

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 070049

PERMIT ISSUED
FEB - 7 2007

This is to certify that TOP OF EXCHANGE LLC Monaghan Woodworks Inc.
has permission to Interior tenant fit-up of entire 2nd floor (permitted by 705)
AT 85 EXCHANGE ST (L 032 D004001)

provided that the person or persons who perform or supervise the work accepting this permit with all of the provisions of the Statutes of the State 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.

Classification of inspection must be given and when permission is procured before this building or part thereof is moved or leaving closed-in. 4
YOUR NOTICES REQUIRED.

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

OTHER REQUIRED APPROVALS

Fire Dept. Craig Carr
Health Dept. _____
Appeal Board _____
Other _____
Department Name

[Signature]
3/4/07
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 07-0049	PERMIT ISSUED FEB - 7 2007	OBJL: 032 D004001
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Location of Construction: 85 EXCHANGE ST	Owner Name: TOP OF EXCHANGE LLC	Owner Address: 42 MARKET ST	Phone:
Business Name:	Contractor Name: Monaghan Woodworks Inc.	Contractor Address: 111 Commercial Portland	Phone: 7752683
Lessee/Buyer's Name	Phone:	Permit Type: Alterations - Commercial	Zone: B3

Past Use: commercial - office	Proposed Use: Commercial - Interior tenant Fit-up of entire 3rd floor connected w/ permit#061705 - office use	Permit Fee: \$1,770.00	Cost of Work: \$175,000.00	CEO District: 1
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied <i>See Conditions</i>	INSPECTION: Use Group: <i>E</i> Type: <i>B3</i> <i>2/4/07</i>	

Proposed Project Description: Interior tenant Fit-up of entire 3rd floor connected w/ permit#061705	Signature: <i>Greg Cross</i>	Signature: <i>Alan Cast</i>
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) <i>w/conditions</i>		
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied		
Signature: _____ Date: _____		

Permit Taken By: Idobson	Date Applied For: 01/16/2007	Zoning Approval	
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<ol style="list-style-type: none"> This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. Building permits do not include plumbing, septic or electrical work. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work.. 	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <i>all interior work</i> <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> <i>OK w/ conditions</i> Date: <i>1/16/07 ABN</i>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____	Historic Preservation <input checked="" type="checkbox"/> <i>yes</i> <input type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied <i>Any exterior work requires a separate review by the Historic Preservation.</i> Date: _____
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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

City of Portland, Maine - Building or Use Permit

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

Permit No: 07-0049	Date Applied For: 01/12/2007	CBL: 032 D004001
-----------------------	---------------------------------	---------------------

Location of Construction: 85 EXCHANGE ST	Owner Name: TOP OF EXCHANGE LLC	Owner Address: 42 MARKET ST	Phone:
Business Name:	Contractor Name: Monaghan Woodworks Inc.	Contractor Address: 111 Commercial St. Portland	Phone (207) 775-2683
Lessee/Buyer's Name	Phone:	Permit Type: Alterations - Commercial	

Proposed Use: Commercial - Interior tenant Fit-up (office space) of entire 3rd floor connected w/ permit#061705	Proposed Project Description: Interior tenant Fit-up of entire 3rd floor connected w/ permit#061705
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Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Ann Machado **Approval Date:** 01/16/2006

Note: **Ok to Issue:**

- 1) ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
- 2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 02/07/2007

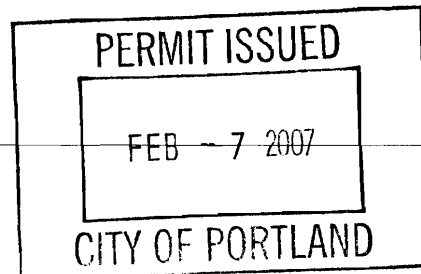
Note: **Ok to Issue:**

- 1) Occupant load can not exceed 29 people
- 2) Second condition no matter what the outcome of the above issue:
Door # 09 on the partner's office as shown on page A03 cannot have any type of locking mechanism and must be marked with appropriate exit signs and emergency lighting if it is the only access to the fire escape.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Cptn Greg Cass **Approval Date:** 01/25/2007

Note: **Ok to Issue:**

- 1) Second means of egress shall comply with NFPA 101 CHAPTER 39.2.2.
This means marking, illumination, and emergency lighting.
- 2) Fire escape stairs shall comply with NFPA 101 7.2.8
A certified load test is required.
- 3) NFPA 72 compliance letter required.

**Comments:**

2/5/2007-ldobson: There is a slight design issue if the space has an occupant load of 30 (or 50 if you look at exception 4 in 1016.1) or greater. Section 1017 requires that the corridors be 1 hr. rated because the building is not protected with a fire supression system. The wall assemblies look good but will require a UL listing. The doors are not rated,nor are there fire/smoke dampers in the HVAC penetrations of the corridor walls. My sense if that the did not feel this corridor had to be rated. MJN

Memorandum

To Capt. Greg Cass
From James Higgins
Date January 24, 2007
Project 85 Exchange Street, 3rd Floor Tenant Fit Out, Portland Maine
Permit Application No. #
Subject **Portland Fire Department Building Permit Checklist**

Item 1:

Mark Mueller Architects
100 Commercial Street
Suite 205
Portland, Maine 04101
Contact: Mark Mueller 207-774-9057

Item 2:

Joint project between Mark Mueller Architects and:
PHPartners
18 Tremont Street
Suite 707
Boston, Massachusetts 02108
Contact: James Higgins 617-720-0740

Item 3:

Proposed use of the 3rd floor space is Business group B.

Item 4:

Tenant fit out space is 5,400 square feet of usable space.

Item 5:

The structure is existing and there is no proposed fire protection included in this scope of work.

Item 6a:

There is no fire suppression system in the building.

Item 6b:

The detection system for the 3rd floor space is documented on the electrical engineering drawing E4.00, dated 12/18/06 and amended with Addendum #3, dated 1/04/07.

Item 7a:

The egress stair and the fire escape are both existing.

Item 7b:

The farthest travel distance from the tenant space to the existing means of egress is 64 feet.

Item 7c:

The fire extinguisher is located 8.5 feet from the door to the egress stair in the tenant space.

Item 7d:

The emergency lighting is documented on the electrical engineering drawing E2.00, dated 12/18/06 and amended with Addendum #3, dated 1/04/07.

Item 7e:

The exist signs are documented on the electrical engineering drawing E2.00, dated 12/18/06 and amended with Addendum #3, dated 1/04/07.

Item 7f:

See attached.

NFFPA 101: 2003 CODE DATA

OCCUPANT LOAD	54 PEOPLE (TENANT SPACE)
USE GROUP CLASSIFICATION	BUSINESS
TYPE OF CONSTRUCTION	3 (000)
ACTUAL BUILDING AREA	TOTAL BUILDING = 21,600 SF
BUILDING HEIGHT	(4) STORIES
FIRE SUPPRESSION:	NON-EXISTING
FIRE WALLS & PARTY WALLS	NO PARTY WALLS EXIST
STAIR ENCLOSURES	EXISTING, PROPOSED STAIR EXIT DOOR 90 MIN. RATED
SHAFTS	EXISTING
EXIT ACCESS CORRIDORS	OPEN PLAN - NO CORRIDORS ARE PROPOSED
INTERIOR LOAD BEARING WALLS	BRICK/ MASONRY
STRUCTURAL MEMBER SUPPORTING WALL	N/A
FLOOR CONSTRUCTION	EXISTING
ROOF CONSTRUCTION	EXISTING
FIRE EXTINGUISHERS	(1) PER PLAN
FLAME SPREAD RATINGS:	
INTERIOR FINISH REQUIREMENTS	CLASS A, B, OR C.
REQUIRED VERTICAL EXITS	NOT PART OF THIS SUBMISSION
CORRIDORS PROVIDING EXIT ACCESS	NOT PART OF THIS SUBMISSION
ROOMS OR ENCLOSED SPACES	NOT PART OF THIS SUBMISSION
INTERIOR FLOOR FINISH REQUIREMENTS	CLASS 1 OR 2
REQUIRED VERTICAL EXITS	NOT PART OF THIS SUBMISSION
CORRIDORS PROVIDING EXIT ACCESS	NOT PART OF THIS SUBMISSION
ROOMS OR ENCLOSED SPACES	NOT PART OF THIS SUBMISSION
GENERAL NOTES	

Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date Decmeber 20, 2006

Addendum #2 to Plans and Specifications For: Wall base and Metal door frames

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

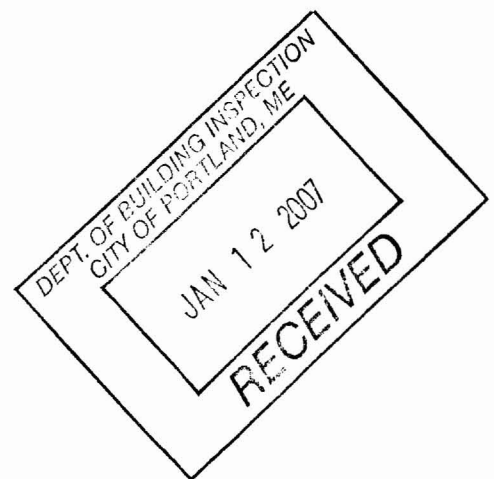
The wall base on interior partitions to be changed from a painted wood base to a 4" vinyl wall base, straight at carpeted areas and cove at hard flooring, Color selection to follow.

The wall base at the exterior partitions is to stay as existing, painted wood, and patched as needed

The metal door frames are to be changed so that the casings have a standard return of 1/2".

Attachments

None



Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date Decmeber 18, 2006

Addendum #1 to Plans and Specifications For:

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

Ceiling System, ACT-1: Armstrong Cirrus Dune with Suprafine 9/16" exposed Tee Grid System, Shadow Molding at Partitions.

Delete magnetic locking device and card reader. Provide key lock cylinder in metal shoe of entry doors. Key alike with door to exit stairs.

Attachments

SKA-01: Delete curved GWB soffit and light cove in corridor #332 and file area #335. Provide additional lighting as indicated on sketch.

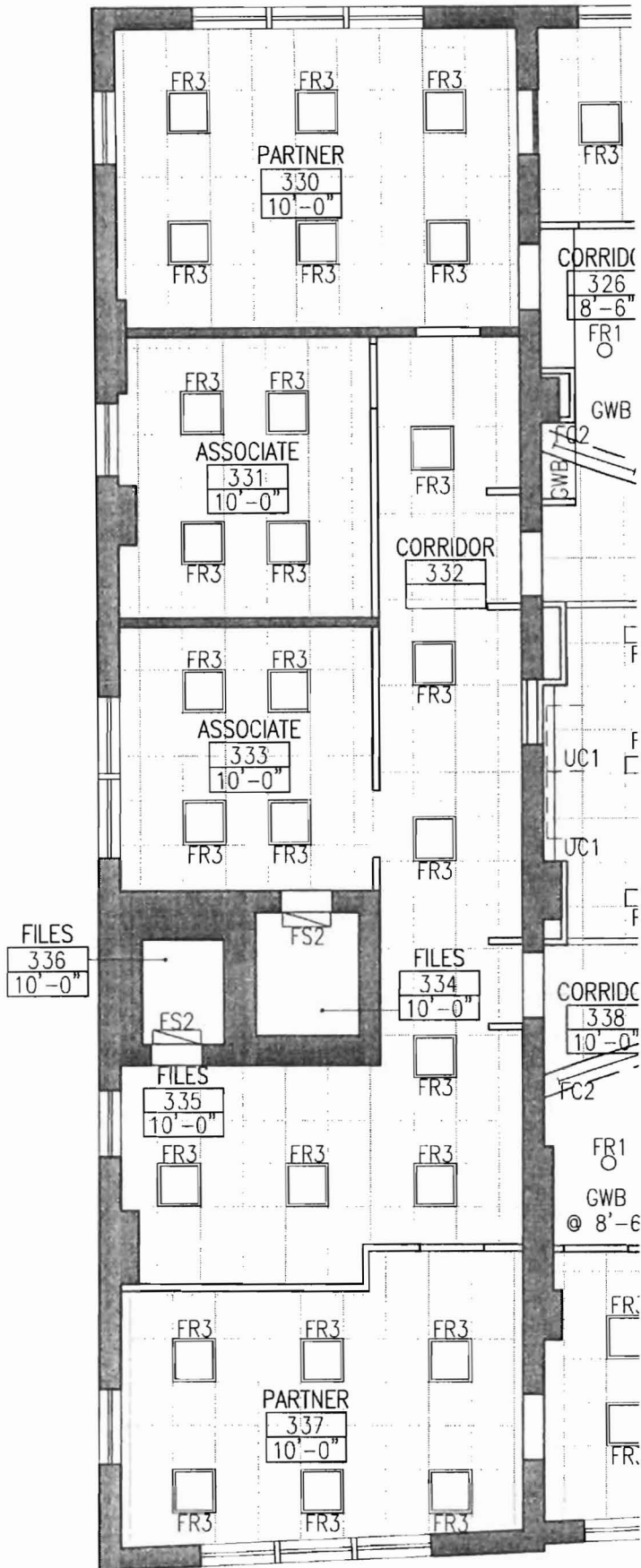
SKA-02: Delete GWB wing wall in conference room #321.

SKA-04: Partition types. Please note that all partitions between offices, new and existing, are to be type #2

Alternates: Please provide pricing for the attached alternates:

SKA-03: Alternate Detail, Provide a price to delete the GWB cove detail and cove lighting and provide the indicated detail.

SKA-05: Alternate lighting, If the light cove is deleted along the curved GWB soffit additional light fixtures will need to be added to the ACT ceiling. Provide a price to provide the additional fixtures indicated on the sketch.



PH PARTNERS

18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

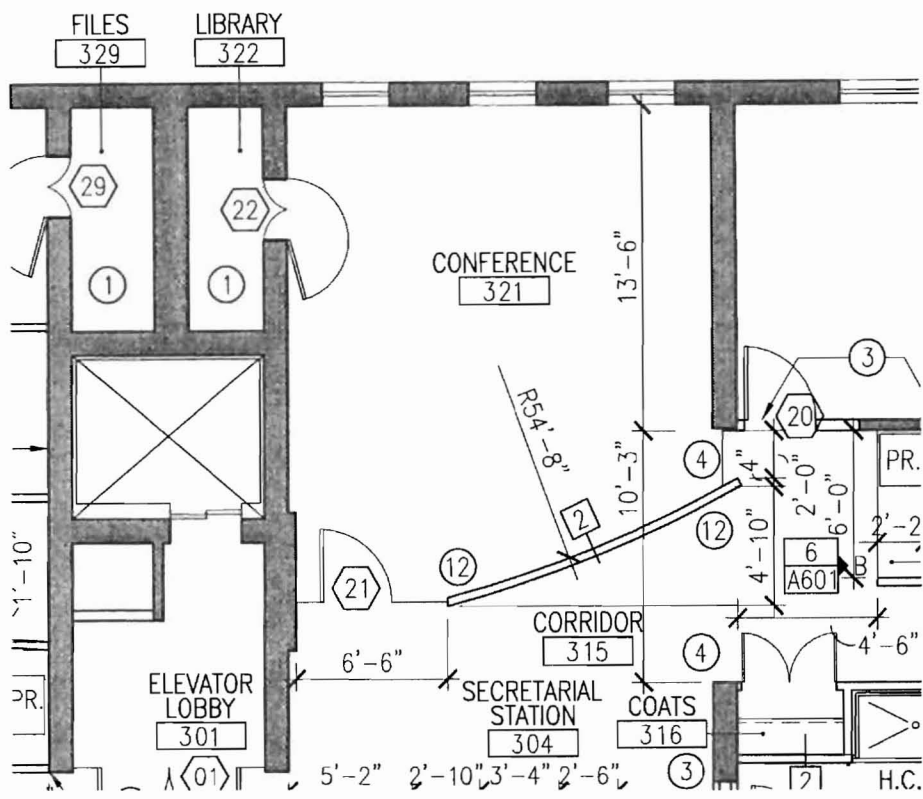
BINGHAM MCCUTCHEM

85 EXCHANGE STREET, PORTLAND ME
 3RD FLOOR RENOVATIONS

SKA-01
 REVISED RCP

1/8" = 1'-0"

12/18/2006



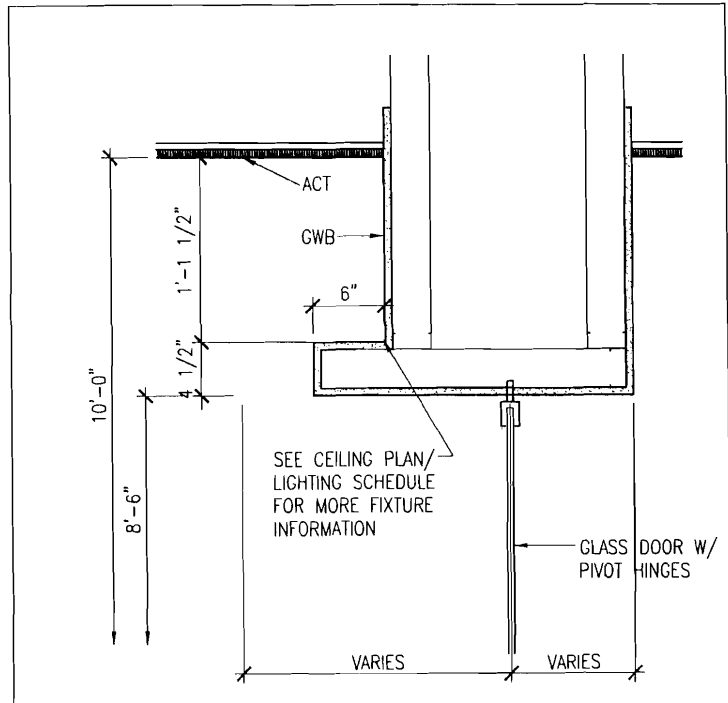
PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND, ME
 3RD FLOOR RENOVATIONS

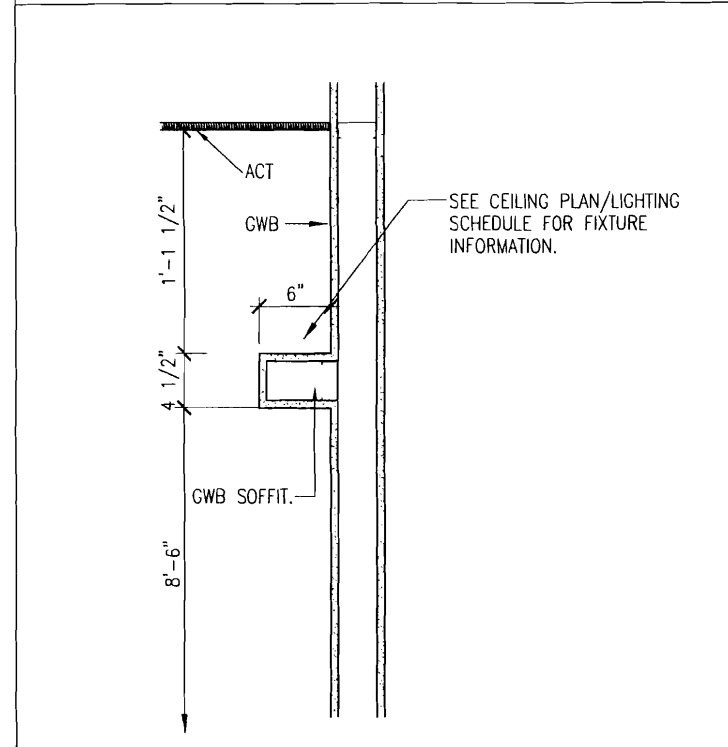
SKA-02
 REVISED CONF. RM. 321

1/8" = 1'-0"

12/18/2006



A6 SECTION AT SOFFIT W/ LIGHT COVE
 SCALE: 1" = 1'-0" MIL311



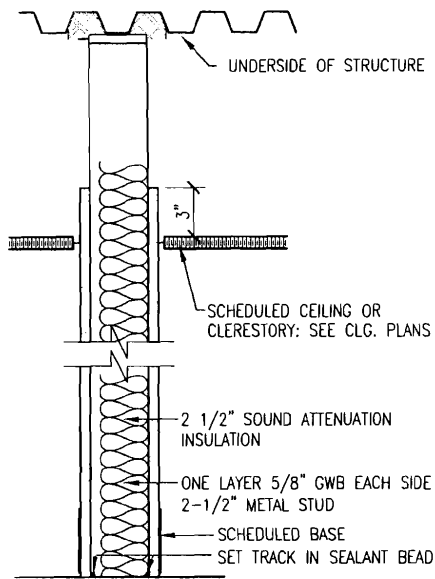
B6 SECTION AT LIGHT COVE
 SCALE: 1" = 1'-0" CLG107

PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

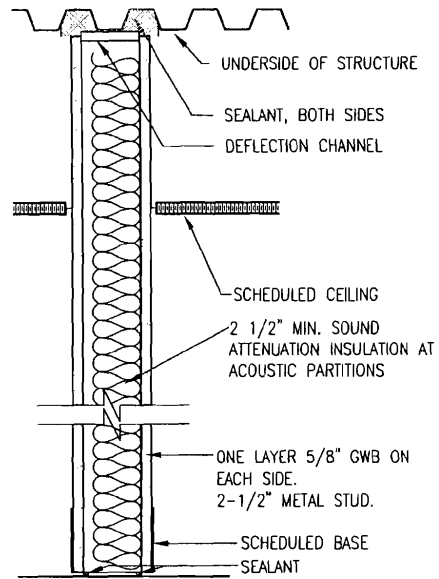
BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND, ME
 3RD FLOOR RENOVATIONS

SKA-03
 ALTERNATE DETAILS

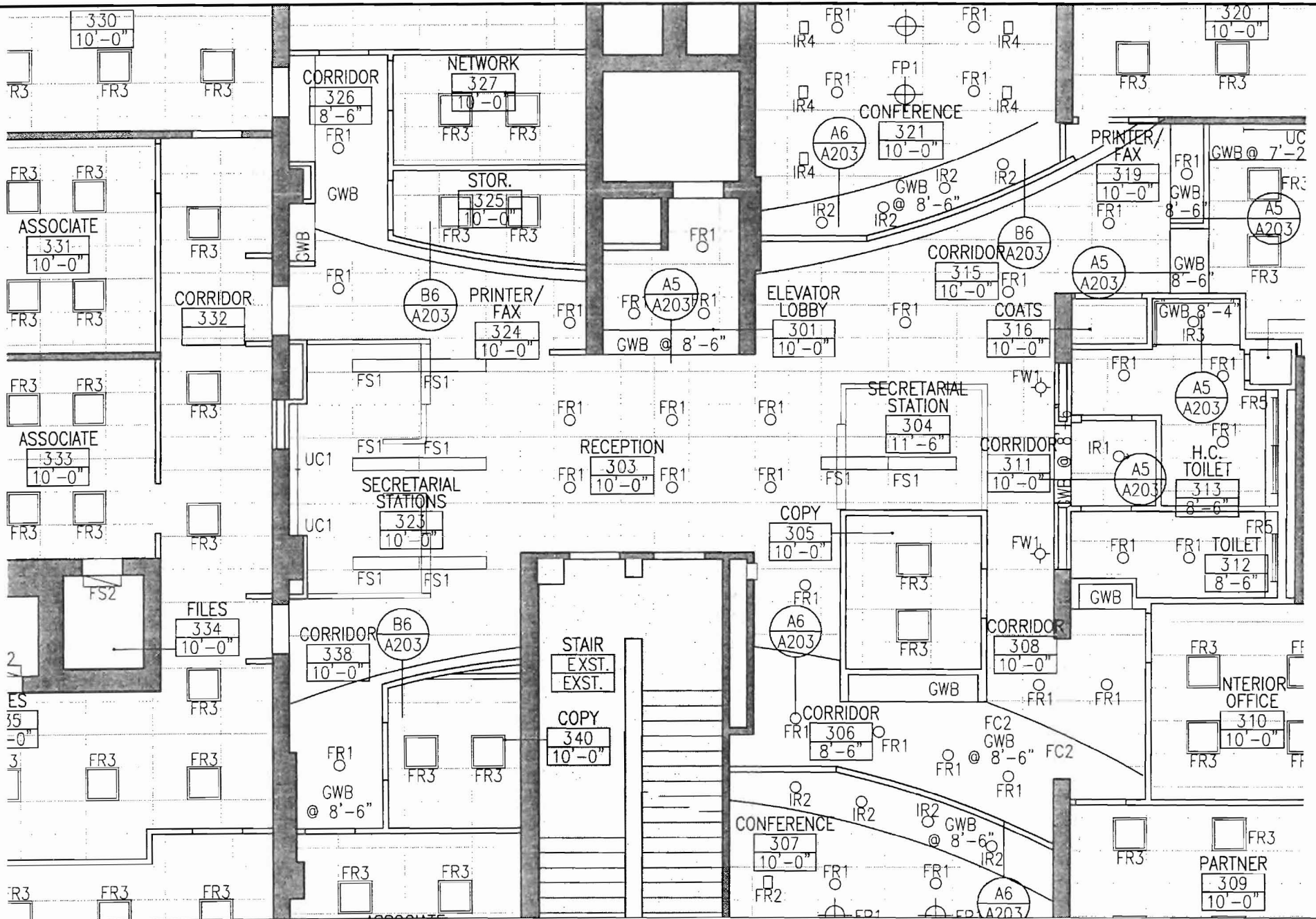
PARTITION TYPES



1 STANDARD GWB PARTITION
(NON INSULATED)
FRAMING TO DECK W/GWB 3" ABOVE ACT



2 ACOUSTIC PARTITION
(INSULATED)
FRAMING TO DECK W/ GWB TO DECK W/ BATT INSULATION



phpartners
 18 Tremont Street, suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEM
 85 EXCHANGE STREET, PORTLAND, ME
 3RD FLOOR RENOVATIONS

SKA-05
 REVISED RCP

1/8" = 1'-0" 12/18/2006

Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date January 4, 2007

Addendum #3 to Plans and Specifications For:

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

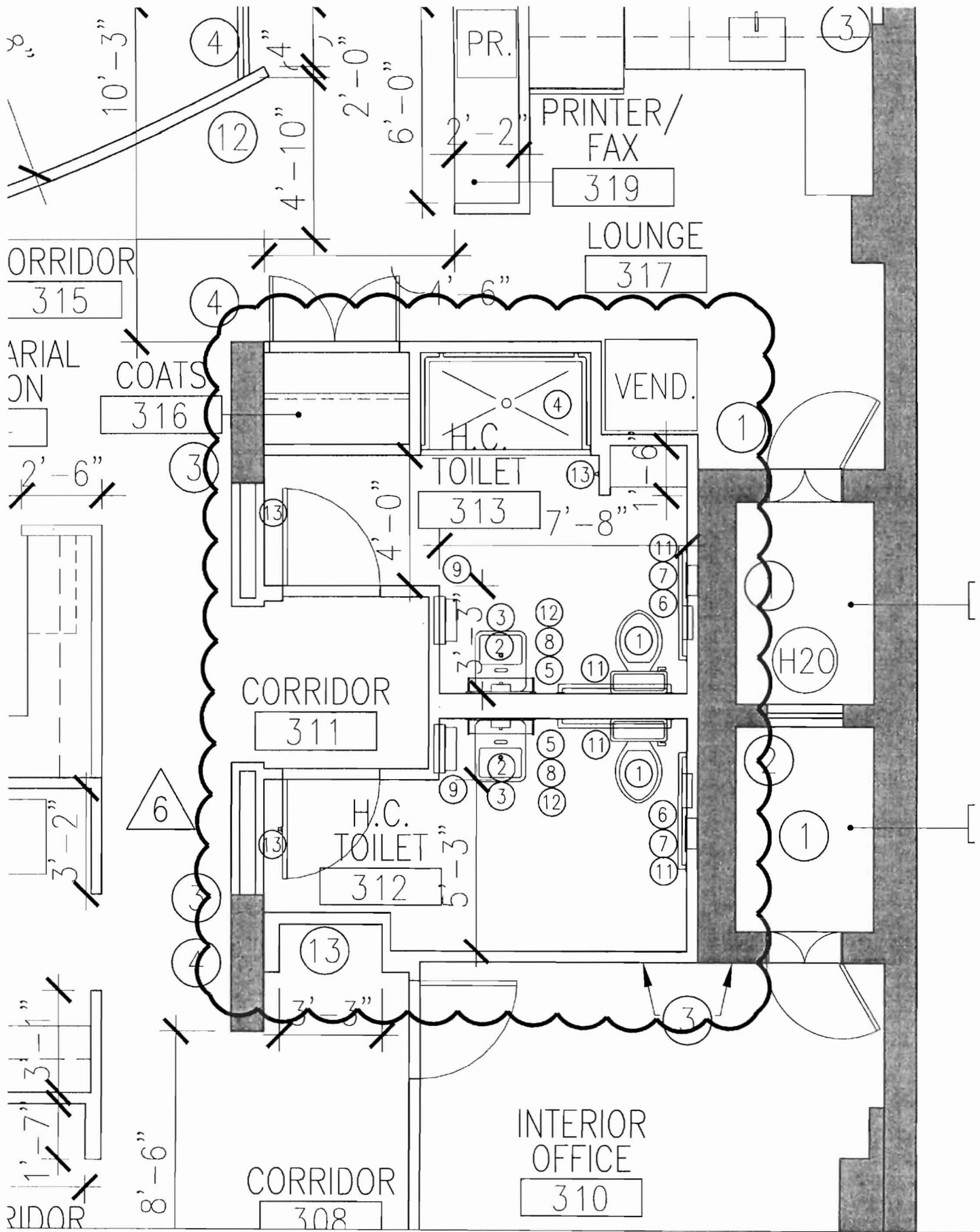
Bathroom revisions to comply with ADA codes.

Revisions to life safety to clearly identify the fire escape as the second means of egress.

Finish changes.

Attachments

- A403a – Finish Plan and Floor Transition Details
- A601 – Interior Elevations
- SKA-06 – ADA Bathrooms
- SKA-07 – ADA Kitchen Sink Section
- SKE-01 E 2.00 – Electrical 3rd Floor Ltg.
- SKE-02 E 4.00 – Electrical 3rd Floor Fire



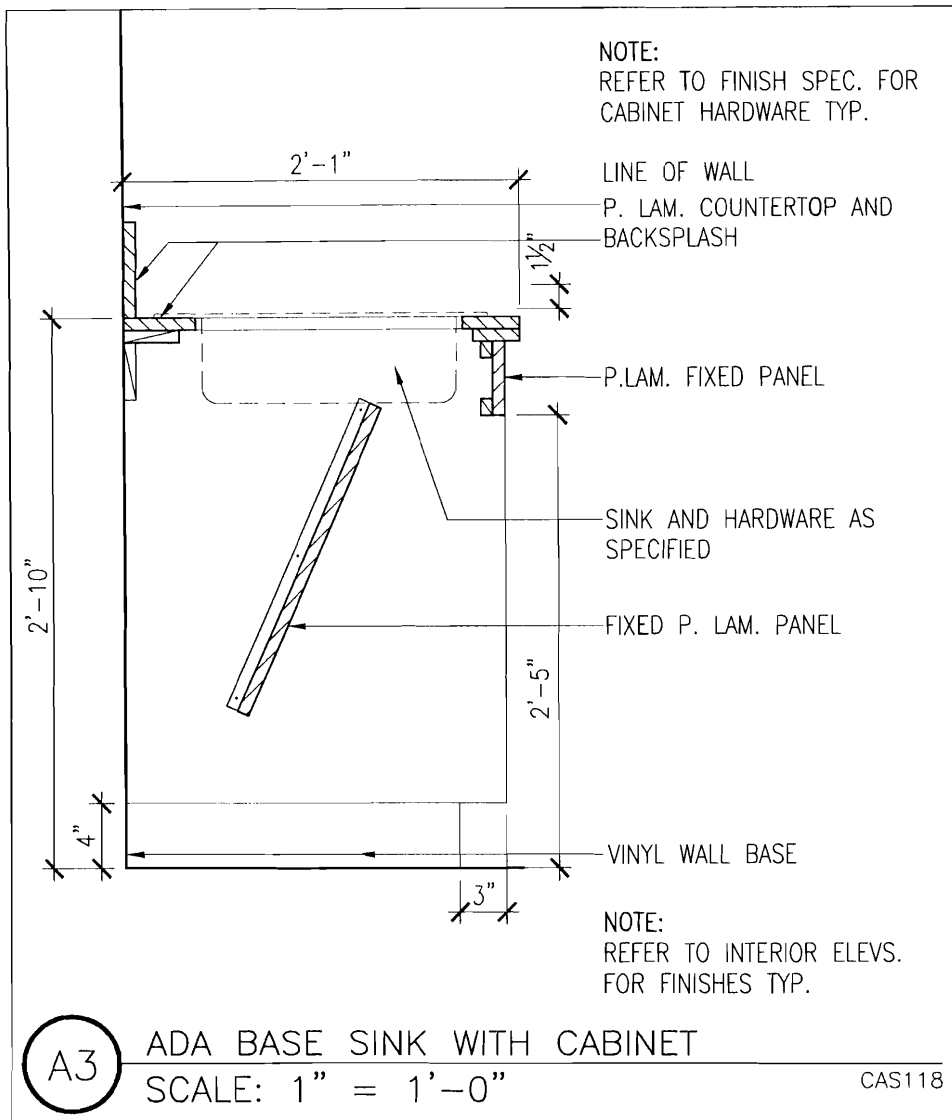
PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

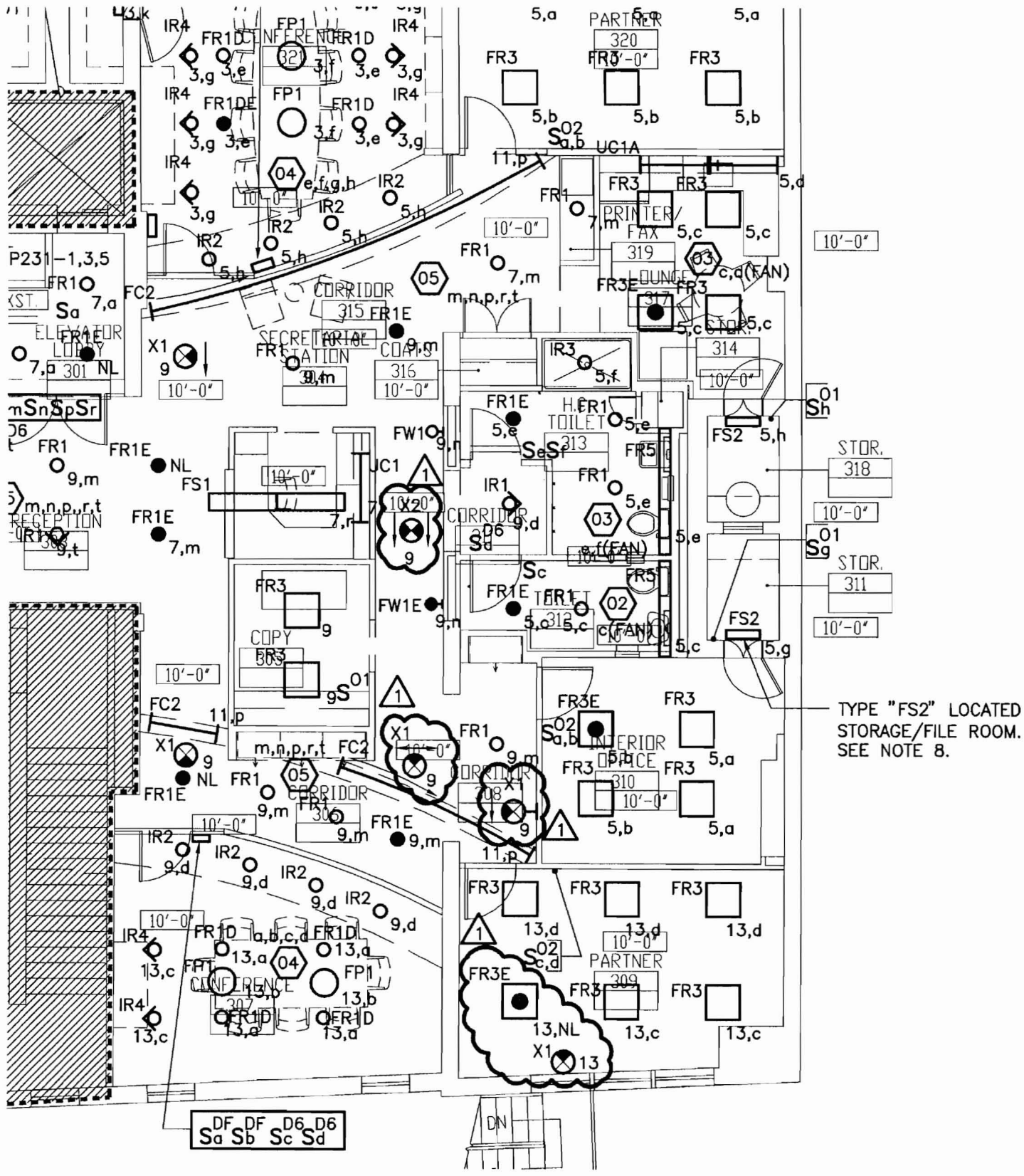
BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND ME
 3RD FLOOR RENOVATIONS

SKA-06
 ADA BATHROOMS

1/8" = 1'-0"

01/02/2007





Richard D. Kimball Company, Inc.
 200 Brickstone Square
 Andover, MA 01810-1488

PROJECT

NUMBER 26739 REVISION 1
 REFERENCE DRAWING E2.00

DRAWING

DRAWN BY RHA CHECKED BY MTG
 DATE 01/04/07 SCALE 1/8" = 1'-0"

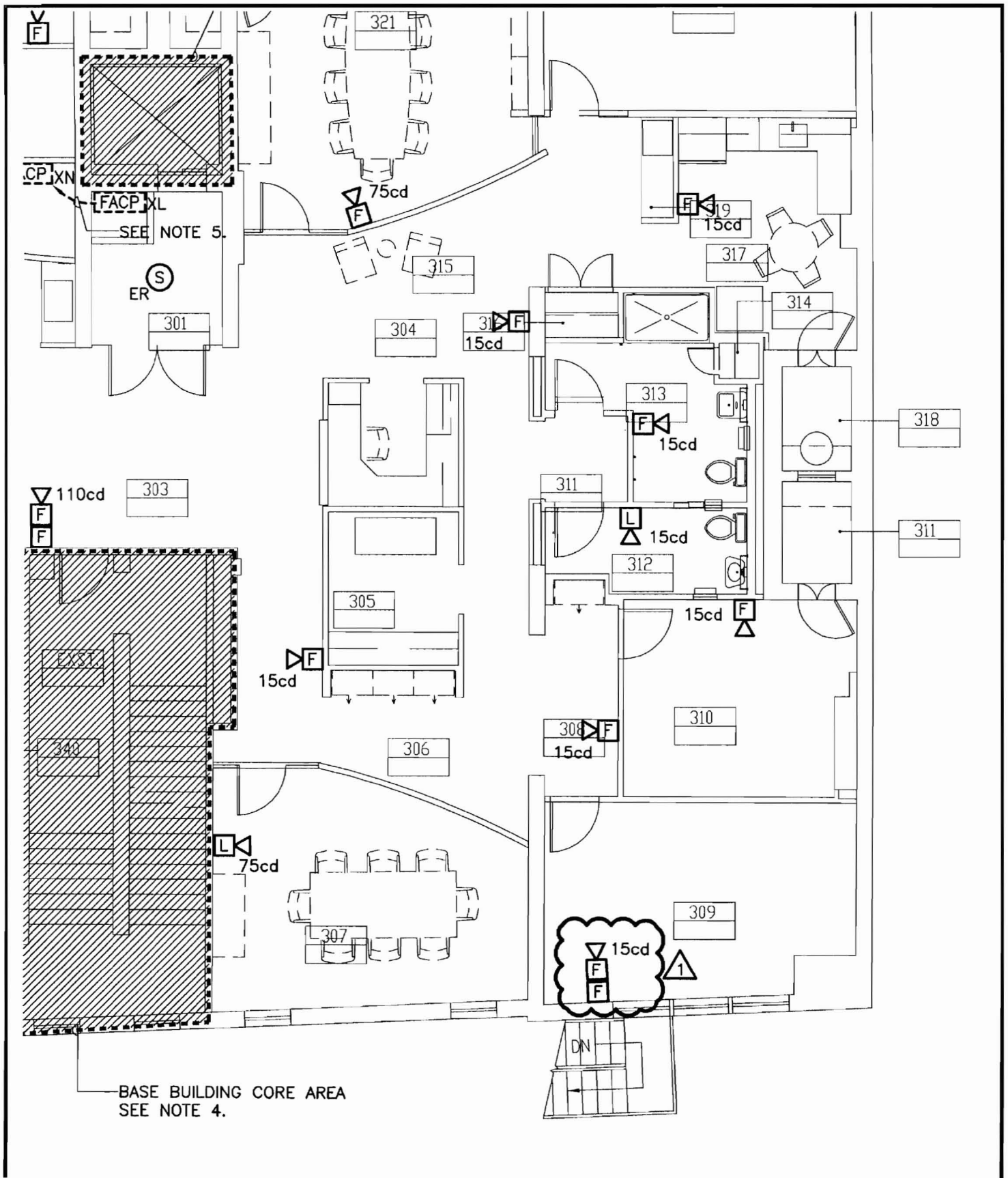
Andover, MA
 Boston, MA

P 978-475-0298
 F 978-475-5768
 W www.rdkengineers.com

BINGHAM MCCUTCHEM
 3RD FLOOR RENOVATIONS
 PORTLAND, MAINE

PHPARTNERS
 18 TREMONT STREET
 BOSTON, MASS

SKE-01



Richard D. Kimball Company, Inc.
 200 Brickstone Square
 Andover, MA 01810-1488

PROJECT

NUMBER 26739 REVISION 1

REFERENCE DRAWING E4.00

BINGHAM MCCUTCHEM
 3RD FLOOR RENOVATIONS
 PORTLAND, MAINE

DRAWING

DRAWN BY RHA CHECKED BY MTG

DATE 01/04/07 SCALE 1/8" = 1'-0"

PHPARTNERS
 18 TREMONT STREET
 BOSTON, MASS

Andover, MA
 Boston, MA

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 F 978-475-5768
 W www.rdkengineers.com

SKE-02

Construction Change Directive

CCD-01 Exhaust Fan

Date January 09, 2007

To Brad Finlay Monaghan Woodworks 100 Commercial Street Portland, ME 04101	Project Bingham McCutchen LLP 85 Exchange Street Project PHP Job No. <u>6032</u>
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The following revisions to the Contract will be required according to instructions which are checked below.

Description

Delete HP-10 and replace with an exhaust fan.

Attachments

SKH-01, SKH-02, SKE-03, SKE-04

Instructions

- PRICE the above change and submit an itemized proposal showing associated labor and material costs, indicating either an increase or decrease in Contract Sum or Contract Time. Do not proceed with work described in this Directive until approved in writing by the Owner.
- PROCEED immediately with items to avoid or minimize delays in the work, and submit a Change Estimate based on lump sum increase or decrease to the Contract.
- PROCEED immediately with items to avoid or minimize delays in the work, and submit itemized documentation of costs incurred in the Work as soon as final cost/time change is determined.
- FOR INFORMATION only. Do no work which will increase the Time or Contract Sum with the above clarifications or supplemental instructions, unless the Owner has been advised in writing that the Contractor considers the Work described to require Contract adjustment.

When signed by Owner and Architect and received by Contractor, this document becomes effective immediately as a Construction Change Directive (CCD) and Contractor shall proceed as directed. Contractor's signature indicates agreement with terms of this Directive.

Owner Bingham McCutchen LLP 150 Federal Street Boston, MA 02110	Architect PH Partners, Inc. 18 Tremont Street, Suite 707 Boston, MA 02108	Contractor Monaghan Woodworks 100 Commercial Street Portland, ME 04101
By	By	By
Date	Date	Date

Andover, MA
Boston, MA

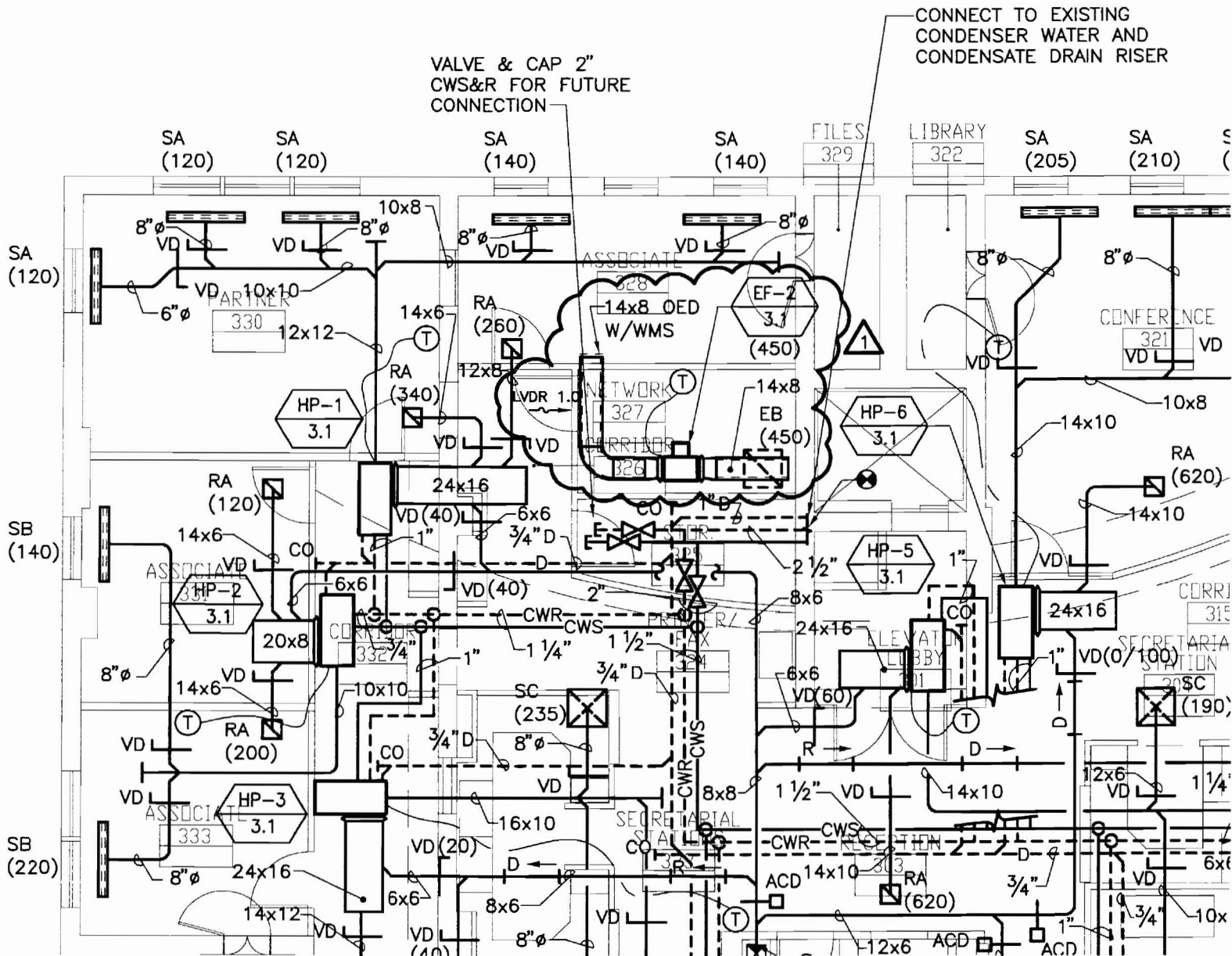
Richard D. Kimball Company, Inc.
200 Brickstone Square
Andover, MA 01810 1488

P 978-475-0298
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PROJECT _____
NUMBER 26739
DATE 01/09/07
REVISION 1
BINGHAM McCUTCHEEN
3RD FLOOR RENOVATIONS
85 EXCHANGE ST
PORTLAND, ME

DRAWING _____
DRAWN BY BSI
CHECKED BY BSI
SCALE 1/8" = 1'-0"
REFERENCE DRAWING H2.00
HVAC
NETWORK ROOM
EXHAUST FAN

SKH-01



Andover, MA
Boston, MA

Richard D. Kimball Company, Inc.
200 Brickstone Square
Andover, MA 01810-1488

P 978-475-0298
F 978-475-5768

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PROJECT

NUMBER 26739

DATE 01/09/07

REVISION 1

BINGHAM McCUTCHEN
3RD FLOOR RENOVATIONS
85 EXCHANGE ST
PORTLAND, ME

DRAWING

DRAWN BY BSI

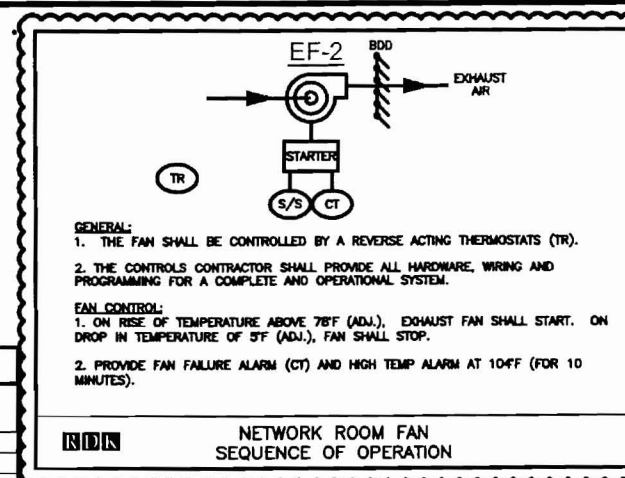
CHECKED BY BSI

SCALE NONE

REFERENCE DRAWING HB.00

HVAC
NETWORK ROOM
EXHAUST FAN

SKH-02



DIFFUSER, GRILLE & REGISTER SCHEDULE

TAG	SELECTION RANGE (CFM)	NECK SIZE (IN.)	OVERALL SIZE (IN.)	SERVICE	MOUNTING	MANUFACTURER AND MODEL NUMBER (AS STANDARD)	NC OR AIR PRESSURE DROP NOT TO EXCEED	REMARKS
SA	0-240	8"ø	48x4	SUPPLY	SURFACE	TITUS ML-39	25	1,2
SC	0-350	8"ø	24x24	SUPPLY	LAY-IN	TITUS OMNI	25	
RA	0-720	14x14	18x18	RETURN	SURFACE	TITUS 350FL	25	
EA	0-720	14x14	18x18	RETURN	SURFACE	TITUS 350FL	25	
EB	0-720	14x14	18x18	RETURN	SURFACE	TITUS 350FL	25	

NOTES:

- PROVIDE WITH MATCHING TITUS PLENUM BOX.
- LINEAR DIFFUSER TO HAVE (2) 1" SLOTS. BALANCE DIFFUSER FOR VERTICAL DOWNFLOW ON EXTERIOR SLOT, AND HORIZONTAL DISCHARGE ON INTERIOR SLOT.

FAN SCHEDULE

TAG	LOCATION	SERVICE	CFM	FAN TYPE	E.S.P. (IN.WG)	WHEEL			MOTOR				MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS	
						DIA. (IN.)	TYPE	DRIVE	RPM	BHP	HP	V			PH
F-1	LOUNGE	LOUNGE TOILETS	315	INLINE	0.15	12	BI	BELT	1725	0.08	1/4	115	1	GREENHECK BSO-90-4	
F-2	NETWORK 327	NETWORK 327	450	INLINE	0.35	12	BI	BELT	1725	0.08	1/4	115	1	GREENHECK BSO-90-4	

NOTES:

- PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH.
- PROVIDE WITHOUT INTEGRAL BACKDRAFT DAMPER.

HEAT PUMP SCHEDULE

TAG	LOCATION	SERVES	COOLING CAPACITIES						HEATING CAPACITY			WATER SIDE		AIR SIDE		ELECTRICAL CHARACTERISTICS COMPRESSOR			MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS		
			ENT H2O (°F)	LVG H2O (°F)	EAT (°F)		TOTAL MBH	SENS. MBH	REJECTED BTUH	ENT H2O (°F)	LVG H2O (°F)	TOTAL BTU	EAT (°F)	GPM	P.D. (FT. H2O)	CFM	ESP (IN. H2O)	FLA V PH				
					DB	WB												FLA			V	PH
HP-1	CORRIDOR 332	PARTNER 330	85	103.2	75	63	22.7	17.5	30127	70	55.8	30.1	70	3.4	3.4	840	0.5	15.8	208	1	MCQUAY-WCRH024	1,2,3
HP-2	CORRIDOR 332	ASSOCIATE 331 & 332	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3
HP-3	FILES 334	SECRETARIAL 323	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	720	.35	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-4	COPY 340	PARTNER 337	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	850	0.45	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-5	LOBBY 301	SECRETARIAL 304	85	103.2	75	63	18.0	13.8	23672	70	55.7	24.0	70	2.7	2.1	680	0.45	8.5	208	1	MCQUAY-WCRH019	1,2,3
HP-6	CORRIDOR 315	CONFERENCE 321	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	620	0.5	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-7	FAX 319	PARTNER 320	85	95.0	75	63	8.5	7.1	10789	70	81.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3
HP-8	TOILET 312	PARTNER 309	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3
HP-9	COPY 305	CONFERENCE 307	85	95.0	75	63	8.5	7.1	10789	70	81.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3

NOTES:

- PROVIDE WITH FLEXIBLE HOSE KIT, EXTRA SET OF FILTERS, HANGERS BRACKETS AND 300 PSI COIL.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCH.
- PROVIDE CONDENSATE PUMP ALL ASSOCIATED PIPING SUPPORTS, CONTROLS AND ANY OTHER APPURTENANCES REQUIRED TO MAKE PUMP OPERATIONAL WITH ASSOCIATED HEAT PUMP. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

Andover, MA
Boston, MA

Richard D. Kimball Company, Inc
200 Brickstone Square
Andover, MA 01810-1488

P 978-475-0298

F 978-475-5768

W www.rdkengineers.com

PROJECT

NUMBER 26739

DATE 01/09/07

REVISION 1

BINGHAM MCCUTCHEN
3RD FLOOR RENOVATIONS
PORTLAND, MAINE

DRAWING

DRAWN BY RHA

CHECKED BY MTG

SCALE 1/8" = 1'-0"

REFERENCE DRAWING E3.00

PHPARTNERS
18 TREMONT STREET
BOSTON, MASS

SKE-03

ART PLAN "C"
ENT LAYOUT.

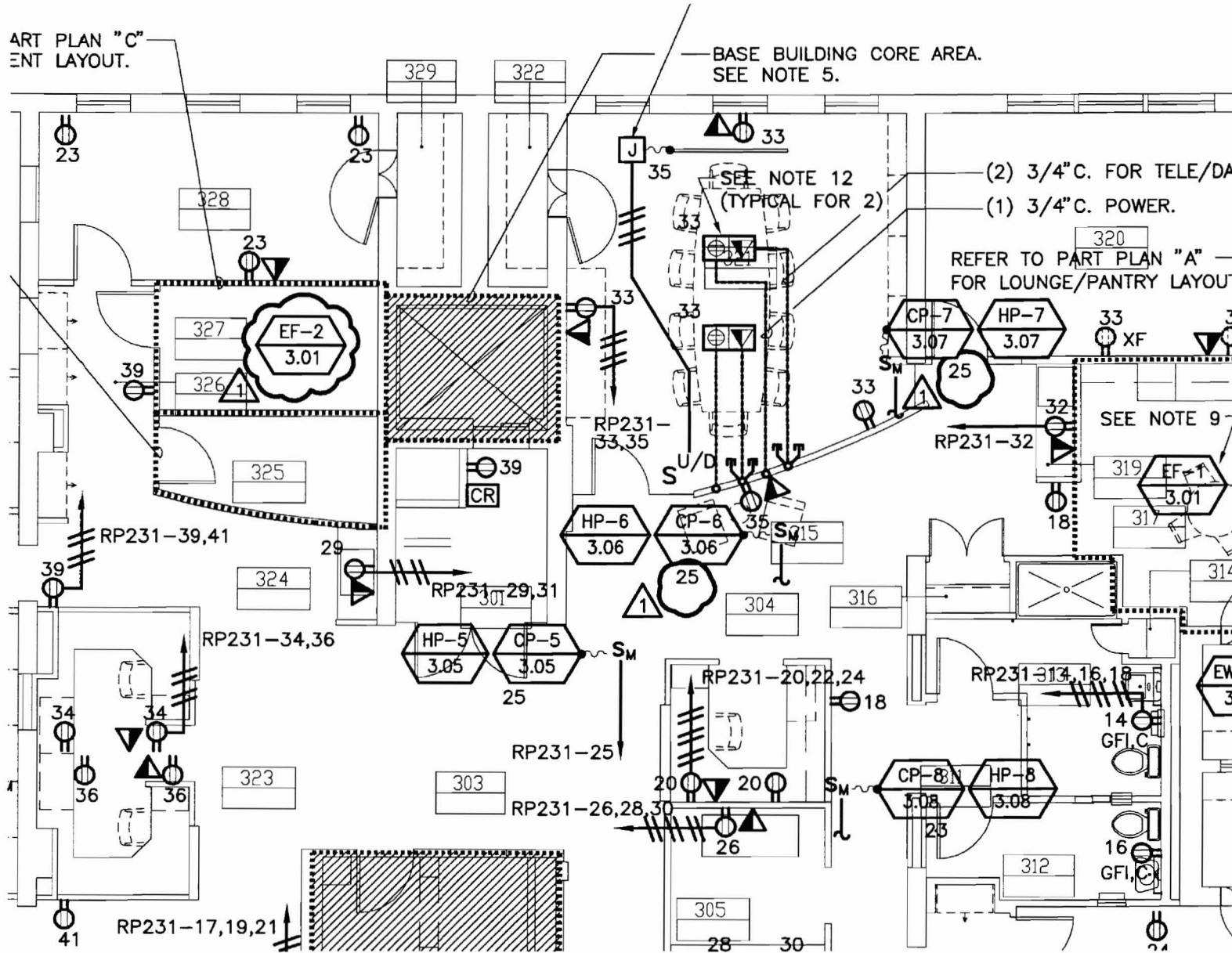
BASE BUILDING CORE AREA.
SEE NOTE 5.

SEE NOTE 12
(TYPICAL FOR 2)

(2) 3/4" C. FOR TELE/DA
(1) 3/4" C. POWER.

REFER TO PART PLAN "A"
FOR LOUNGE/PANTRY LAYOUT

SEE NOTE 9



PROJECT [REDACTED]

NUMBER 26739

DATE 01/09/07

REVISION 1

BINGHAM MCCUTCHEN
3RD FLOOR RENOVATIONS
PORTLAND, MAINE

DRAWING [REDACTED]

DRAWN BY RHA

CHECKED BY MTG

SCALE NONE

REFERENCE DRAWING ED.00

PHPARTNERS
18 TREMONT STREET
BOSTON, MASS

MECHANICAL / PLUMBING EQUIPMENT SCHEDULE

EQUIP TAG	DESCRIPTION	LOAD					POWER SOURCE		BRANCH CIRCUIT	CONNECTION				REMARKS
		HP	KVA	VOLT	PH	WIRE	PANEL	C/B		FLEX	JB	REC	DISC	
HP-1	HEAT PUMP	-	3.3	208	1	3	RP232-1	30A-2P	2#10, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-2	HEAT PUMP	-	1.5	208	1	3	RP232-5	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-3	HEAT PUMP	-	1.7	208	1	3	RP232-9	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-4	HEAT PUMP	-	1.7	208	1	3	RP232-13	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-5	HEAT PUMP	-	1.4	208	1	3	RP232-17	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-6	HEAT PUMP	-	1.7	208	1	3	RP232-2	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-7	HEAT PUMP	-	1.2	208	1	3	RP232-8	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-8	HEAT PUMP	-	1.5	208	1	3	RP232-10	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-9	HEAT PUMP	-	1.2	208	1	3	RP232-14	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
EF-1	EXHAUST FAN	1/4	.70	120	1	3	RP232-27	15A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 4,8
EF-2	EXHAUST FAN	1/4	.70	120	1	3	RP232-27	15A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 4,9
EW-1	ELECTRIC WATER HEATER	-	4.50	208	3	3	RP232-28	20A-3P	3#12, 1#12G.-3/4"C.	X			X	SEE NOTE 7
CP	CONDENSATE PUMP	-	.40	120	1	3	RP232	20A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 5,8

NOTES:

- BRANCH CIRCUIT WIRING METHODS SHALL BE AS NOTED ON THE DRAWINGS AND/OR SPECIFICATIONS FOR THE APPLICABLE LOCATION.
- "FLEX" - DENOTES FINAL THREE FEET (MAXIMUM) OF RACEWAY SHALL BE FLEXIBLE METAL OR LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- DISCONNECT SHALL BE RATED 30AMP - SINGLE FUSE UNFUSED.
- DISCONNECT SHALL BE MOTOR-RATED SWITCH WITH THERMAL OVERLOAD ELEMENT.
- DISCONNECT PROVIDED INTEGRAL (PREWIRED) TO EQUIPMENT BY OTHERS.
- ON/OFF VIA CEILING MOUNTED OCCUPANCY SENSOR POWER PACK (PANTRY AND TOILET ROOMS).
- DISCONNECT SHALL BE RATED 30AMP - THREE PHASE UNFUSED.
- CONDENSATE PUMP CP-1 THROUGH CP-9 ARE SIMILAR PIECES OF EQUIPMENT. REFER TO FLOOR PLANS FOR CIRCUIT DESIGNATIONS.
- ON/OFF VIA WALL MOUNTED TSTAT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.

SKE-04



Call Toll Free 800-727-9907 Facsimile 800-627-0929 Telephone: 208-342-6823
Corporate Headquarters: 4545 Enterprise, Boise, Idaho 83705-5425

BUDGETARY QUOTATION ONLY

Date of Quote: 11/28/2006
 Date Quotation Valid: 11/28/06 Through 2/26/2007
 Account Representative: Cal Osborn C.800-474-3950, CalO@Best-Bath.com
 Quote to: PHPartners
 Attention: Jim Higgins
 Telephone: 617-720-0740
 Fax: 617-720-0747
 Project Name: Bingham McCuthen
 File Number: co112806me40
 Terms:
 Lead Time: 2 Weeks upon receipt of confirmed Purchase Order, Sign-Off Drawings and Confirmed Shipping Schedule

BASE PRODUCT INFORMATION

All Walls 100% Laminated with 3/8" Plywood

"No longer requires mud setting. Pre-leveled unit requires use of factory supplied adhesive to attach to the floor."

Model #:

4LSS6331A1B
White

General Information:

Quantity: Number of RH: _ ? Number of LH: _ ?

1

Freight: Full Freight Allowed

Shp To Zip Code:04103 (?)

SUBTOTAL

ACCESSORIES SPECIFIED AND INCLUDED FOR EACH UNIT

ITEM DESCRIPTION

- 1 27" x 60" x 27" Stainless Steel "U" Grab Bar powder coated white--pre-drilled, installed by others
- 1 Symmons valve and hand held shower assembly. Symmons pressure balanced mixing, valve #15-1-X-FG, Hansgrohe #27712, Alsons #462BG, #4980BX, #4900, #490-60BG--plumbing tree pre-soldered, pre-drilled, installed by others
- 1 Surface Mount Soap Dish--installed by others
- 1 Sioux Chief caulkless brass drain with chrome screen #827-2B--installed by others
- 1 Neoprene 5.5' Water Retainer for 60" Shower Opening,CUT TO FIT--installed by others
- 1 Curtain rod, 20 gauge stainless steel 62.5" w/rings & AQA brackets--installed by others
- 1 66" x 73" Curtain, 10 Ga. Vinyl--factory supplied

SUBTOTAL

UNIT PRICE AS SPECIFIED	\$2,748.00
1 UNIT TOTAL:	\$2,748.00

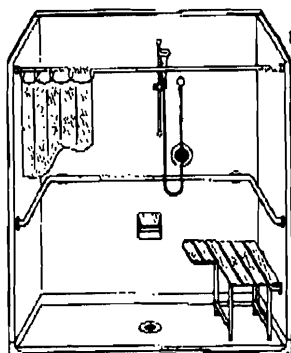
Consignee must inspect load and document any damage with the shipper at time of receipt.

Consignee must report any missing items within 5 business days of receipt to Customer Service 1-866-941-5666.

FSI Signoffs by:	Engineering	Sales	Production	Quotes
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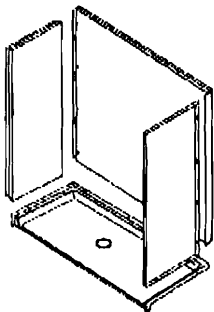
MODEL: 4LSS6331A75B-4LSS6331A2B

ALL ACCESSORIES OPTIONAL

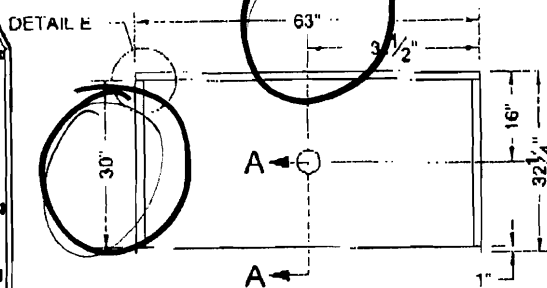


PERSPECTIVE VIEW - N.T.S.
MODEL SHOWN HERE AS:

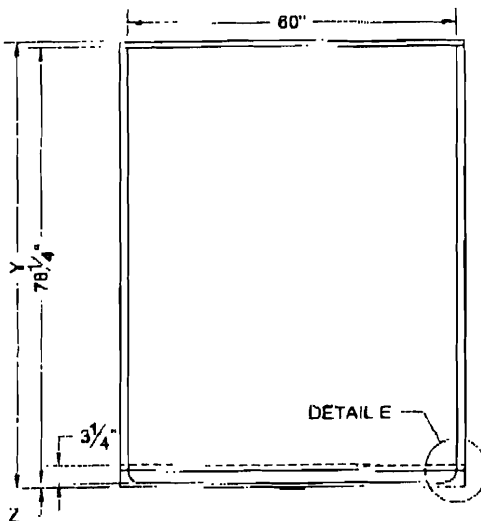
RIGHT SEAT
RIGHT PLUMBING



ASSEMBLY VIEW - N.T.S.



TOP VIEW - SCALE 3/8" = 1'-0"



FRONT ELEVATION - SCALE: 3/8" = 1'-0"

Features:

- ADA compliant roll-in shower
- Available in various threshold heights
- Molded, four piece gelcoat/fiberglass shower module
- "Smooth" wall finish, white (standard)
- Integral full wood backing for strength and unlimited accessory placement
- On all threshold, heights 1-1/2" or taller, no mud set is required
- On all threshold, heights 1-1/4" or shorter, no mud set is required, but an epoxy adhesive kit is supplied



	UNIT HEIGHT	THRESHOLD HEIGHT
MODEL #	Y	Z*
4LSS6331A75B	80"	3/4" MIN.
4LSS6331A2B	81-1/4"	2" MAX.

* - SEE BACK FOR DETAIL SECTIONS

PRODUCT SPECIFICATIONS:

- Multi piece shower module shall be constructed of gelcoat/fiberglass with full integral plywood backing
- Rough-In: Stud opening + 1/4"-0" Nominal Dimensions.

C.S.I. FORMAT SPECIFICATION TEXT AVAILABLE

PRODUCT INFORMATION:

- Accessories: Factory installed, unless prone to damage during installation/shipping. Polished chrome/satin stainless standard, others available.
- Colors: White as standard, others to match any major fixture manufacturer, also available with sprayable solid surface in many colors
- Custom curb heights, other than shown, are available (between min. and max.)

ACCESSORIES:

- INSTALLED BY OTHERS:
- Grab bar
 - Seat, folding
 - Mixing valve, pressure balanced, lever handle, preplumbed tee to supply elbow
 - Vacuum breaker
 - Soap dish
 - Curtain and rod
 - Collapsible Rubber Water Retainer
 - Semi-permanent Threshold Adaptor
 - Cautless drain

CODES:

- Designed and manufactured in compliance with the following standards and codes:
- A.N.S.I. Z124.2 Standards for Plastic Showers
 - I.P.C. International Plumbing Code
 - A.D.A. Accessibility Guidelines for Buildings and Facilities
 - A.N.S.I. A117.1 Accessible and Usable Buildings and Facilities
 - U.P.C. Uniform Plumbing Code

NOTICE OF LIMITATION:

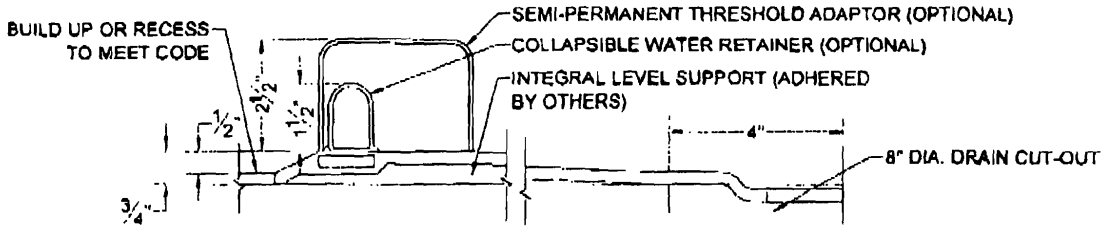
- Recess as needed to meet code
- Adhere to floor as required



DIV. OF FIBERGLASS SYSTEMS INC.
www.best-bath.com 1-800-727-9907

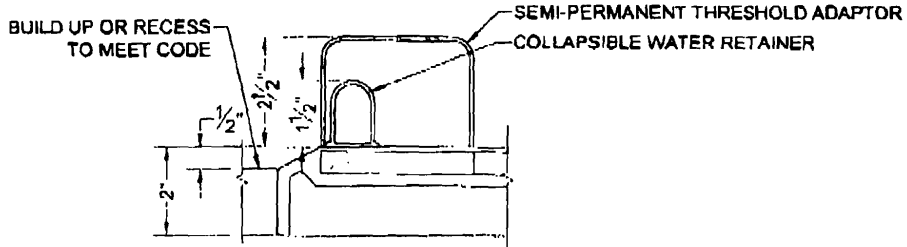
We reserve the right to make revisions without notice in the design of fixtures or in packaging unless this right has specifically been waived at the time the order is accepted.

4LSS6331A75B



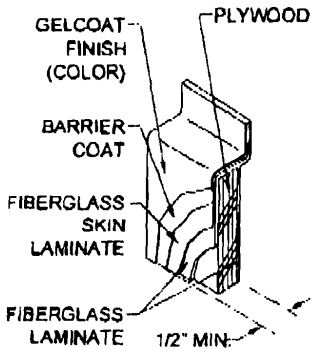
SECTION A-A - SCALE: 3" = 1'-0"

4LSS6331A2B

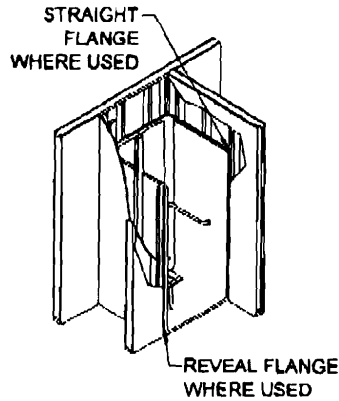


SECTION A-A - SCALE: 3" = 1'-0"

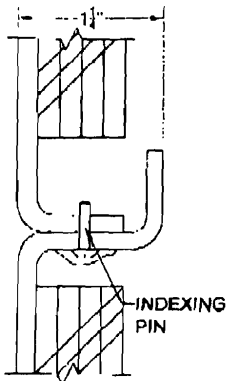
****OTHER THRESHOLD HEIGHTS AVAILABLE UPON REQUEST****



DETAIL B - SCALE: 3" = 1'-0"
WALL SECTION DETAIL



DETAIL C - SCALE: NTS
TYPICAL FRAMING



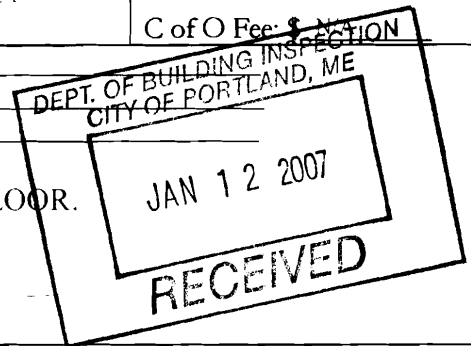
DETAIL E - SCALE: NTS
WALL JOINT DETAIL



General 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: 85 EXCHANGE STREET - 3RD FLOOR		
Total Square Footage of Proposed Structure Existing Building Tenant Space 5,400 S.F.		Square Footage of Lot N/A
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# 032 D004 001	Owner: TOP OF EXCHANGE LLC 42 MARKET STREET PORTLAND, ME 04101	Telephone: 207.772.2946
Lessee/Buyer's Name (If Applicable) BINGHAM MCCUTCHEN LLP 150 FEDERAL STREET BOSTON, MA 02110 P: 617.951.8000 - F: 617.951.8736	Applicant name, address & telephone: MARK MUELLER ARCHITECTS 100 COMMERCIAL ST. - SUITE 205 PORTLAND, ME 04101 P: 207.774.9057 - F: 207.773.3851	Cost Of Work: \$ 175,000.00 Fee: \$ 1,770.00 C of O Fee: \$ N/A
Current Specific use: BUSINESS If vacant, what was the previous use? N/A Proposed Specific use: BUSINESS		
Project description: INTERIOR TENANT FIT-UP OF ENTIRE 3RD FLOOR.		
Contractor's name, address & telephone: MONAGHAN WOODWORKS		
Who should we contact when the permit is ready: BRAD FINLAY Mailing address: MONAGHAN WOODWORKS Phone: 207.756.5410 100 COMMERCIAL ST. - SUITE 311 PORTLAND, ME 04101 P: 207.775.2683		



Please submit all of the information outlined in the Commercial Application Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information visit us on-line at www.portlandmaine.gov, stop by the Building Inspections office, room 315 City Hall or call 874-8703.

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: JANUARY 12, 2007
-------------------------	------------------------

This is not a permit, you may not commence ANY work until the permit is issued.



CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

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

FROM: MARK MUELLER ARCHITECTS

RE: Certificate of Design

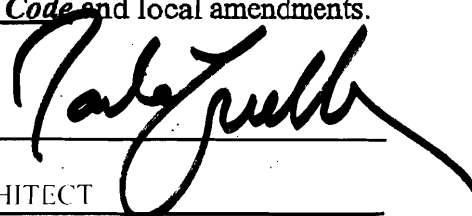
DATE: JANUARY 12, 2007

These plans and / or specifications covering construction work on:

RENOVATION OF THE 3RD FLOOR TENANT SPACE.

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the 2003 International Building Code and local amendments.

(SEAL)

Signature: 

Title: ARCHITECT

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.

Firm: MARK MUELLER ARCHITECTS

Address: 100 COMMERCIAL STREET
SUITE 205
PORTLAND, MAINE 04101
207.774.9057



CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

ACCESSIBILITY CERTIFICATE

Designer: MARK MUELLER ARCHITECTS

Address of Project: 85 EXCHANGE STREET - 3RD FLOOR

Nature of Project: RENOVATION OF THE 3RD FLOOR TENANT SPACE.

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.

Signature: 

Title: ARCHITECT

Firm: MARK MUELLER ARCHITECTS

Address: 100 COMMERCIAL STREET
SUITE 205
PORTLAND, MAINE 04101

Phone: 207.774.9057

(SEAL)

NOTE: If this project is a new Multi Family Structure of 4 units or more, this project must also be designed in compliance with the Federal Fair Housing Act. On a separate submission, please explain in narrative form the method of compliance.

FROM DESIGNER: MARK MUELLER ARCHITECTS

DATE: JANUARY 12, 2007

Job Name: BINGHAM MCCUTCHEN

Address of Construction: 85 EXCHANGE STREET - 3RD FLOOR

2003 International Building Code

Construction project was designed according to the building code criteria listed below:

Building Code and Year IBC 2003 Use Group Classification(s) BUSINESS

Type of Construction 3B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC NO

Is the Structure mixed use? YES if yes, separated or non separated (see Section 302.3) NON

Supervisory alarm system? YES Geotechnical/Soils report required? (See Section 1802.2) NO

STRUCTURAL DESIGN CALCULATIONS

N/A Submitted for all structural members
(100.1, 100.1.1)

N/A

Live load reduction
(1803.1.1, 1807.9, 1607.10)

20 psf

Roof live loads (1803.1.2, 1607.11)

**DESIGN LOADS ON CONSTRUCTION DOCUMENTS
(1803)**

Uniformly distributed floor live loads (7603.11, 1807)

Roof snow loads (7603.7.3, 1608)

50 psf

Ground snow load, P_g (1608.2)

Floor Area Use

Loads Shown

Offices

50 psf + 20 psf

1.0

If $P_g > 10$ psf, flat-roof snow load, P_f
(1608.3)

Corridors Above 1st

80 psf

1.0

If $P_g > 10$ psf, snow exposure factor, C_e
(Table 1608.3.1)

1.0

Roof thermal factor, C_t (Table 1608.3.2)

1.0

Sloped roof snowload, P_s (1608.4)

N/A

Seismic design category (1818.3)

N/A

Basic seismic-force-resisting system
(Table 1817.8.2)

N/A

Response modification coefficient, R ,
and deflection amplification factor, C_d
(Table 1817.8.2)

Wind loads (1803.1.4, 1809)

N/A

Design option utilized (1609.1.1, 1609.6)

N/A

Basic wind speed (1809.3)

N/A

Building category and wind importance
factor, I_w (Table 1804.5, 1609.5)

N/A

Analysis procedure (1818.6, 1617.5)

N/A

Wind exposure category (1809.4)

N/A

Design base shear (1617.4, 1817.6.1)

N/A

Internal pressure coefficient (ASCE 7)

N/A

Component and cladding pressures
(1809.1.1, 1809.6.2.2)

Flood loads (1803.1.6, 1612)

N/A

Flood hazard area (1612.3)

N/A

Elevation of structure

N/A

Main force wind pressures (7603.1.1,
1609.6.2.1)

Other loads

N/A

Concentrated loads (1607.4)

20 psf

Partition loads (1607.5)

N/A

Impact loads (1807.8)

Earthquake design data (1803.1.5, 1814-1823)

N/A

Design option utilized (1814.1)

N/A

Seismic use group ("Category")
(Table 1804.5, 1616.2)

N/A

Misc. loads (Table 1607.6, 1607.8.1,
1807.7, 1607.12, 1807.13, 1610,
1811, 2404)

N/A

Spectral response coefficients, S_{DS} &
 S_{D1} (1615.1)

N/A

Site class (1816.1.5)

Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date Decmeber 20, 2006

Addendum #2 to Plans and Specifications For: Wall base and Metal door frames

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

The wall base on interior partitions to be changed from a painted wood base to a 4" vinyl wall base, straight at carpeted areas and cove at hard flooring, Color selection to follow.

The wall base at the exterior partitions is to stay as existing, painted wood, and patched as needed

The metal door frames are to be changed so that the casings have a standard return of 1/2".

Attachments

None

Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date Decmeber 18, 2006

Addendum #1 to Plans and Specifications For:

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

Ceiling System, ACT-1: Armstrong Cirrus Dune with Suprafine 9/16" exposed Tee Grid System, Shadow Molding at Partitions.

Delete magnetic locking device and card reader. Provide key lock cylinder in metal shoe of entry doors. Key alike with door to exit stairs.

Attachments

SKA-01: Delete curved GWB soffit and light cove in corridor #332 and file area #335. Provide additional lighting as indicated on sketch.

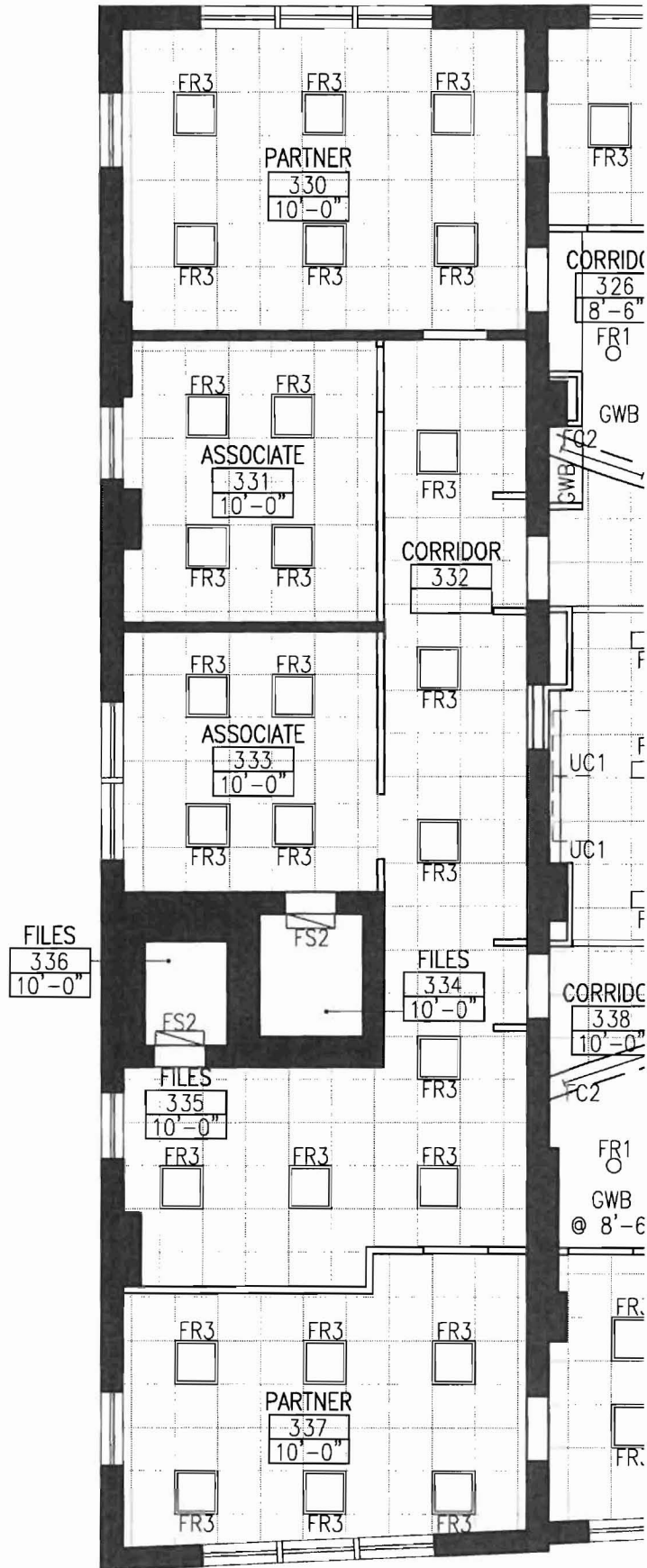
SKA-02: Delete GWB wing wall in conference room #321.

SKA-04: Partition types. Please note that all partitions between offices, new and existing, are to be type #2

Alternates: Please provide pricing for the attached alternates:

SKA-03: Alternate Detail, Provide a price to delete the GWB cove detail and cove lighting and provide the indicated detail.

SKA-05: Alternate lighting, If the light cove is deleted along the curved GWB soffit additional light fixtures will need to be added to the ACT ceiling. Provide a price to provide the additional fixtures indicated on the sketch.



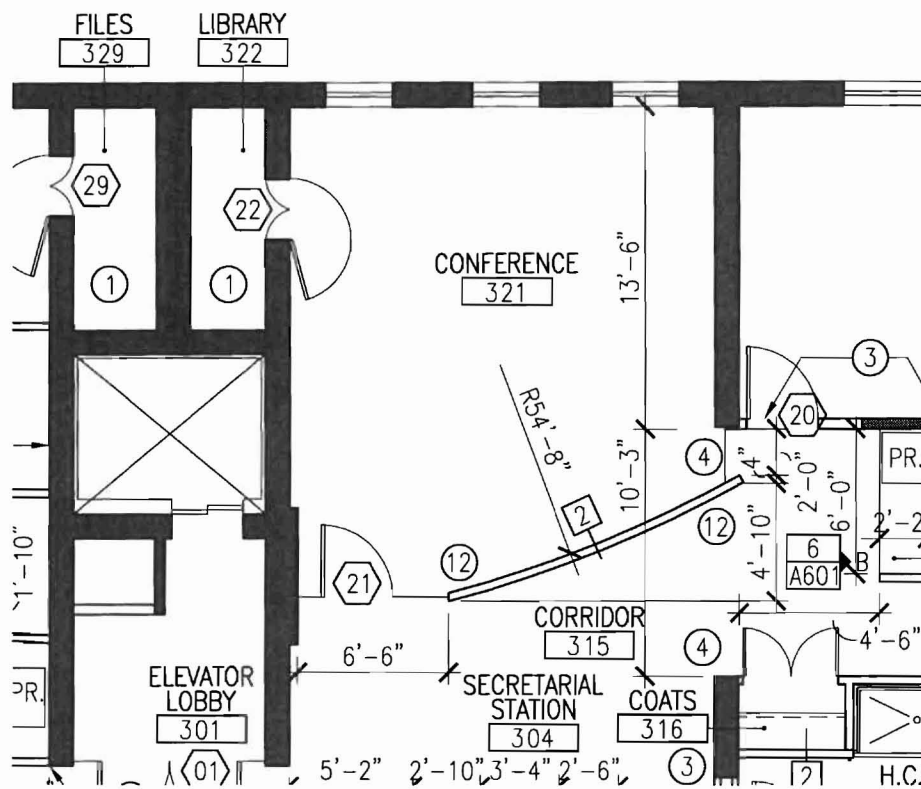
PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND ME
 3RD FLOOR RENOVATIONS

SKA-01
 REVISED RCP

1/8" = 1'-0"

12/18/2006



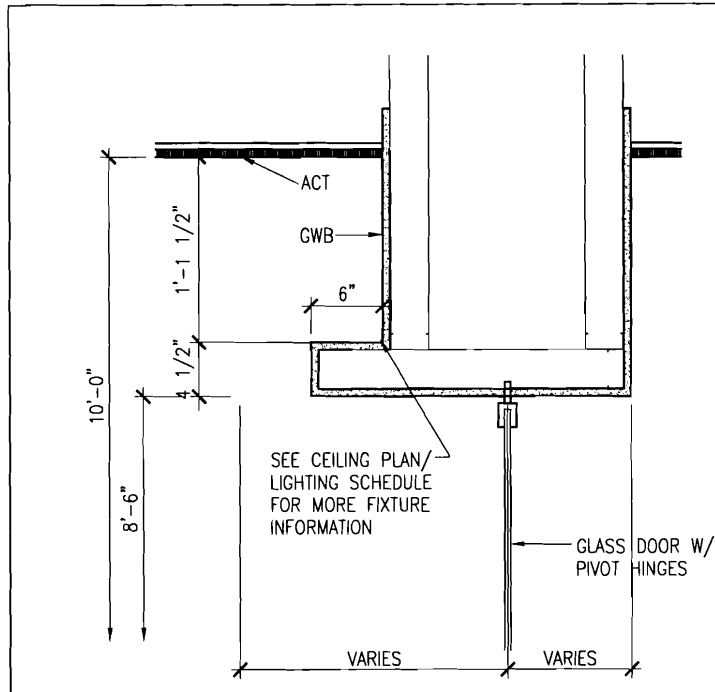
PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND, ME
 3RD FLOOR RENOVATIONS

SKA-02
 REVISED CONF. RM. 321

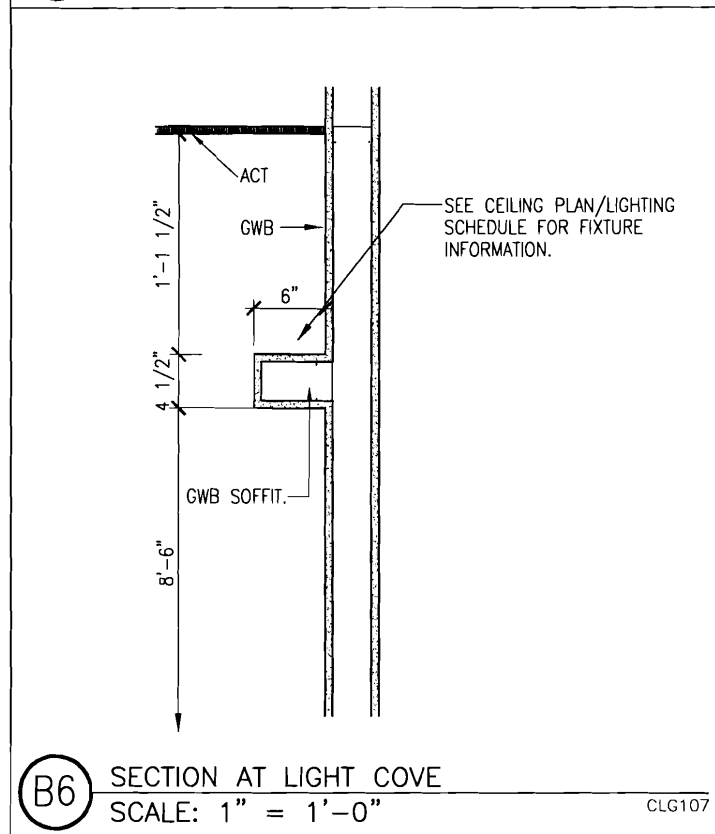
1/8" = 1'-0"

12/18/2006



(A6) SECTION AT SOFFIT W/ LIGHT COVE
SCALE: 1" = 1'-0"

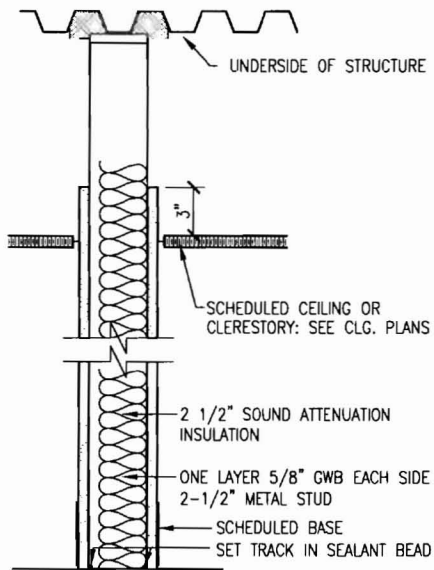
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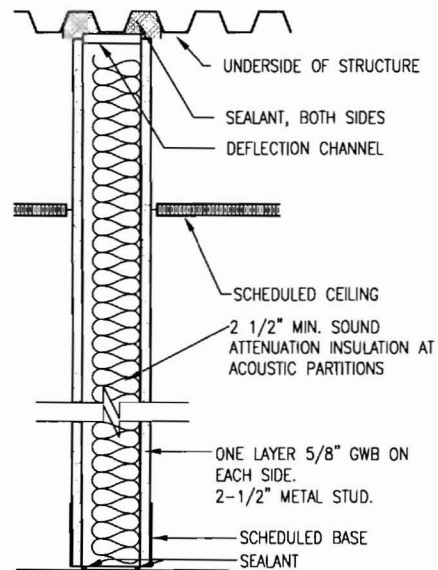
(B6) SECTION AT LIGHT COVE
SCALE: 1" = 1'-0"

CLG107

PARTITION TYPES



1 STANDARD GWB PARTITION
(NON INSULATED)
FRAMING TO DECK W/GWB 3" ABOVE ACT



2 ACOUSTIC PARTITION
(INSULATED)
FRAMING TO DECK W/ GWB TO DECK W/ BATT INSULATION

PH PARTNERS

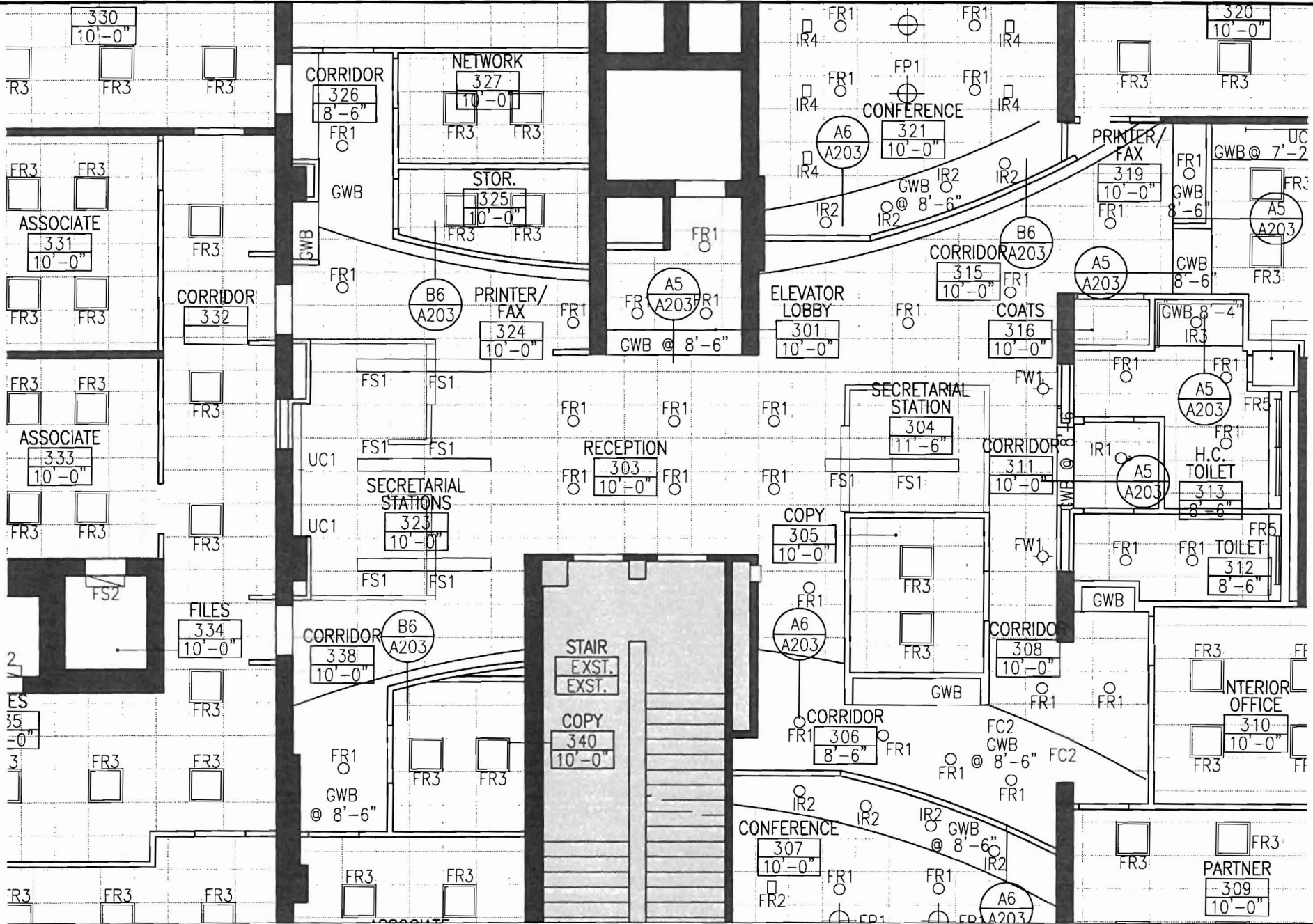
18 Tremont street, Suite 707
Boston, MA 02108
t: 617-720-0740
f: 617-720-0747

BINGHAM MCCUTCHEN
85 EXCHANGE STREET, PORTLAND ME
3RD FLOOR RENOVATIONS

SKA-04
PARTITION TYPES

1" = 1'-0"

12/18/2006



phpartners
 18 Tremont Street, suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEM
 85 EXCHANGE STREET, PORTLAND, ME
 3RD FLOOR RENOVATIONS

SKA-05
 REVISED RCP

1/8" = 1'-0" 12/18/2006

Addendum

To Brad Finlay
 Monaghan Woodworks, Inc.
 100 Commercial Street
 Portland, Maine 04101

Date January 4, 2007

Addendum #3 to Plans and Specifications For:

Project	Bingham McCutchen LLP 85 Exchange Street Portland Maine	PHP Job No.	6032
		Original Issuance Date	12/08/06

This addendum revises, supplements, or otherwise modifies original contract documents. When issued by the Architect and received by Contractor, this document becomes effective immediately and becomes part of the contract.

Description

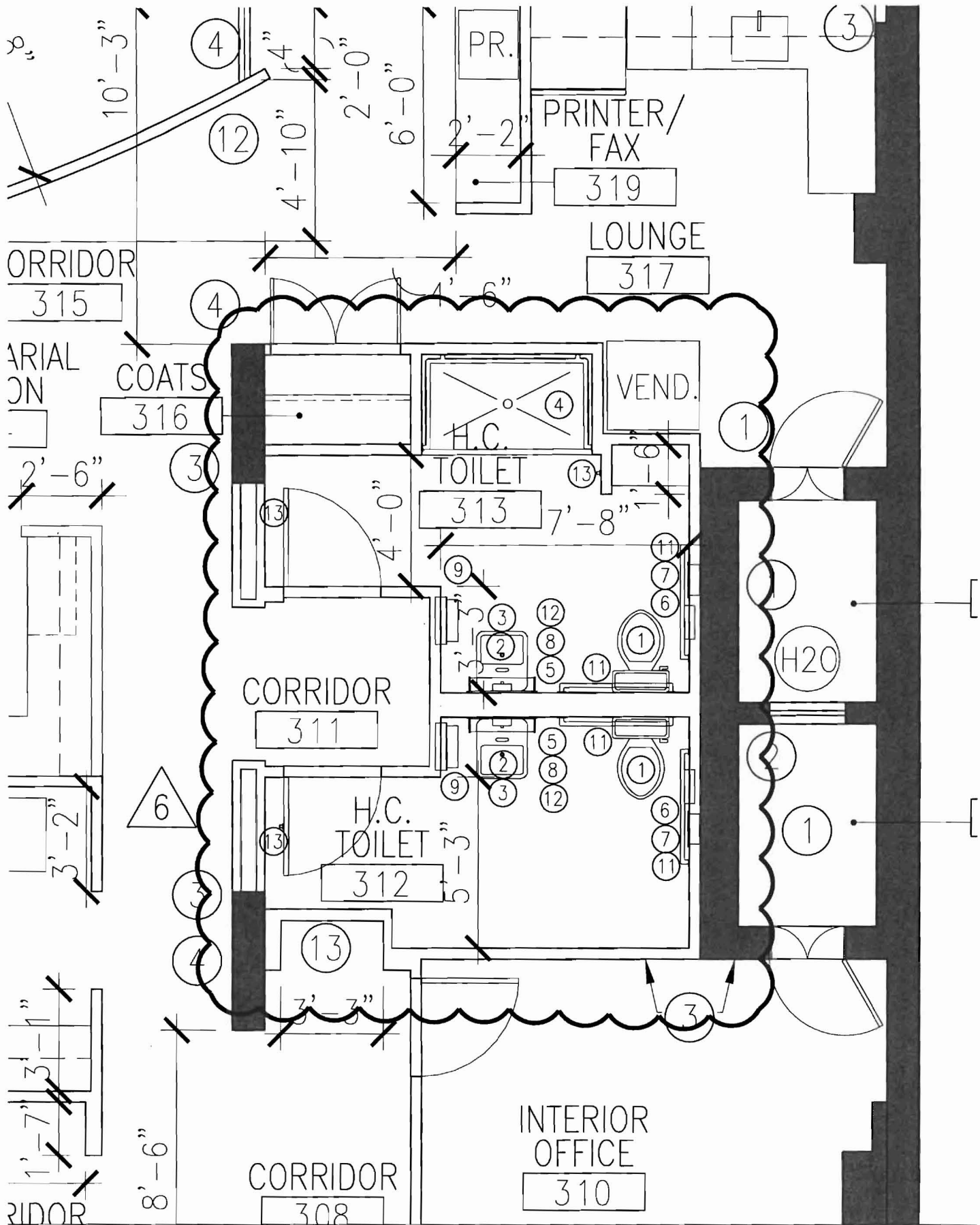
Bathroom revisions to comply with ADA codes.

Revisions to life safety to clearly identify the fire escape as the second means of egress.

Finish changes.

Attachments

- A403a – Finish Plan and Floor Transition Details
- A601 – Interior Elevations
- SKA-06 – ADA Bathrooms
- SKA-07 – ADA Kitchen Sink Section
- SKE-01 E 2.00 – Electrical 3rd Floor Ltg.
- SKE-02 E 4.00 – Electrical 3rd Floor Fire



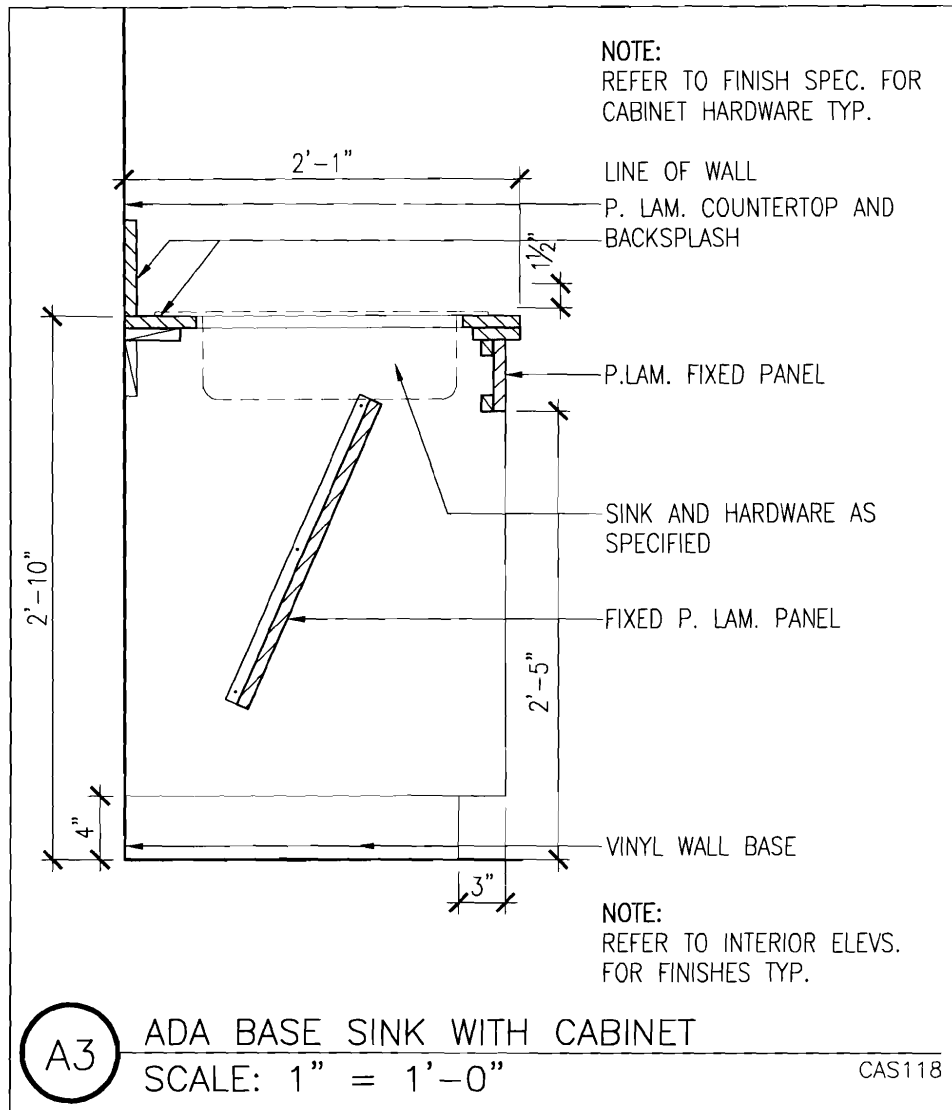
PH PARTNERS
 18 Tremont street, Suite 707
 Boston, MA 02108
 t: 617-720-0740
 f: 617-720-0747

BINGHAM MCCUTCHEN
 85 EXCHANGE STREET, PORTLAND ME
 3RD FLOOR RENOVATIONS

SKA-06
 ADA BATHROOMS

1/8" = 1'-0"

01/02/2007



PH PARTNERS

18 Tremont street, Suite 707
Boston, MA 02108
t: 617-720-0740
f: 617-720-0747

BINGHAM MCCUTCHEN

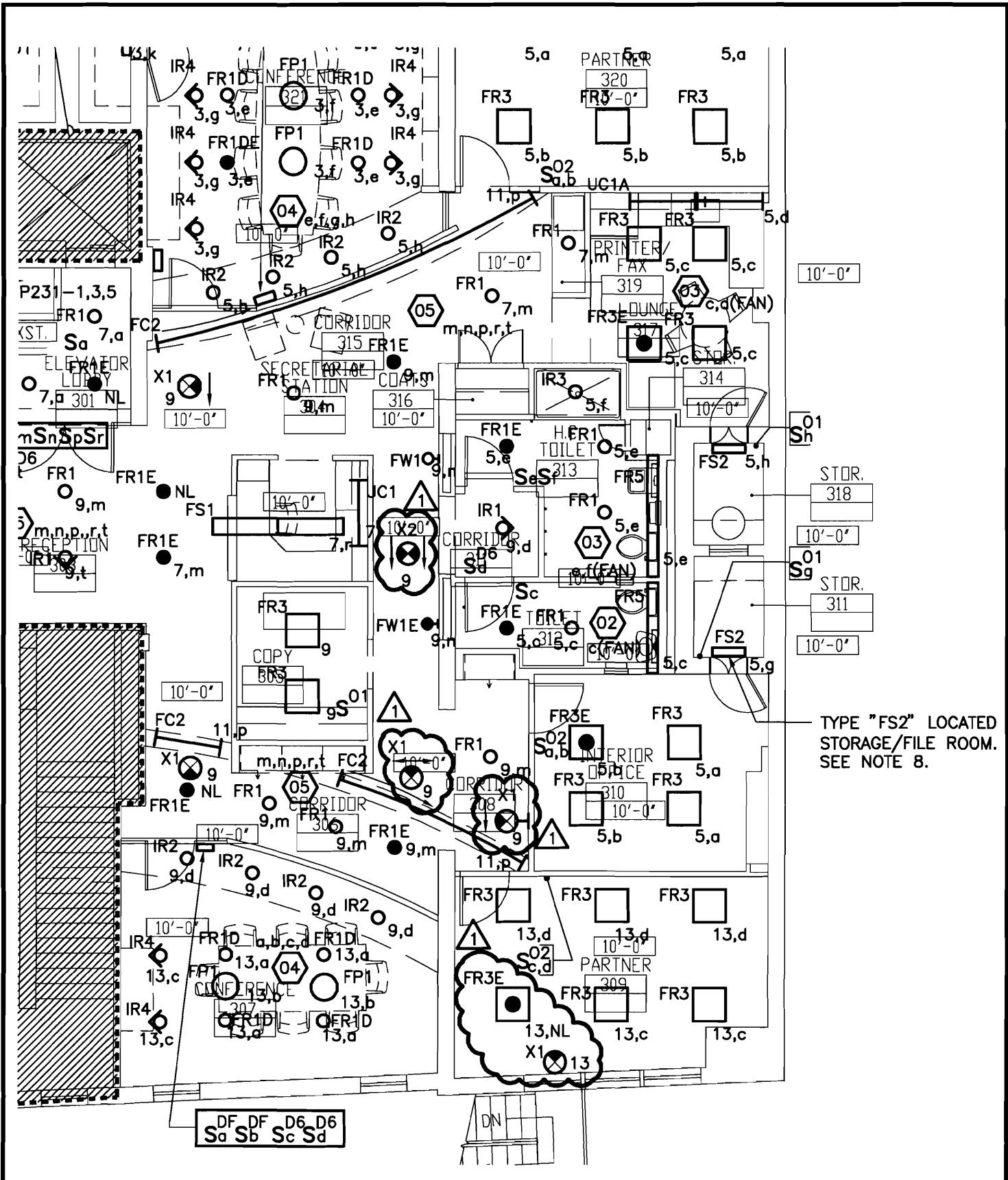
85 EXCHANGE STREET, PORTLAND ME
3RD FLOOR RENOVATIONS

SKA-07

ADA KITCHEN SINK SECTION

1" = 1'-0"

01/04/2007



Richard D. Kimball Company, Inc
 200 Brickstone Square
 Andover, MA 01810-1488
 P 978-475-0298
 F 978-475-5768
 W www.rdkengineers.com

PROJECT

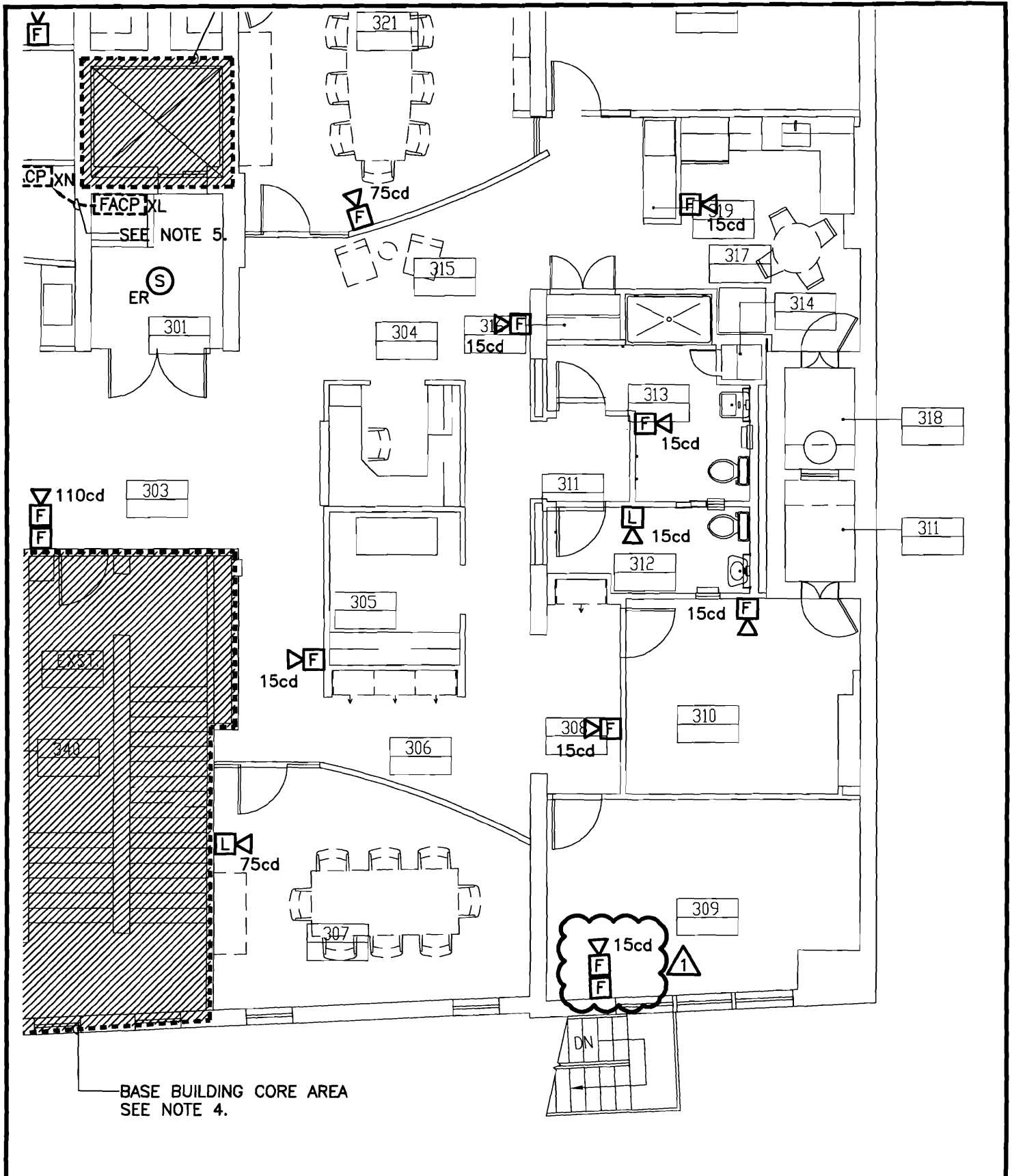
NUMBER 26739 REVISION 1
 REFERENCE DRAWING E2.00
 BINGHAM MCCUTCHEM
 3RD FLOOR RENOVATIONS
 PORTLAND, MAINE

DRAWING

DRAWN BY RHA CHECKED BY MTG
 DATE 01/04/07 SCALE 1/8" = 1'-0"
 PHPARTNERS
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 BOSTON, MASS

Andover, MA
 Boston, MA

SKE-01



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ENGINEERS

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Boston, MA

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NUMBER 26739 REVISION 1

REFERENCE DRAWING E4.00

BINGHAM MCCUTCHEM
3RD FLOOR RENOVATIONS
PORTLAND, MAINE

DRAWING

DRAWN BY: RHA CHECKED BY: MTG

DATE: 01/04/07 SCALE: 1/8" = 1'-0"

PHPARTNERS
18 TREMONT STREET
BOSTON, MASS

SKE-02

Construction Change Directive

CCD-01 Exhaust Fan

Date January 09, 2007

<p>To Brad Finlay Monaghan Woodworks 100 Commercial Street Portland, ME 04101</p>	<p>Project Bingham McCutchen LLP 85 Exchange Street Project PHP Job No. <u>6032</u></p>
--	---

The following revisions to the Contract will be required according to instructions which are checked below.

Description

Delete HP-10 and replace with an exhaust fan.

Attachments

SKH-01, SKH-02, SKE-03, SKE-04

Instructions

- PRICE the above change and submit an itemized proposal showing associated labor and material costs, indicating either an increase or decrease in Contract Sum or Contract Time. Do not proceed with work described in this Directive until approved in writing by the Owner.
- PROCEED immediately with items to avoid or minimize delays in the work, and submit a Change Estimate based on lump sum increase or decrease to the Contract.
- PROCEED immediately with items to avoid or minimize delays in the work, and submit itemized documentation of costs incurred in the Work as soon as final cost/time change is determined.
- FOR INFORMATION only. Do no work which will increase the Time or Contract Sum with the above clarifications or supplemental instructions, unless the Owner has been advised in writing that the Contractor considers the Work described to require Contract adjustment.

When signed by Owner and Architect and received by Contractor, this document becomes effective immediately as a Construction Change Directive (CCD) and Contractor shall proceed as directed. Contractor's signature indicates agreement with terms of this Directive.

<p>Owner Bingham McCutchen LLP 150 Federal Street Boston, MA 02110</p>	<p>Architect PH Partners, Inc. 18 Tremont Street, Suite 707 Boston, MA 02108</p>	<p>Contractor Monaghan Woodworks 100 Commercial Street Portland, ME 04101</p>
<p>By Date</p>	<p>By Date</p>	<p>By Date</p>

Andover, MA
Boston, MA

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PROJECT

NUMBER
26739

DATE
01/09/07

REVISION
1

BINGHAM McCUTCHEEN
3RD FLOOR RENOVATIONS
85 EXCHANGE ST
PORTLAND, ME

DRAWING

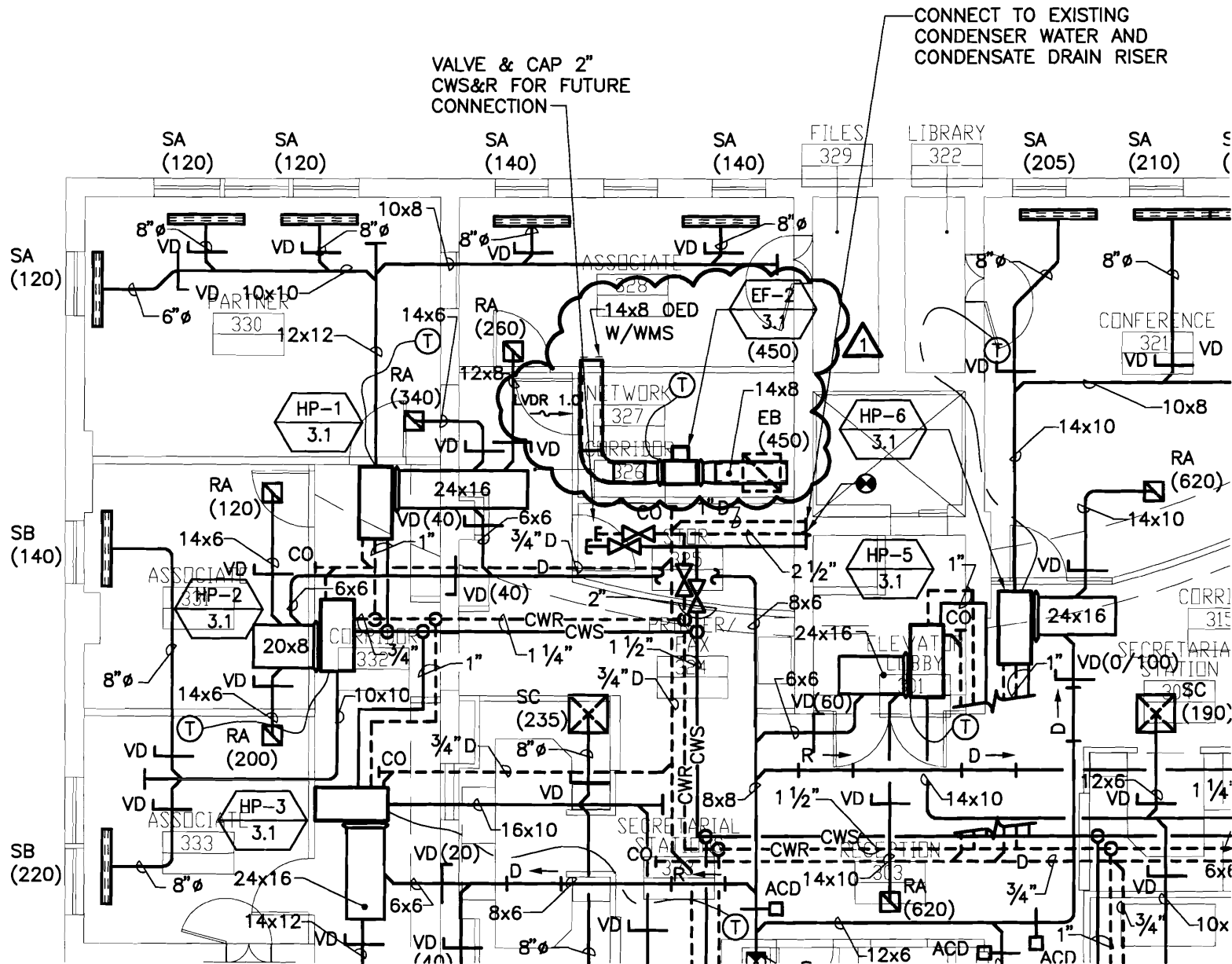
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BSI

CHECKED BY
BSI

SCALE
1/8" = 1'-0"

REFERENCE DRAWING
H2.00

HVAC
NETWORK ROOM
EXHAUST FAN



SKH-01

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Boston, MA

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PROJECT

NUMBER
26739

DATE
01/09/07

REVISION
1

BINGHAM McCUTCHEN
3RD FLOOR RENOVATIONS
85 EXCHANGE ST
PORTLAND, ME

DRAWING

DRAWN BY
BSI

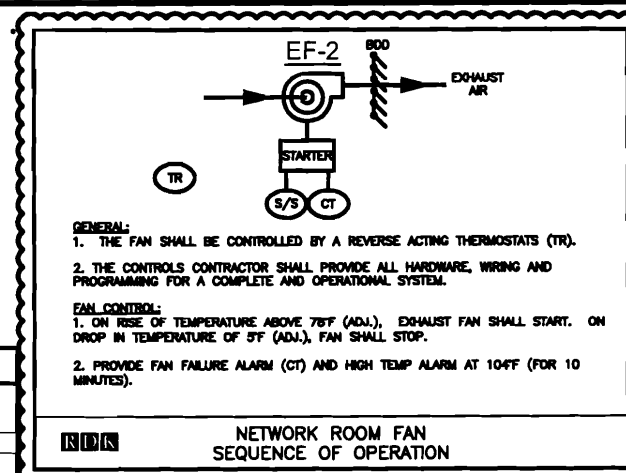
CHECKED BY
BSI

SCALE
NONE

REFERENCE DRAWING
H8.00

HVAC
NETWORK ROOM
EXHAUST FAN

SKH-02



DIFFUSER, GRILLE & REGISTER SCHEDULE

TAG	SELECTION RANGE (CFM)	NECK SIZE (IN.)	OVERALL SIZE (IN.)	SERVICE	MOUNTING	MANUFACTURER AND MODEL NUMBER (AS STANDARD)	NC OR AIR PRESSURE DROP NOT TO EXCEED	REMARKS
SA	0-240	8"	48x4	SUPPLY	SURFACE	TITUS ML-39	25	1,2
SC	0-350	8"	24x24	SUPPLY	LAY-IN	TITUS OMNI	25	
RA	0-720	14x14	18x18	RETURN	SURFACE	TITUS 350FL	25	
EA	0-180	8"	24x24	SUPPLY	SURFACE	TITUS 350FL	25	
EB	0-720	14x14	18x18	RETURN	SURFACE	TITUS 350FL	25	

NOTES:

1. PROVIDE WITH MATCHING TITUS PLENUM BOX.
2. LINEAR DIFFUSER TO HAVE (2) 1" SLOTS. BALANCE DIFFUSER FOR VERTICAL DOWNFLOW ON EXTERIOR SLOT, AND HORIZONTAL DISCHARGE ON INTERIOR SLOT.

FAN SCHEDULE

TAG	LOCATION	SERVICE	CFM	FAN TYPE	E.S.P. (IN.WG)	WHEEL			MOTOR				MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS	
						DIA. (IN.)	TYPE	DRIVE	RPM	BHP	HP	V			PH
F-1	LOUNGE	LOUNGE TOILETS	150	INLINE	0.15	12	BI	BELT	1725	0.08	1/4	115	1	GREENHECK BSG-90-4	
F-2	NETWORK 327	NETWORK 327	450	INLINE	0.35	12	BI	BELT	1725	0.08	1/4	115	1	GREENHECK BSG-90-4	

NOTES:

1. PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH.
2. PROVIDE WITHOUT INTEGRAL BACKDRAFT DAMPER.

HEAT PUMP SCHEDULE

TAG	LOCATION	SERVES	COOLING CAPACITIES						HEATING CAPACITY				WATER SIDE		AIR SIDE		ELECTRICAL CHARACTERISTICS			MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS	
			ENT H2O (°F)	LVC H2O (°F)	EAT (°F)		TOTAL MBH	SENS. MBH	REJECTED BTUH	ENT H2O (°F)	LVC H2O (°F)	TOTAL BTU	EAT (°F)	GPM	P.D. (FT. H2O)	CFM	ESP (IN. H2O)	COMPRESSOR				
					DB	WB												FLA	V			PH
HP-1	CORRIDOR 332	PARTNER 330	85	103.2	75	63	22.7	17.5	30127	70	55.8	30.1	70	3.4	3.4	640	0.5	15.8	208	1	MCQUAY-WCRH024	1,2,3
HP-2	CORRIDOR 332	ASSOCIATE 331 & 332	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3
HP-3	FILES 334	SECRETARIAL 323	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	720	.35	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-4	COPY 340	PARTNER 337	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	650	0.45	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-5	LOBBY 301	SECRETARIAL 304	85	103.2	75	63	18.0	13.9	23672	70	55.7	24.0	70	2.7	2.1	660	0.45	8.5	208	1	MCQUAY-WCRH019	1,2,3
HP-6	CORRIDOR 315	CONFERENCE 321	85	98.8	75	63	15.8	12.0	19985	70	58.5	20.4	70	3.1	2.8	820	0.5	8.1	208	1	MCQUAY-WCRH015	1,2,3
HP-7	FAX 319	PARTNER 320	85	95.0	75	63	8.5	7.1	10789	70	61.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3
HP-8	TOILET 312	PARTNER 309	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3
HP-9	COPY 308	CONFERENCE 307	85	95.0	75	63	8.5	7.1	10789	70	61.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3

NOTES:

1. PROVIDE WITH FLEXIBLE HOSE KIT, EXTRA SET OF FILTERS, HANGERS BRACKETS AND 300 PSI COIL.
2. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCH.
3. PROVIDE CONDENSATE PUMP ALL ASSOCIATED PIPING SUPPORTS, CONTROLS AND ANY OTHER APPURTENANCES REQUIRED TO MAKE PUMP OPERATIONAL WITH ASSOCIATED HEAT PUMP. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.

RDK ENGINEERS

Andover, MA
Boston, MA

Richard D. Kimball Company, Inc
200 Brickstone Square
Andover, MA 01810-1488

P 978-475-0298
F 978-475-5768
W www.rdkengineers.com

PROJECT

NUMBER 26739
DATE 01/09/07
REVISION 1

BINGHAM MCCUTCHEM
3RD FLOOR RENOVATIONS
PORTLAND, MAINE

DRAWING

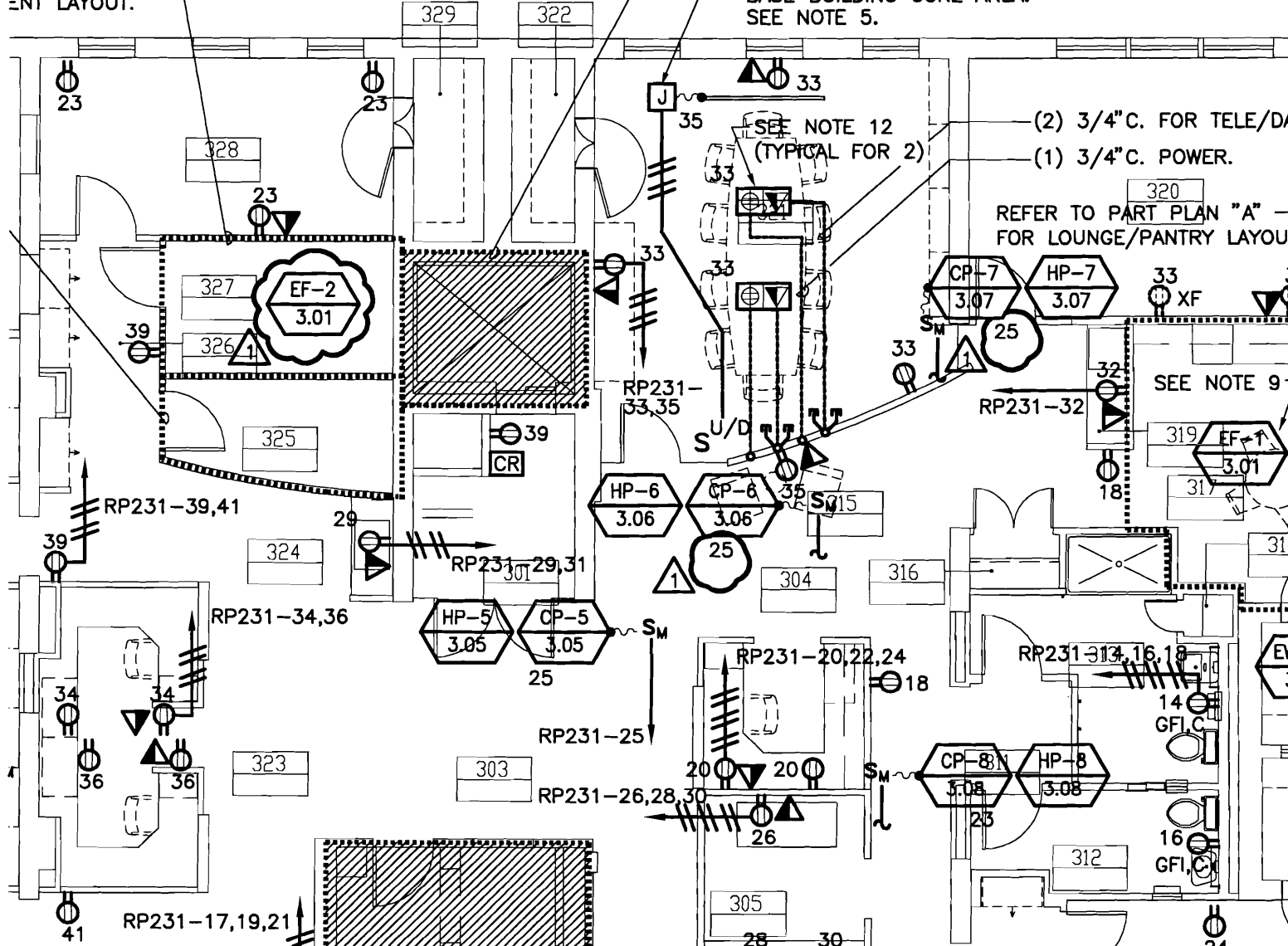
DRAWN BY RHA
CHECKED BY MTG
SCALE 1/8" = 1'-0"
REFERENCE DRAWING E3.00

PHPARTNERS
18 TREMONT STREET
BOSTON, MASS

SKE-03

ART PLAN "C"
ENT LAYOUT.

—BASE BUILDING CORE AREA.
SEE NOTE 5.



PROJECT [REDACTED]

NUMBER 26739

DATE 01/09/07

REVISION 1

BINGHAM MCCUTCHEN
3RD FLOOR RENOVATIONS
PORTLAND, MAINE

DRAWING [REDACTED]

DRAWN BY RHA

CHECKED BY MTG

SCALE NONE

REFERENCE DRAWING EO.00

PHPARTNERS
18 TREMONT STREET
BOSTON, MASS

MECHANICAL / PLUMBING EQUIPMENT SCHEDULE

EQUIP TAG	DESCRIPTION	LOAD					POWER SOURCE		BRANCH CIRCUIT	CONNECTION				REMARKS
		HP	KVA	VOLT	PH	WIRE	PANEL	C/B		FLEX	JB	REC	DISC	
HP-1	HEAT PUMP	-	3.3	208	1	3	RP232-1	30A-2P	2#10, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-2	HEAT PUMP	-	1.5	208	1	3	RP232-5	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-3	HEAT PUMP	-	1.7	208	1	3	RP232-9	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-4	HEAT PUMP	-	1.7	208	1	3	RP232-13	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-5	HEAT PUMP	-	1.4	208	1	3	RP232-17	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-6	HEAT PUMP	-	1.7	208	1	3	RP232-2	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-7	HEAT PUMP	-	1.2	208	1	3	RP232-6	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-8	HEAT PUMP	-	1.5	208	1	3	RP232-10	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
HP-9	HEAT PUMP	-	1.2	208	1	3	RP232-14	20A-2P	2#12, 1#10G.-3/4"C.	X			X	SEE NOTE 3
EF-1	EXHAUST FAN	1/4	.70	120	1	3	RP232-27	15A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 4,8
EF-2	EXHAUST FAN	1/4	.70	120	1	3	RP232-27	15A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 4,9
EW-1	ELECTRIC WATER HEATER	-	4.50	208	3	3	RP232-28	20A-3P	3#12, 1#12G.-3/4"C.	X			X	SEE NOTE 7
CP	CONDENSATE PUMP	-	.40	120	1	3	RP232	20A-1P	2#12, 1#12G.-3/4"C.	X			X	SEE NOTE 5,8

NOTES:

- BRANCH CIRCUIT WIRING METHODS SHALL BE AS NOTED ON THE DRAWINGS AND/OR SPECIFICATIONS FOR THE APPLICABLE LOCATION.
- "FLEX" - DENOTES FINAL THREE FEET (MAXIMUM) OF RACEWAY SHALL BE FLEXIBLE METAL OR LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- DISCONNECT SHALL BE RATED 30AMP - SINGLE FUSE UNFUSED.
- DISCONNECT SHALL BE MOTOR-RATED SWITCH WITH THERMAL OVERLOAD ELEMENT.
- DISCONNECT PROVIDED INTEGRAL (PREWIRED) TO EQUIPMENT BY OTHERS.
- ON/OFF VIA CEILING MOUNTED OCCUPANCY SENSOR POWER PACK (PANTRY AND TOILET ROOMS).
- DISCONNECT SHALL BE RATED 30AMP - THREE PHASE UNFUSED.
- CONDENSATE PUMP CP-1 THROUGH CP-9 ARE SIMILAR PIECES OF EQUIPMENT. REFER TO FLOOR PLANS FOR CIRCUIT DESIGNATIONS.
- ON/OFF VIA WALL MOUNTED TSTAT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.



Call Toll Free 800-727-9907 Facsimile 800-627-0929 Telephone: 208-342-8823
Corporate Headquarters: 4545 Enterprise, Boise, Idaho 83705-5425

BUDGETARY QUOTATION ONLY

Date of Quote: 11/28/2006
Date Quotation Valid: 11/28/06 Through 2/26/2007
Account Representative: Cal Osborn C.800-474-3950, CalO@Best-Bath.com
Quote to: PHPartners
Attention: Jim Higgins
Telephone: 617-720-0740
Fax: 617-720-0747
Project Name: Bingham McCuthen
File Number: co112806me40
Terms:
Lead Time: 2 Weeks upon receipt of confirmed Purchase Order, Sign-Off Drawings and Confirmed Shipping Schedule

BASE PRODUCT INFORMATION

All Walls 100% Laminated with 3/8" Plywood

"No longer requires mud setting. Pre-leveled unit requires use of factory supplied adhesive to attach to the floor."

Model #:

4LSS6331A1B

General Information:

White

Quantity: Number of RH:_? Number of LH:_?

1

Freight: Full Freight Allowed

Ship To Zip Code:04103 (?)

SUBTOTAL

ACCESSORIES SPECIFIED AND INCLUDED FOR EACH UNIT**ITEM DESCRIPTION**

- 1 27" x 60" x 27" Stainless Steel "U" Grab Bar powder coated white--pre-drilled, installed by others
- 1 Symmons valve and hand held shower assembly. Symmons pressure balanced mixing, valve #15-1-X-FG, Hansgrohe #27712, Alsons #462BG, #4980BX, #4900, #490-60BG--plumbing tree pre-soldered, pre-drilled, installed by others
- 1 Surface Mount Soap Dish--installed by others
- 1 Sioux Chief caulkless brass drain with chrome screen #827-2B--installed by others
- 1 Neoprene 5.5' Water Retainer for 60" Shower Opening,CUT TO FIT--installed by others
- 1 Curtain rod, 20 gauge stainless steel 62.5" w/rings & AQA brackets--installed by others
- 1 66" x 73" Curtain, 10 Ga. Vinyl--factory supplied

SUBTOTAL

UNIT PRICE AS SPECIFIED

\$2,748.00

1 UNIT TOTAL:

\$2,748.00

Consignee must inspect load and document any damage with the shipper at time of receipt.

Consignee must report any missing items within 5 business days of receipt to Customer Service 1-866-941-5666.

FSI Signoffs by:

Engineering

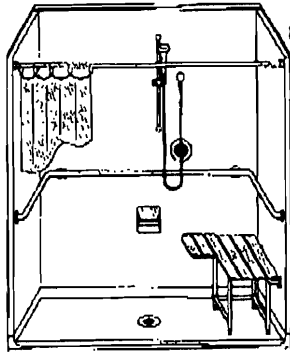
Sales

Production

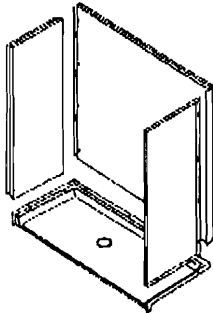
Quotes

MODEL: 4LSS6331A75B-4LSS6331A2B

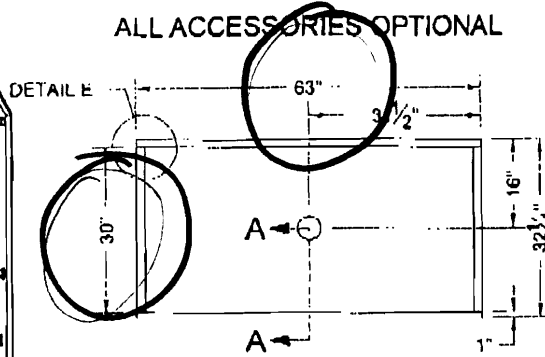
ALL ACCESSORIES OPTIONAL



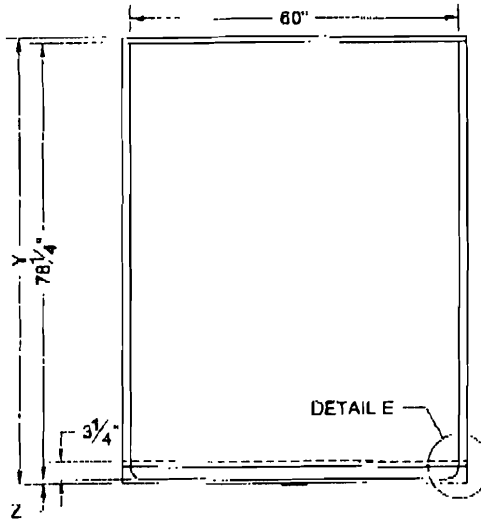
PERSPECTIVE VIEW - N.T.S.
MODEL SHOWN HERE AS:
RIGHT SEAT
RIGHT PLUMBING



ASSEMBLY VIEW - N.T.S.



TOP VIEW - SCALE 1/4" = 1'-0"



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



Features:

- ADA compliant roll-in shower
- Available in various threshold heights
- Molded, four piece gelcoat/fiberglass shower module
- "Smooth" wall finish, white (standard)
- Integral full wood backing for strength and unlimited accessory placement
- On all threshold, heights 1-1/2" or taller, no mud set is required
- On all threshold, heights 1-1/4" or shorter, no mud set is required, but an epoxy adhesive kit is supplied

MODEL #	UNIT HEIGHT Y	THRESHOLD HEIGHT Z*
4LSS6331A75B	80"	3/4" MIN.
4LSS6331A2B	81-1/4"	2" MAX.

* - SEE BACK FOR DETAIL SECTIONS

PRODUCT SPECIFICATIONS:

- Multi piece shower module shall be constructed of gelcoat/fiberglass with full integral plywood backing
- Rough-In: Stud opening + 1/4"-0" Nominal Dimensions.

C.S.I. FORMAT SPECIFICATION TEXT AVAILABLE

PRODUCT INFORMATION:

- Accessories: Factory Installed, unless prone to damage during installation/shipping. Polished chrome/satin stainless standard, others available.
- Colors: White as standard, others to match any major fixture manufacturer, also available with sprayable solid surface in many colors
- Custom curb heights, other than shown, are available (between min. and max.)

ACCESSORIES:

- INSTALLED BY OTHERS:**
- Grab bar
 - Seat, folding
 - Mixing valve, pressure balanced, lever handle, preplumbed tee to supply elbow
 - Vacuum breaker
 - Soap dish
 - Curtain and rod
 - Collapsible Rubber Water Retainer
 - Semi-permanent Threshold Adaptor
 - Caulkless drain

CODES:

- Designed and manufactured in compliance with the following standards and codes:
- A.N.S.I. Z124.2 Standards for Plastic Showers
 - I.P.C. International Plumbing Code
 - A.D.A. Accessibility Guidelines for Buildings and Facilities
 - A.N.S.I. A117.1 Accessible and Usable Buildings and Facilities
 - U.P.C. Uniform Plumbing Code

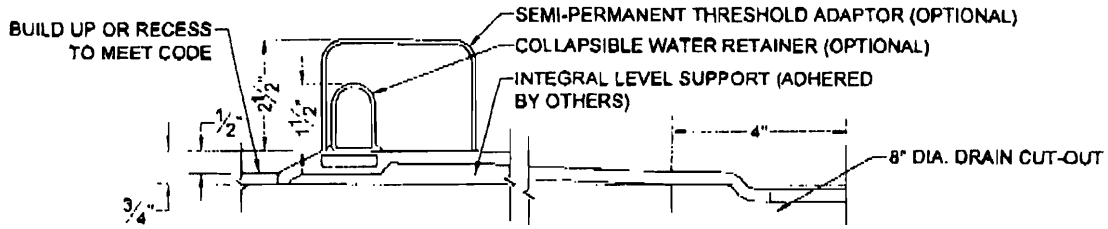
NOTICE OF LIMITATION:

- Recess as needed to meet code
- Adhere to floor as required



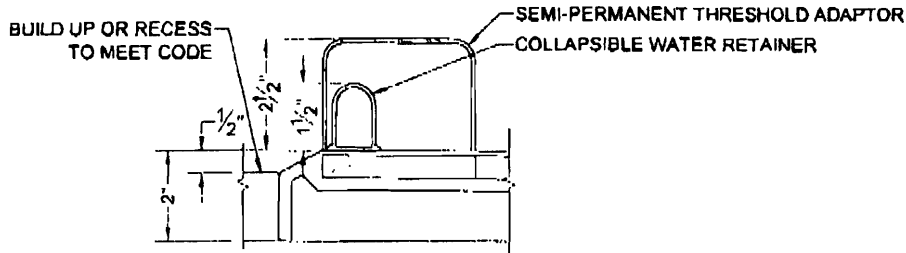
We reserve the right to make revisions without notice in the design of fixtures or in packaging unless the right has specifically been waived at the time the order is accepted.

4LSS6331A75B



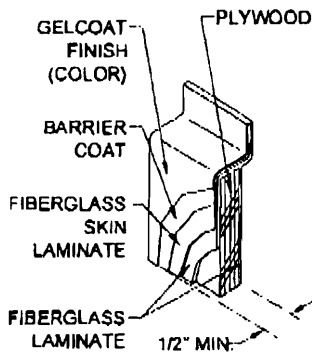
SECTION A-A - SCALE: 3" = 1'-0"

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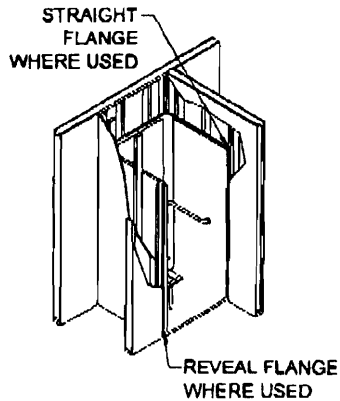


SECTION A-A - SCALE: 3" = 1'-0"

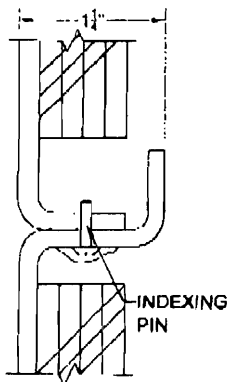
****OTHER THRESHOLD HEIGHTS AVAILABLE UPON REQUEST****



DETAIL B - SCALE: 3" = 1'-0"
WALL SECTION DETAIL



DETAIL C - SCALE: NTS
TYPICAL FRAMING



DETAIL E - SCALE: NTS
WALL JOINT DETAIL




Bingham McCutchen LLP

85 Exchange Street
Portland, Maine




3rd Floor Renovations

ARCH. DRAFTING CONVENTIONS

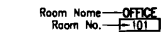
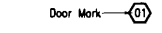
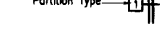
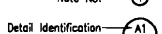



WALL INDICATION

	Existing Partition to Remain
	Existing Partition to be Demolished
	New Partition






DOORS

	Existing Typical Door to Remain
	Existing Typical Door to be Demolished
	New Typical Door

ARCH. GRAPHIC SYMBOLS

	Room Identification
	Door Symbol
	Partition Type
	Note Reference Symbol
	Detail
	Plan Detail
	Interior Elevation

LINETYPES

	Overhead (overcounter and soffits) (DASHED)
	Below and Beyond (undercounter) (HIDDEN)
	Reference (column line, center line) (CENTER)
	Limit of Work Line (BORDER2)
	Break Line

MISCELLANEOUS

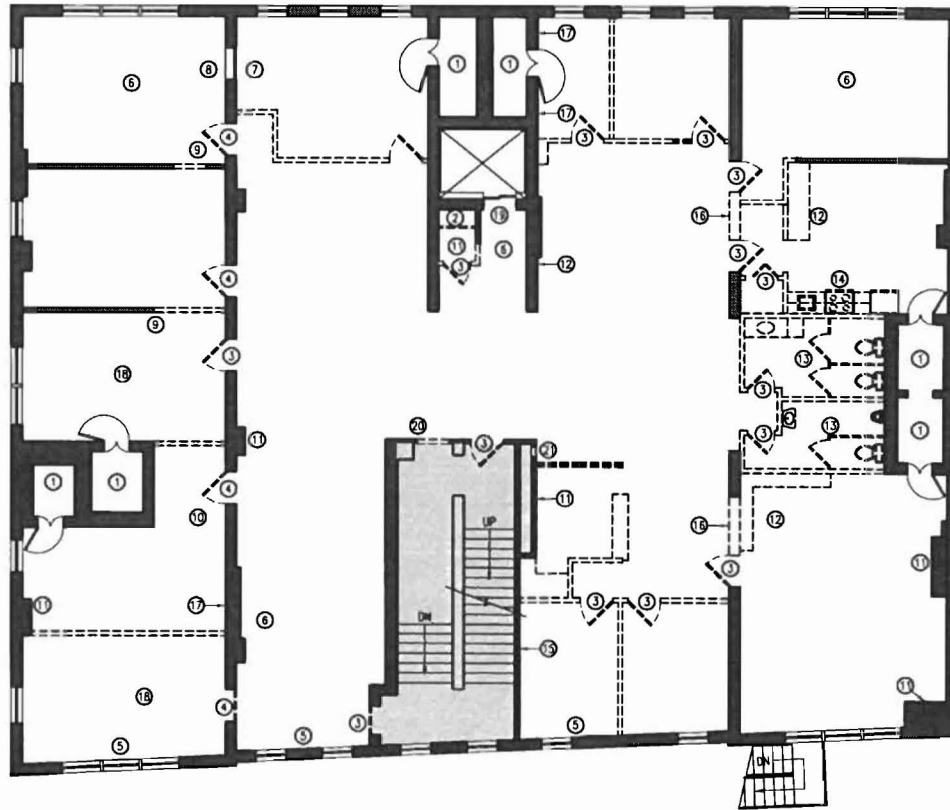
	Revision Symbol
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ARCHITECTURAL ABBREVIATIONS

&	And	FPRF	Fireproofing	PNL	Panel
<	Angle	FS	Full Size	PNT	Point
∅	At	FSH	Fire Sprinkler Head	PNTD	Pointed
⊘	Centerline	FTSP	Firestopping	POL	Polished
⊘	Diameter	FT	Foot or Feet	POLY	Polyethylene
#	Pound	FTC	Footing	PR	Pair
±	Tolerance Dimension	FURN	Furniture	PRCST	Precast
A/E	Architect / Engineer	FURR	Furring	PREFAB	Prefabricated
AB	Anchor Bolt	FUT	Future	PREFIN	Prefinished
ACBL	Accessible (ADA Compliant)	G	Gas	PTD	Paper Towel Dispenser
ACUOUS	Acoustical	GA	Gage	PTN	Partition
AFF	Above Finished Floor	GALV	Galvanized	PTR	Paper Towel Receptacle
AD	Access Door	GB	Grab Bar	PVC	Polyvinyl Chloride
ADA	The Americans with Disabilities Act	GEN	Generator	PVG	Paving
ADBL	Adaptable (ADA Compliant)	GFRC	Glass Fiber Reinforced Concrete	QT	Quarry Tile
ADDL	Additional	GFRG	Glass Fiber Reinforced Gypsum	QTY	Quantity
ADH	Adhesive	GL	Glass	QUAL	Quality
ADJ	Adjustable	GLMU	Glass Masonry Unit	R	Riser
ADJC	Adjacent	GMMU	Glass Mesh Mortar Unit	RAD	Radius
AF	Access Floor	GND	Ground	RBR	Rubber
AGGR	Aggregate	GR	Grade	RD	Roof Drain
AL	Aluminum	GRG	Grating	REC	Recessed
ALT	Alternate	GRTG	Gasket	REF	Reference
ANOD	Anodized	GSKT	GROUT	REFR	Refrigerator
AP	Access Panel	GT	Gravel	REG	Register
ARCH	Architect	GYP	Gypsum	REINF	Reinforced or Reinforcing
ASC	Above Suspended Ceiling	HB	Hose Bibb	REM	Removeable
ASPH	Asphalt	HC	Hollow Core	REQD	Required
BD	Board	HDB	Hardboard	RESIL	Resilient
BLDG	Building	HDWD	Hardwood	RTG	Roofing
BLKG	Blocking	HDWE	Hardware	RH	Right Hand
BM	Beam	HGHT	Height	RHR	Right Hand Reverse
BOT	Bottom	HML	Hollow Metal	RLG	Railing
BUR	Built-up Roofing	HMD	Hollow Metal Door	RM	Room
CAB	Cabinet	HNDRL	Hendrail	RO	Rough Opening
CB	Casing Bead	HO	Hold Open	RV	Roof Vent
CC	Corner Guard	HORIZ	Horizontal	RWL	Rain Water Leader
CEM	Cement	HPT	High Point	S	South
CEMTS	Cementitious	HR	Heating, Ventilation, Air Conditioning	SC	Solid Core
CER	Ceramic	HVAC	Hydraulic	SCHED	Schedule
CHAN	Channel	HYDR	Hydraulic	SCRN	Screen
CHBD	Chalkboard	ID	Inside Diameter	SD	Soop Dispenser
CHFR	Chamfer	IF	Inside Face	SECT	Section
CJ	Construction Joint	IN	Inch or Inches	SGL	Single
CLG	Ceiling	INSUL	Insulation	SHR	Shower
CLJ	Control Joint	INTR	Interior	SHT	Sheet
CLO	Closet	IWH	Instantaneous Water Heater	SHTNG	Sheathing
CLR	Clear	JAN	Janitor	SHV	Shelving
CLRM	Classroom	JST	Joist	SHW	Shower
CMPT	Composite	JT	Joint	SK	Sink
CNTG	Centrifuge	KIT	Kitchen	SLV	Sleeve
CNTR	Counter	KO	Knockout	SM	Sheet Metal
CO	Cosed Opening	KOP	Knockout Panel	SND	Sanitary Napkin Dispenser
COL	Column	KPL	Kick Plate	SNR	Sanitary Napkin Receptacle
COMP	Computer	L	Left	SPEC	Specification
CONC	Concrete	LAB	Laboratory	SQ	Square
CONN	Connection	LAD	Ladder	SSK	Service Sink
CONSTR	Construction	LAM	Lamination	SST	Stainless Steel
CONT	Continuous	LAV	Lavatory	ST	Street
CONTR	Contractor	LB	Pound	STA	Station
CORR	Corridor	LBL	Label	STAG	Stagger
CPRS	Compressible or Compression	LF	Linear Foot	STC	Sound Transmission Class
CRS	Cold Rolled Steel	LG	Length	STD	Standard
CS	Cost Stone	LH	Left Hand	STL	Steel
CSK	Countersunk	LHR	Left Hand Reverse	STR	Storage
CSMT	Cosement	LIB	Library	STRUCT	Structural
CSWK	Cosework	LIN	Linear	SUSP	Suspended
CTL	Cylinder	LKR	Locker	SYM	Symbol
DBL	Double	LLH	Long Leg Horizontal	SYMM	Symmetrical
DEMO	Demolition	LLV	Long Leg Vertical	SYS	System
DEPT	Department	LNLT	Long Leg Vertical	T	Tread
DET	Detail	LONG	Longitudinal	T&B	Top and Bottom
DF	Drinking Fountain	LPT	Low Point	T&G	Top and Groove
DIA	Diameter	LT	Light	TB	Towel Bar
DIM	Dimension	LTV	Lightweight	TBM	Top of Beam
DISP	Dispenser	LTC	Lever or Louver	TC	Top of Concrete
DN	Down	MACH	Machine	TEL	Telephone
DMPF	Dampproofing	MAINT	Maintenance	TEMP	Temporary
DN	Down	MAS	Masonry	TER	Terrazzo
DO	Door	MATL	Material	TF	Top of Footing
DOP	Door Opening	MAX	Maximum	TFE	Top of Finished Floor
DS	Downspout	MECH	Mechanical	THK	Thickness
DSP	Dry Standpipe	MED	Medium	THRES	Threshold
DST	Door Stop	MEMB	Membrane	THRU	Through
DWC	Drawer	MET	Metal	THRU	Through
DWR	Drawer	MEZZ	Mezzanine	TP	Top of Pavement
E	East	MFG	Manufacturer	TPH	Toilet Paper Holder
EA	Each	MH	Manhole	TYP	Typical
EPFS	Exterior Insulation Finish System	MN	Minimum	UNEX	Unexposed
EL	Elevation	MIR	Mirror	UNFN	Unfinished
ELAST	Elastomeric	MISC	Miscellaneous	UON	Unless Otherwise Noted
ELEC	Electric	ML	Metal Lath	UPS	Uninterruptible Power Supply
ELEV	Elevator	MOLD	Molding	UR	Urinal
EMER	Emergency	MULK	Milwork	UV	Ultraviolet
ENCL	Enclosure	MO	Masonry Opening	VAC	Vacuum
ENGR	Engineer	MTD	Mounted	VCT	Vinyl Composition Tile
ENTR	Entrance	MTR	Mortar	VERT	Vertical
EP	Electrical Panel	MULL	Mullion	VEST	Vestibule
EPDM	Ethylene Propylene Diene Monomer	MVBL	Movable	VERIFY	Contractor to Verify in Field
EPFR	Explosion Proof	N	North or Nitrogen	VNR	Veneer
EQ	Equal	NA	Not Applicable	VR	Vapor Retarder
EQUIP	Equipment	NAT	Natural	W	West
ESCAL	Escalator	NIC	Not in Contract		
ESMT	Eseement				
EW	Each Way				
EWC	Electric Water Cooler				
EXC	Excavate				
EXH	Exhaust				
EXP	Expansion				

GENERAL NOTES AND CONDITIONS

- ALL WORK SHALL COMPLY WITH THE CITY OF PORTLAND AND THE STATE OF REGULATIONS, AND THE REGULATIONS OF THE NATIONAL BOARD OF FIRE UNDERDISABILITIES ACT.
- ALL ARCHITECTURAL DRAWINGS AND CONSTRUCTION NOTES ARE COMPLEMENTARY. EITHER WILL BE BINDING AS IF CALLED FOR BY ALL. ANY WORK SHOWN OR DRAWINGS SHALL BE PROVIDED AS THOUGH SHOWN ON ALL RELATED DRAWINGS.
- THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IF HE CALLED FOR IN THIS DOCUMENT ON ALL OTHER ARCHITECTURAL DRAWINGS.
- THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, NOTES, AND FIELD CONDITIONS BEFORE COMMENCING ANY WORK, AND REQUESTS.
- THE CHARACTER AND SCOPE OF THE WORK ARE ILLUSTRATED BY THE DRAWINGS. ANY ADDITIONAL DETAIL DRAWINGS TO INTERPRET AND EXPLAIN THE DEEMED NECESSARY BY ARCHITECT WILL BE FURNISHED TO THE GENERAL CONTRACTOR, AND IT IS TO BE UNDERSTOOD THAT THE SAID ADDITIONAL DRAWING FORMING A PART OF THESE NOTES TO WHICH THEY RELATE.
- THE SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT PREMISES HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MA DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD SUCH BE RECOGNIZED.
- EACH CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS.
- EACH CONTRACTOR SHALL MAKE ALL REQUIRED ARRANGEMENTS FOR DELIVERY IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO CHECK THE RULES ON THE PREMISES, INCLUDING THE FOLLOWING:
 - DATE AND TIME OF DELIVERY SHALL BE ESTABLISHED IN CONJUNCTION WITH OWNER PREMISES (OVERTIME CHARGES AND/OR ANY NECESSARY EXPENSE SHALL SERVICE).
 - BUILDING CONDITIONS, INCLUDING SIZE AND LOADING CAPACITY OF ELEVATOR WINDOW OPENINGS, ETC., SHALL BE CHECKED FOR ITEMS BEING DELIVERED BY
 - ALL CHARGES INVOLVING THE INSTALLATION AND/OR OPERATION OF A HOIST BORNE BY THE CONTRACTOR USING THIS SERVICE. CHARGES INVOLVING THE REINSTALLATION OF WINDOW SASH AND/OR FIXED PANELS REQUIRED FOR DELIVERY CONTRACTOR.
- ALL CORRESPONDENCE TO OWNER, TO CONTRACTOR, TO LANDLORD, OR TO COPY TO THE OTHER PARTY/PARTIES.
- THE GENERAL CONTRACTOR SHALL FURNISH A FIELD PROGRESS SCHEDULE CONSTRUCTION.
- THE USE OF THE WORDS "PROVIDE" OR "PROVIDED" IN CONNECTION WITH MEAN, UNLESS OTHERWISE NOTED, THAT SUCH ITEM SHALL BE FURNISHED AND SO REQUIRED.
- WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT RULING AND JUDGMENT OF ARCHITECT.
- THE GENERAL CONTRACTOR SHALL SUPPLY CUTS FOR APPROVAL BY ARCHITECT EQUIPMENT CALLED FOR ON ARCHITECTURAL DRAWINGS. (E.G., LIGHT FIXTURES, I
- THE GENERAL CONTRACTOR SHALL SUBMIT ALL FABRICATION SHOP DRAWINGS FOR APPROVAL. ALL SHOP DRAWINGS AND CUTS SIGNED "APPROVED" SHALL BE DESIGN APPEARANCE ONLY. CONTRACTORS AND ENGINEERS SHALL ASSUME THEIR DRAWINGS (SUBMIT MINIMUM FOUR COPIES OF EACH).
- THE GENERAL CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIAL EMPLOYEES AND HIS SUBCONTRACTORS.
- ALL WOODWORK ATTACHED TO PREMISES AND ALL WOOD DOORS SHALL COMPLY WITH BUILDING CODE AND THE STATE OF MAINE FIRE CODES.
- ALL BUILDING PERMITS AND FILING FEES CONNECTED WITH THIS WORK SHALL BE CONTRACTOR.
- THE GENERAL CONTRACTOR SHALL EXERCISE STRICT CONTROL OVER JOB CLERKS OR DUST FROM LEAVING THE JOB SITE.
- THE CONSTRUCTION NOTES AND/OR DRAWINGS ARE SUPPLIED TO ILLUSTRATE TYPE OF CONSTRUCTION DESIRED AND ARE INTENDED TO IMPLY TO THE FINEST MATERIAL AND WORKMANSHIP THROUGHOUT.
- THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF THE FLOOR DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
- THE GENERAL CONTRACTOR UPON ACCEPTANCE AND APPROVAL OF THE DRAWINGS RESPONSIBILITY FOR THE CONSTRUCTION, MATERIALS AND WORKMANSHIP OF THE AND DRAWINGS AND HE WILL BE EXPECTED TO COMPLY WITH THE SPIRIT AS WE WERE WRITTEN.
- ALL REQUIRED EXITS, WAY OF APPROACH THERETO AND WAY OF TRAVEL FROM SHALL CONTINUOUSLY BE MAINTAINED FREE FROM ALL OBSTRUCTIONS AND IMPEDIMENTS IN CASE OF FIRE OR OTHER EMERGENCY.
- DURING THE ENTIRE PERIOD OF CONSTRUCTION, ALL EXISTING EXITS, EXIT SIGNS AND ALARMS SHALL BE CONTINUOUSLY MAINTAINED.
- DURING THE ENTIRE PERIOD OF CONSTRUCTION, THE TELEPHONE NUMBERS OF PHYSICIANS, HOSPITALS OR AMBULANCES SHALL BE CONSPICUOUSLY POSTED.
- THE GENERAL CONTRACTOR SHALL DO ALL CUTTING, FITTING AND PATCHING TO MAKE ALL PARTS COME TOGETHER PROPERLY AND FIT TO RECEIVE OR BE RECEIVED BY CONTRACTORS SHOWN UPON OR REASONABLY IMPLIED BY THE DRAWINGS AND NOTES.
- THE GENERAL CONTRACTOR SHALL PROVIDE ALL FLOOR CUTOUTS AND PATCH INSTALLATION OF ALL WORK.
- THE GENERAL CONTRACTOR SHALL CUT AND PATCH EXISTING DRYWALL OR PLASTER NEW ELECTRICAL, PLUMBING AND HVAC WORK CONCEALED IN EXISTING WALLS.
- THE GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL PARTITIONS AS SHOWN.

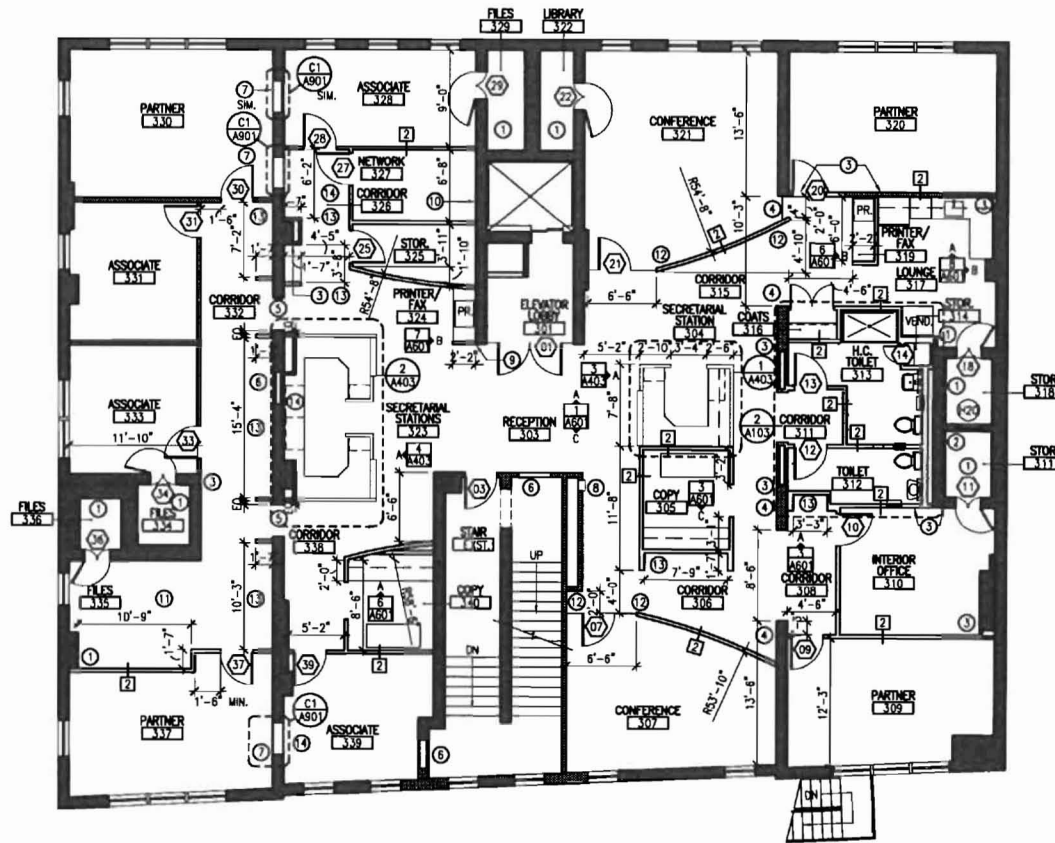


DEMOLITION PLAN GENERAL NOTES

1. COORDINATE ALL SCHEDULING AND ACCESS WITH THE BUILDING.
2. REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS.
3. COORDINATE WITH OWNER RETURN OF ITEMS NOT TO BE REUSED.
4. AREAS AFFECTED BY SELECTIVE DEMOLITION. PATCH AND REPAIR ALL SURFACES AT AREAS WHERE DEMOLITION INTERFACES WITH EXISTING/NEW CONSTRUCTION. SEE FINISH PLAN FOR EXTENT OF NEW FINISHES.
5. REMOVE ALL EXISTING FLOORING INCLUDING TILE FLOOR AT ELEVATOR LOBBY AND ALL VINYL FLOORING EXCEPT FOR EXISTING CARPET AT EGRESS STAIR AND HALL WAY.
6. ALL WOOD BASE, ON WALLS TO BE DEMOLISHED, IS TO BE SALVAGED FOR REUSE IF FEASIBLE AND AT THE DISCRETION OF THE GENERAL CONTRACTOR.
7. PARTITIONS SHOWN TO BE DEMOLISHED, INCLUDING DOORS, DOOR FRAMES, HARDWARE, SWITCHES, PLUMBING FIXTURES, EXTRANEOUS PIPING, CONTROLS, ETC.
8. ALL EXISTING MILLWORK ITEMS, NOT SHOWN AS EXISTING TO REMAIN TO BE REMOVED THE ON CONSTRUCTION PLAN, ARE TO BE REMOVED. THIS DOES NOT INCLUDE BASE BUILDING ITEMS.
9. EXISTING EXTERIOR WINDOW MILLWORK SILLS, CASING AND FRAMES ARE TO REMAIN AND PROTECTED DURING DEMOLITION AND CONSTRUCTION.
10. EXISTING WINDOW BLINDS AND ASSOCIATED BRACKETS AND HARDWARE TO BE REMOVED.
11. ALL EXISTING ELECTRICAL & TEL/DATA DEVICES, LOCATED IN PARTITIONS OR COLUMN ENCLOSURES THAT ARE TO REMAIN, ARE TO BE REMOVED ALONG WITH ANY ELECTRICAL BOX OR MUD RING, UNLESS SHOWN OTHERWISE ON ELECTRICAL PLAN A319. PARTITIONS AND COLUMN ENCLOSURES ARE TO BE

DEMOLITION PLAN KEY NOTES

- ① EXISTING WALLS: REMOVE ALL SHELVING AND ASSOCIATED BLOCKING AND SUPPORTS. REMOVE ANY CARPET AND VINYL WALL BASE. REMOVE EXISTING LIGHTING AND WIRING. PREPARE WALL FOR NEW PAINTED FINISH AND PREP FLOORS FOR NEW CARPET.
- ② REMOVE EXISTING AND ANY UNUSED ELECTRICAL DEVICES AND BOXES INCLUDING FIRE PROTECTION AND SECURITY DEVICES. PATCH WALL AS NEEDED IN PREPARATION FOR NEW PAINTED FINISH. REMOVE EXISTING CARPET.
- ③ EXISTING DOOR AND FRAME TO BE REMOVED.
- ④ EXISTING DOOR AND HARDWARE TO BE REMOVED INCLUDING STRIKE PLATE AND HINGES. FRAME AND CASING TO REMAIN.
- ⑤ REMOVE EXISTING BASEBOARD HEATING ELEMENTS AND ALL ASSOCIATED WIRING.
- ⑥ REMOVE EXISTING CHAIR RAIL.
- ⑦ EXISTING SEALED DOOR TO REMAIN. REMOVE ALL VISIBLE HARDWARE AND PATCH HOLES IN DOOR.
- ⑧ EXISTING ADJUSTABLE SHELVES TO BE REMOVED ALONG WITH ASSOCIATED HARDWARE.
- ⑨ REMOVE WALL MOUNTED VENTS AND PATCH WALL OPENING.
- ⑩ REMOVE PUMP TYPE DEVICE LOCATED AT TOP OF WALL.
- ⑪ IF POSSIBLE REDUCE SIZE OF EXISTING WALL CHASE. REVIEW PROPOSED CHANGE WITH ARCHITECT PRIOR TO PROCEEDING.
- ⑫ REMOVE EXISTING MILLWORK.



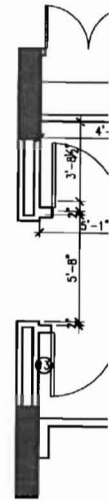
CONSTRUCTION PLAN GENERAL NOTES

1. PARTITIONS TO BE TYPE 1 UNLESS OTHERWISE INDICATED SEE
2. STUDS TO EXTEND TO DECK, U.O.N.
3. ARCHITECT TO APPROVE PARTITION TRACK LAYOUT BEFORE WALL CONSTRUCTION.
4. DOORS TO BE LOCATED 4" FROM ADJACENT WALL, U.O.N.
5. FLOOR CONDITION AT ALL FILE NICHE SHALL BE MADE LEVEL THE FULL LENGTH OF THE NICHE.
6. ALL EXISTING TO REMAIN PARTITIONS ARE TO BE REPAIRED: GWB PARTITIONS, PATCH ALL HOLES AND REPAIR ALL DAMAGE, PREP. FOR NEW PAINTED FINISH; PLASTER WALLS, REPAIR ALL CRACKS AND SKIM AS NEEDED TO ACHIEVE SMOOTH CONTINUOUS CONDITIONS, PREP. FOR PAINT; EXPOSED BRICK, CLEAN ALL BRICK AND MORTAR, PATCH ANY HOLES, CRACKS OR VOIDS. SEAL BRICK AND MORTAR.
7. ALL EXISTING TO REMAIN MILLWORK AROUND WINDOWS AND EXISTING TO REMAIN DOOR CASTINGS AND JAMBS, CAULK ALL CRACKS AND GAPS AND FILL ALL HOLES, PREP. FOR NEW PAINTED FINISH.
8. EXISTING PARTITIONS THAT ARE EXTENDED THE WALL CONSTRUCTION TO MATCH EXISTING PARTITION.
9. EXPOSED BRICK WALLS ARE TO RECEIVE SURFACE-APPLIED WOOD BASE.
10. CURVED PARTITIONS IN OPEN AREAS ARE TO RECEIVE A SEMI-GLOSS PAINT FINISH. WALL SURFACE MUST BE SKIM COATED FOR A SMOOTH CONSISTENT FINISH.

PARTITION TYPES

CONSTRUCTION PLAN KEY NOTES

- 1 EXISTING VAULTS: PATCH ANY HOLES IN BRICK WALLS AND FLOORS, PREPARE FOR NEW FINISHES.
- 2 INFILL EXISTING PASSAGE BETWEEN VAULTS WITH METAL STUDS, ACOUSTIC INSULATION AND GWB, FLUSH WITH EXISTING VAULT WALLS.
- 3 FACE OF FINISH TO ALIGN WITH FACE OF FINISH.
- 4 FACE OF FINISH GWB TO EXTEND OVER MASONRY WALL, CONDITION TO BE CONTINUOUS AND FLUSH.
- 5 EXISTING CUTOUTS FOR DOOR HINGES AND LATCH PLATES ARE TO BE PATCHED/FILLED AND PREPARED FOR NEW PAINTED FINISH.
- 6 EXISTING WALL PENETRATION TO BE INFILLED SO THAT FINISH CONDITION IS CONTINUOUS AND FLUSH ON BOTH SIDES OF PARTITION AND ANY REQUIRED FIRE RATING IS MAINTAINED.
- 7 EXISTING DOOR OPENING TO BE MODIFIED INTO ADJUSTABLE SHELVING, SEE INDICATED DETAIL.
- 8 FIRE EXTINGUISHER AND RECESSED BRUSHED STAINLESS STEEL CABINET
- 9 FACE OF FINISHED GWB TO ALIGN WITH FACE OF EXPOSED BRICK.
- 10 EXISTING PLASTER/GWB WALL CONDITION TO BE EXTENDED TO COVER EXISTING EXPOSED BRICK WALL.
- 11 GENERAL CONTRACTOR TO SUPPLY A PLASTIC LAMINATE TOP FOR LOW FILE CABINET IN THIS AREA. SEE FURNITURE PLAN FOR SIZE AND LOCATION INFORMATION.
- 12 SURFACE APPLIED WOOD BASE TO PUT INTO GLASS PARTITION ON BOTH SIDES.

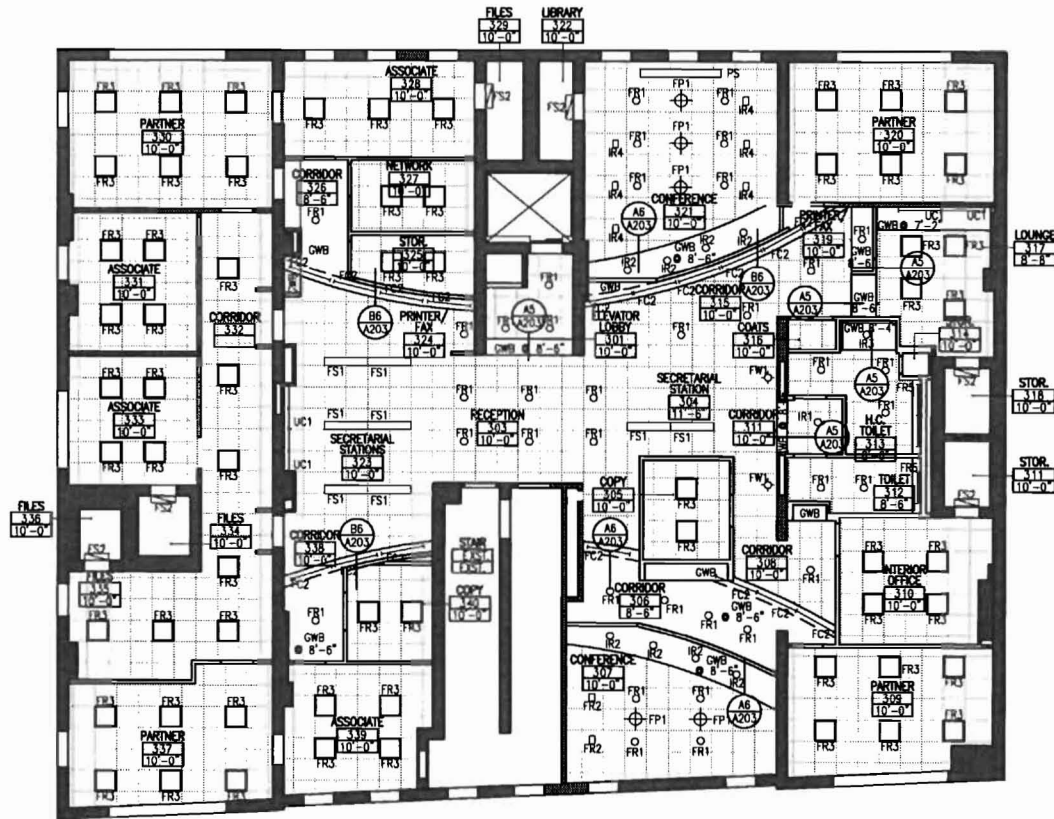


2. ENLARGED CONSTRUCTION

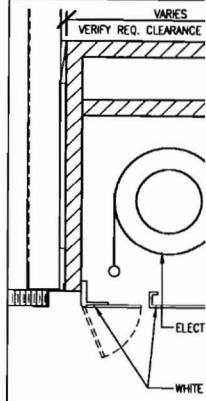
SCALE: 1/4" = 1'-0"

TOILET ROOM EQUIPMENT

- 1 TOILETS: KOHLER WELLWORTH MODEL # K-3481 COLOR: WHITE
- 2 SINKS: KOHLER CHESAPEAKE MODEL # K-1722 COLOR: WHITE
- 3 FAUCETS: KOHLER TRITON WRK MODEL # K16012-5
- 4 SHOWER: BEST BATH SYSTEMS MODEL # 4LSS6331A18 COLOR: WHITE WITH: STAINLESS STEEL "U" SYMONS VALVE AND SYMONS PRESSURE HANSGRÖHE #27712, SURFACE MOUNTED; SIOUX CHIEF CAULK; NEOPRENE 5.5" WATI CURTAIN ROD, 20 GA. VINYL
- 5 GLASS MIRROR WITH BOBRICK: B-280 SE
- 6 RECESSED DUAL-RO BOBRICK: B-697
- 7 RECESSED SANITARY BOBRICK: TRIMLINE 6
- 8 SURFACE MOUNTED BOBRICK: CONTURA 1
- 9 SEMI-RECESSED CON BOBRICK: B-3842
- 10 ELONGATED TOILET S; KOHLER: BREVIA K-4
- 11 STAINLESS STEEL GR BOBRICK: B-680A



A5 GWB CEILING ED
SCALE: 6" = 1'










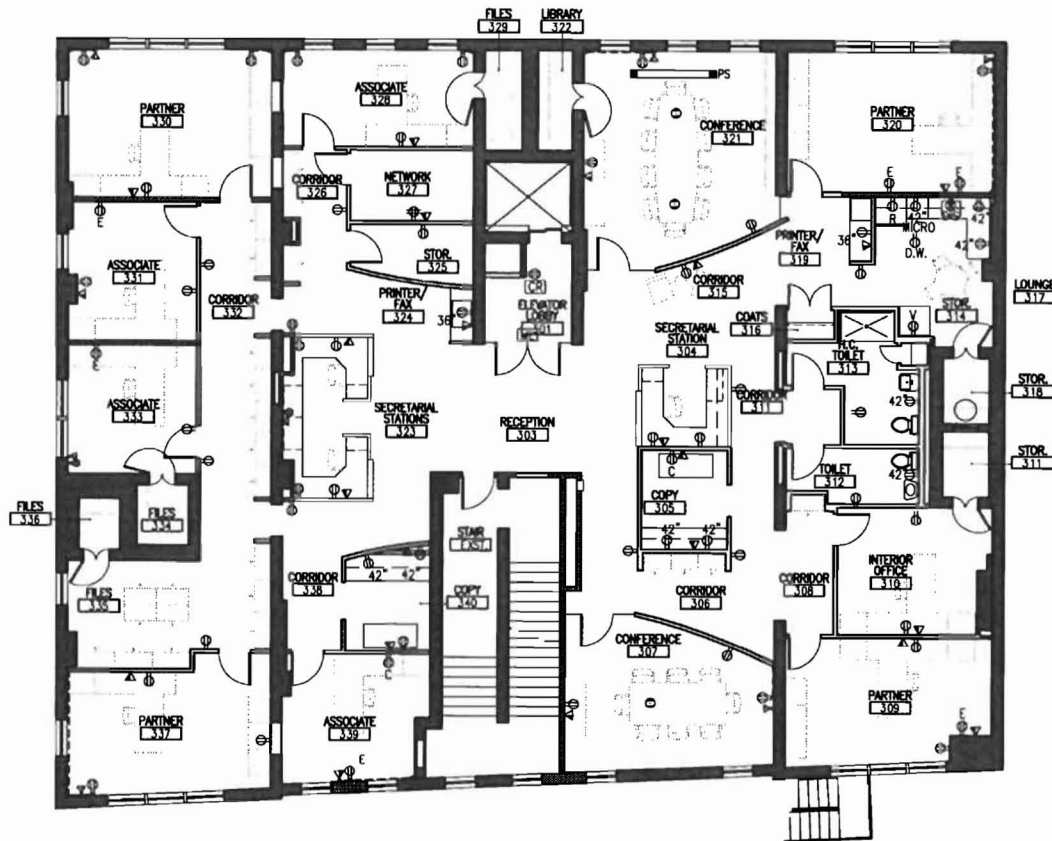
B5 PROJECTION SCR
SCALE: 3" = 1'

REFLECTED CEILING PLAN GENERAL NOTES

1. FOR ORGANIZATIONAL LAYOUT AND MOUNTING HEIGHTS OF LIGHT SWITCHES, DIMMER SWITCHES, THERMOSTATS, ETC. REFER TO ARCHITECTURAL POWER/TEL/DATA PLANS, ELEVATIONS AND DETAILS.
2. MEP/FP INFORMATION SHOWN ON THIS PLAN IS FOR LOCATION ONLY. REFER TO AND COORDINATE WITH ENGINEERS DRAWINGS.
3. ALL MECHANICAL DIFFUSERS AND GRILLES, FIRE ALARM DEVICES, SPRINKLERS AND RECESSED LIGHT FIXTURES ARE TO BE CENTERED IN CEILING TILE UNLESS OTHERWISE NOTED.
4. CONFLICTS IN LOCATION OF MECHANICAL DIFFUSERS AND GRILLES, FIRE ALARM DEVICES, SPRINKLER HEADS AND/OR LIGHT FIXTURES ARE TO BE COORDINATED WITH ARCHITECT PRIOR TO PROCEEDING.
5. ALL ACCESS PANEL TYPES, SIZES, AND LOCATIONS TO BE COORDINATED AND VERIFIED IN WRITING WITH ARCHITECT PRIOR TO INSTALLATION.
6. ALL FIELD CONDITIONS ARE TO BE REVIEWED TO INSURE THAT NO ACOUSTIC CEILING TILE IS CUT TO A DIMENSION OF LESS THAN 3".
7. ALL DIMENSIONS ARE TO CENTERLINE OF FIXTURE UNLESS OTHERWISE NOTED.
8. PROVIDE F.R.T. WOOD BLOCKING ABOVE CEILING AS REQUIRED FOR SPECIALTY CONSTRUCTION ITEMS, I.E. PENDANTS, RECESSED PROJECTION SCREENS, OPERABLE PARTITIONS, CEILING MOUNTED PROJECTORS, SECURITY CAMERAS, ETC.
9. ALL CEILING HEIGHTS TO BE 10'-0" AFF UNLESS OTHERWISE NOTED.

REFLECTED CEILING PLAN LEGEND

-  2X2 CEILING GRID
-  2x2 PARABOLIC
-  STANDARD FLUORESCENT DOWNLIGHT
-  FLUORESCENT PENDANT
-  INDIRECT RECESSED WALL SCONCE
-  LOW VOLTAGE ADJUSTABLE ACCENT LIGHT
-  SEMI-RECESSED WALL WASHER
- FLUORESCENT COVE LIGHTING



ELEC/TEL/DATA PLAN GENERAL NOTES

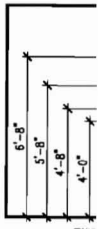
1. ALL DIMENSIONS TO WALL MOUNTED ELECTRICAL OUTLETS ARE TO THE CENTERLINE OF THE OUTLET OR GANG OF OUTLETS. IF NO DIMENSION EXISTS, VERIFY LOCATION IN FIELD WITH ARCHITECT PRIOR TO INSTALLATION.
2. ALL FLOOR CORE LOCATIONS ARE TO BE VERIFIED WITH ARCHITECT IN FIELD PRIOR TO CORING OR CHIPPING THE SLAB.
3. ALL OUTLETS MOUNTED IN MILLWORK TO BE FLUSH WITH MILLWORK SURFACES. ALL OUTLET LOCATIONS MOUNTED IN MILLWORK ARE TO BE COORDINATED WITH MILLWORK DETAILS.
4. NO OUTLETS TO BE MOUNTED BACK TO BACK.
5. THE CONTRACTOR SHALL COORDINATE ALL SECURITY, AUDIOSUAL TEL/DATA AND PAGING SYSTEMS EQUIPMENT INSTALLATION WITH OWNER AND ARCHITECT.
6. ALL NEW OUTLETS TO BE MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
7. BANKS OF WALL SWITCHES INCLUDING DIMMERS, TOGGLEERS, EXHAUST FANS, ETC. ARE TO BE GANGED TOGETHER BEHIND COMMON SWITCH PLATE. ANY CONFLICTS TO THIS INTENT ARE TO BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING.
8. WALL MOUNTED OUTLETS OF MORE THAN ONE DEVICE ARE TO BE MOUNTED USING A MOUNTING BRACKET. RBS BRACKET OR EQUAL?
9. VERIFY WITH ARCHITECT ALL LOCATIONS AND ELECTRICAL CONNECTIONS OF ALL CEILING MOUNTED ELECTRICAL PROJECTORS, PROJECTION SCREENS, AND ELECTRICAL BLACKOUT SHADES. COORDINATE LOCATIONS WITH REFLECTED CEILING PLANS, A/V DRAWINGS AND ENGINEERING DRAWINGS.
10. ALL OUTLETS TO BE WHITE WITH WHITE COVERPLATES.

ELEC/TEL/DATA PLAN LEGEND

- ⊕ STANDARD DUPLEX ELECTRICAL OUTLET
- ⊕^C ELECTRICAL OUTLET FOR COPIER, VERIFY TYPE OF OUTLET NEEDED
- ⊕^R ELECTRICAL OUTLET FOR REFRIGERATOR
- ⊕^{DIS} ELECTRICAL CONNECTION FOR DISPOSAL
- ⊕^{MICRO} ELECTRICAL OUTLET FOR MICROWAVE
- ⊕^V ELECTRICAL OUTLET FOR VENDING MACHINE
- ⊕² STANDARD DOUBLE DUPLEX ELECTRICAL OUTLET
- ▽ WALL MOUNTED TELE/DATA OUTLET (N, 1D U.O.N.). PROVIDE PULL STRING FROM SINGLE SIZE MUD-RING TO ABOVE HUNG CEILING
- ⊕ SURFACE MOUNTED DUPLEX ELECTRICAL OUTLET
- ▽ SURFACE MOUNTED TELE/DATA OUTLET (N, 1D U.O.N.). PROVIDE PULL STRING FROM SINGLE SIZE MUD-RING TO ABOVE HUNG CEILING
- SURFACE MOUNTED CONDUIT (AND COMPONENTS) WIREMOLD 2400 AND 2400D SERIES
- HORIZONTAL CONDUIT
- VERTICAL CONDUIT

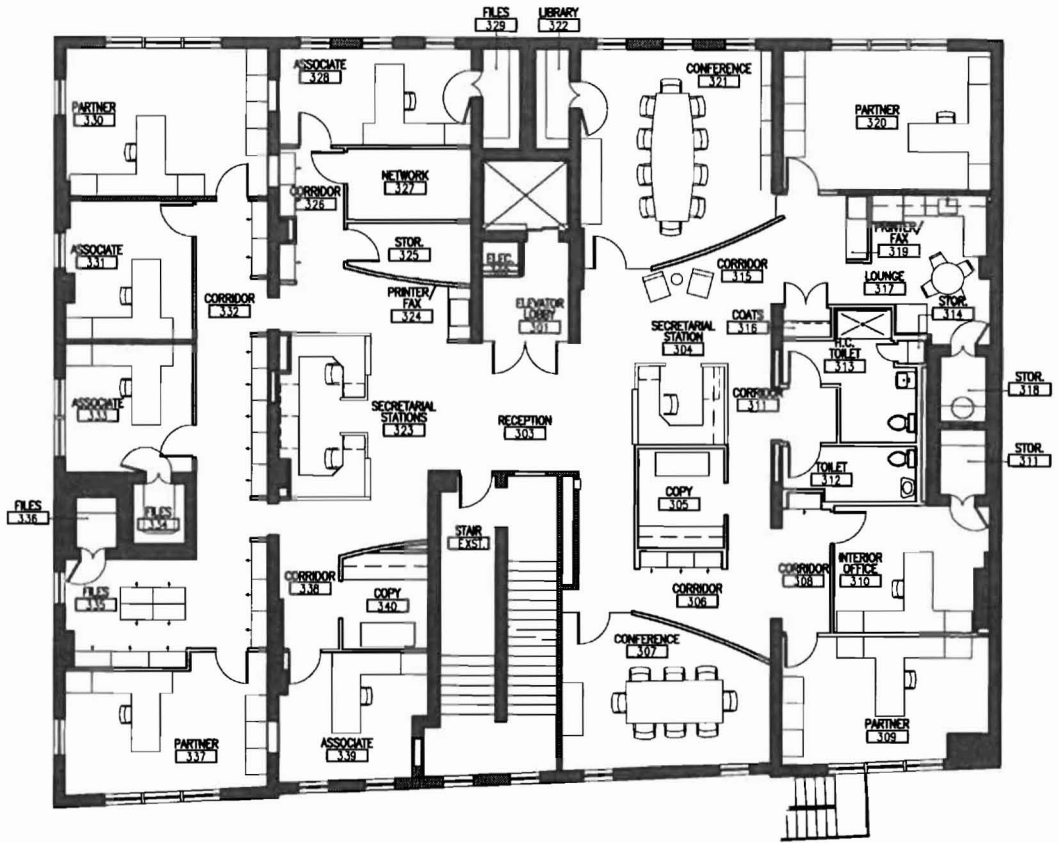
- RIGID METAL CONDUITS THRU FLOOR SLAB TO PROVIDE ELECTRICAL AND TELE/DATA SERVICE TO OUTLETS MOUNTED INTO CONFERENCE TABLES. PROVIDE (1)1" DIA. CONDUIT FOR TELE/DATA AND (1)3/4" DIA. CONDUIT FOR ELECTRICAL. PROVIDE A FLEXIBLE CONNECTION FROM THE RIGID CONDUITS TO OUTLETS MOUNTED AT TABLE TOP.
- ⊕ MAGNETIC LOCKING DEVICE FOR DOOR SECURITY. DEVICE IS CONTROLLED BY CARD READER, EXIST SENSOR DEVICE AND EXIT RELEASE BUTTON.
- ⊕ SECURITY WALL MOUNTED CARD READER FOR ENTRY DOOR.

TYPICAL ELECTRICAL COMI



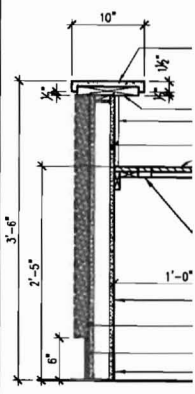
TYPICAL AT D
SEE F
OTHER CC

* NOTE: SURFACE LOCATED AT TOP I

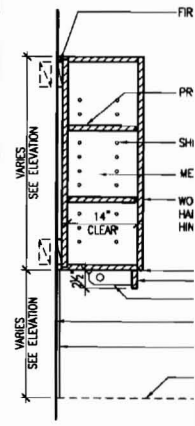


FURNITURE PLAN GENERAL NOTES

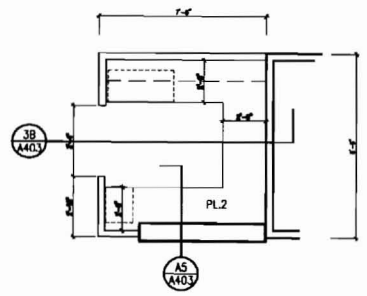
1. FURNITURE SHOWN FOR REFERENCE PURPOSES ONLY.



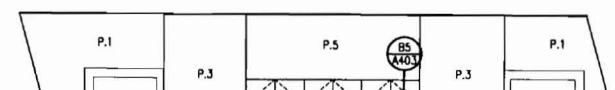
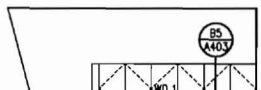
A5 SECTION THROUGH
SCALE: 1" = 1'

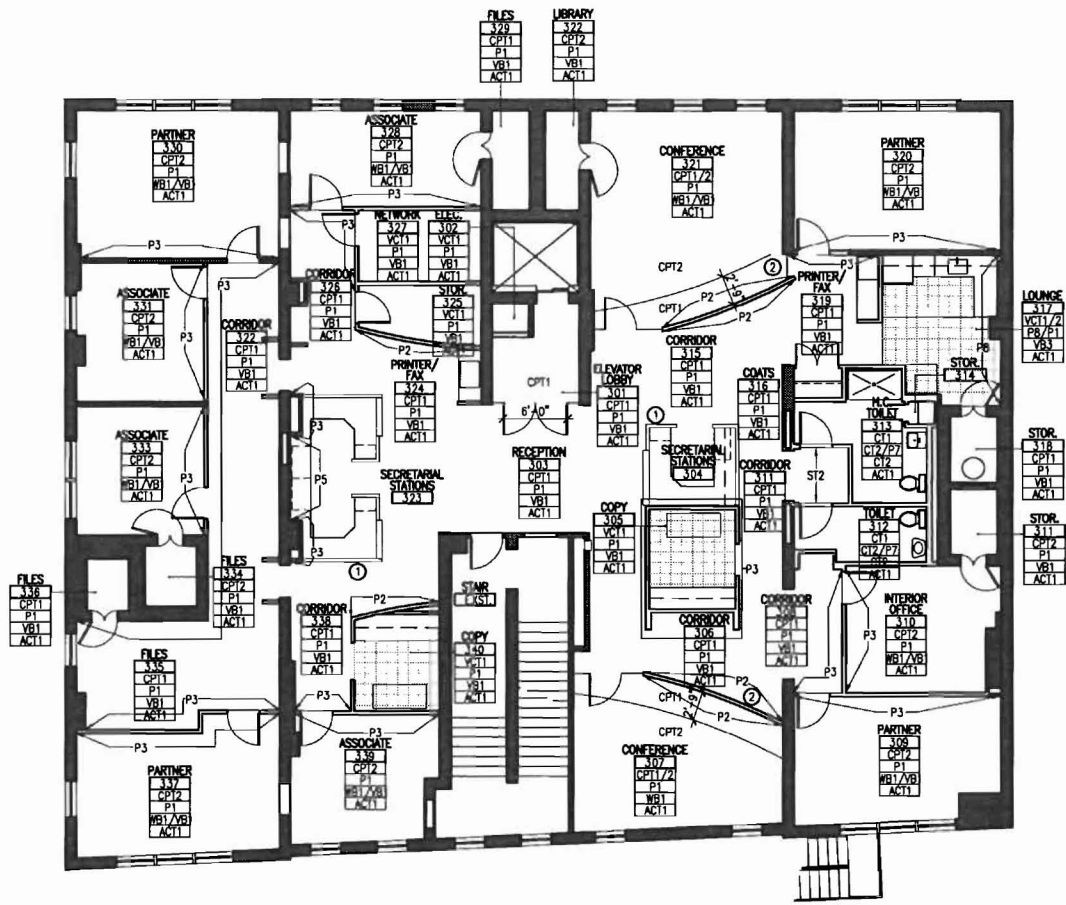


B5 UPPER CABINET
SCALE: 1" = 1'



1. SECRETARIAL STATION 304 ENLARGED PLAN





FINISH PLAN GENERAL NOTES

1. ALL MATERIALS SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS FOR THE PARTICULAR SURFACE.
2. SAMPLES OF ALL FINISHES SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO COMMENCEMENT OF THE WORK.
3. A BRUSH COAT REVIEW IN FIELD WILL BE REQUIRED FOR EACH PAINT FINISH. REVIEW TO BE IN AREA WHICH REPLICATES ACTUAL FINISH LOCATION.
4. FLASH PATCH AS REQUIRED BETWEEN FLOORING MATERIALS TO MAINTAIN UNIFORM FLOOR LEVEL.
5. THE CONTRACTOR SHALL SUBMIT FLOORING INSTALLATION DIAGRAM TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING.
6. CHANGES IN FLOORING MATERIAL BETWEEN ROOMS SHALL OCCUR UNDER THE CENTERLINE OF DOOR, U.O.N. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. ALL MILLWORK TO BE SHOP FINISHED.
8. STRAIGHT BASE SHALL BE USED IN AREAS WHERE CARPET IS SPECIFIED.
9. COVE BASE SHALL BE USED IN AREAS WITH VCT.
10. ALL EXISTING WALLS, SURFACES, AND MATERIALS TO REMAIN ARE TO BE IN "AS-NEW" CONDITION AT END OF CONSTRUCTION. WHERE CONSTRUCTION PARTIALLY AFFECTS EXISTING MATERIALS TO REMAIN, PATCH AND REPAIR AS NECESSARY TO MATCH EXISTING SURROUND.
11. WALL BASE SCHEDULED SHALL RETURN INTO FILE NICHES.
12. ALL METAL FRAMES TO BE SHOP FINISHED.

FINISH SPECIFICATION

PAINT

- P1: GENERAL PAINT, BENJAMIN MOORE, DC-9, BALLET WHITE, EGGSHELL
- P2: ACCENT, BENJAMIN MOORE, 976, COASTAL FOR, SEMI-GLOSS, CURVED WALLS
- P3: ACCENT, BENJAMIN MOORE, HC-95, SAG HARBOR GRAY, DOOR FRAMES, ACCENT WALLS, EGGSHELL
- P4: DOORS, BENJAMIN MOORE, HC-103, DOORS, SEMI-GLOSS
- P5: ACCENT, BENJAMIN MOORE, HC-37, EGGSHELL
- P6: SECRETARIAL, BENJAMIN MOORE, HC-92, SEMI-GLOSS
- P7: TOILET ROOMS,
- P8: KITCHEN,

FABRIC WALL COVERING

- WC1: ARCHITEX, AUTHENTIC PERFORMANCE, BEIGE, ON 2" SNAPLOCK SYSTEM.
- WC2: MAHARAM, TREAT 464570, ON 1/2" SNAPLOCK, TACKLABLE

WOOD

- WD1: QUARTER CUT CLEAR MAPLE, NATURAL FINISH, 40% SHEEN.

CERAMIC TILE

- CT1:
- CT2: DAL-TILE, 2X2, SEMI-GLOSS, ALMOND #0135, TOILET ROOM WALLS.

VINYL COMPOSITION TILE

- VCT1: ARMSTRONG, EXCELON, STONETEX, 52132, DUSTY KHAKI
- VCT2: ARMSTRONG, EXCELON, STONETEX, 52128 DESERT DUST

PLASTIC LAMINATE

- PL1: NEVARMAR, FOUNDRY, TEXTURED S-2084T
- PL2: NEVARMAR, STRING, TEXTURED S-6052T
- PL3: WILSONART, 4813-60, KICKEL EV
- PL4: NEVARMAR, PURE SPUN YARN, TEXTURED, YSN00
- PL5: FORMICA, 7812-58, MDF SOLID E

BASE

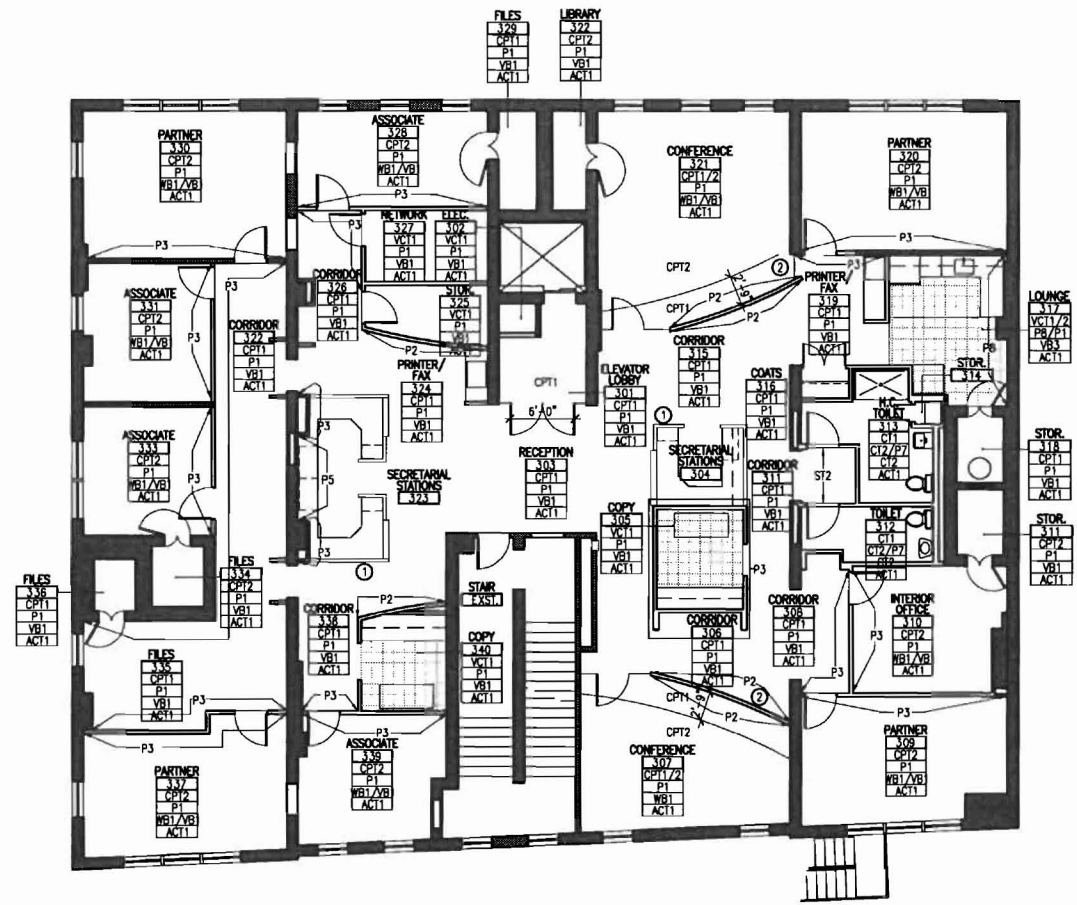
- WB1:

- DIRECT GLUE DOWN CARPET
- CARPET ADHESIVE
- VINYL CARPET/TILE JOINER
- RESILIENT FLOORING
- ADHESIVE

A5 TYPICAL CARPET SCALE: FULL

- DIRECT GLUE DOWN CARPET
- CARPET ADHESIVE
- VINYL CARPET/TILE JOINER
- RESILIENT FLOORING
- ADHESIVE

A5 TYPICAL CARPET SCALE: FULL



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12. ALL METAL FRAMES TO BE SHOP FINISHED.

FINISH SPECIFICATION

PAINT

- P1: GENERAL PAINT, BENJAMIN MOORE, OC-18, DOVE WING, EGGSHELL
- P2: ACCENT, BENJAMIN MOORE, 1558, FIELDSTONE, SEMI-GLOSS, CURVED WALLS
- P3: ACCENT, BENJAMIN MOORE, OC-28, COLLINGWOOD, ACCENT WALLS, EGGSHELL
- P4: DOORS, BENJAMIN MOORE, #980, DOORS, SEMI-GLOSS
- P5: ACCENT, BENJAMIN MOORE, 2142-10, EGGSHELL
- P6: NOT USED
- P7: TOILET ROOMS, BENJAMIN MOORE, OC-52, GRAY OML, SEMIGLOSS
- P8: KITCHEN, ACCENT, BENJAMIN MOORE, 2142-20, EGGSHELL

FABRIC WALL COVERING

- WC1: HBF TEXTILES, COCO, 645-18 PLATINUM, ON 2" SNAPLOC SYSTEM.
- WC2: MAHARAM, TREAT 464570, ON 1/2" SNAPLOC, TACKABLE

WOOD

- WD1: QUARTER CUT CLEAR MAPLE, NATURAL FINISH, 40% SHEEN.

CERAMIC TILE

- CT1: DAL-TILE, 1X1, 0100 WHITE GLOSS, TOILET ROOM WALL
- CT2: DAL-TILE, 2X2, SEMI-GLOSS, DO 26, TOILET ROOM FLOOR.

VINYL COMPOSITION TILE

- VCT1: ARMSTRONG, EXCELON, STONETEX, 52122, PEBBLE GRAY
- VCT2: ARMSTRONG, EXCELON, STONETEX, 52128 DESERT DUST
- VCT3: ARMSTRONG, EXCELON, STONETEX 52127, STONE WHITE

PLASTIC LAMINATE

- PL1: PIONITE, SLATE, SG228, SUEDE
- PL2: WILSONART, 0431-60 ALABASTER
- PL3: WILSONART, 4813-60, NIKEL EV
- PL4: WILSONART, 4809-60, OXYGEN EV
- PL5: NEVAMAR, MR5004T, SHALE GREEN MATRIX, TEXTURED

BASE

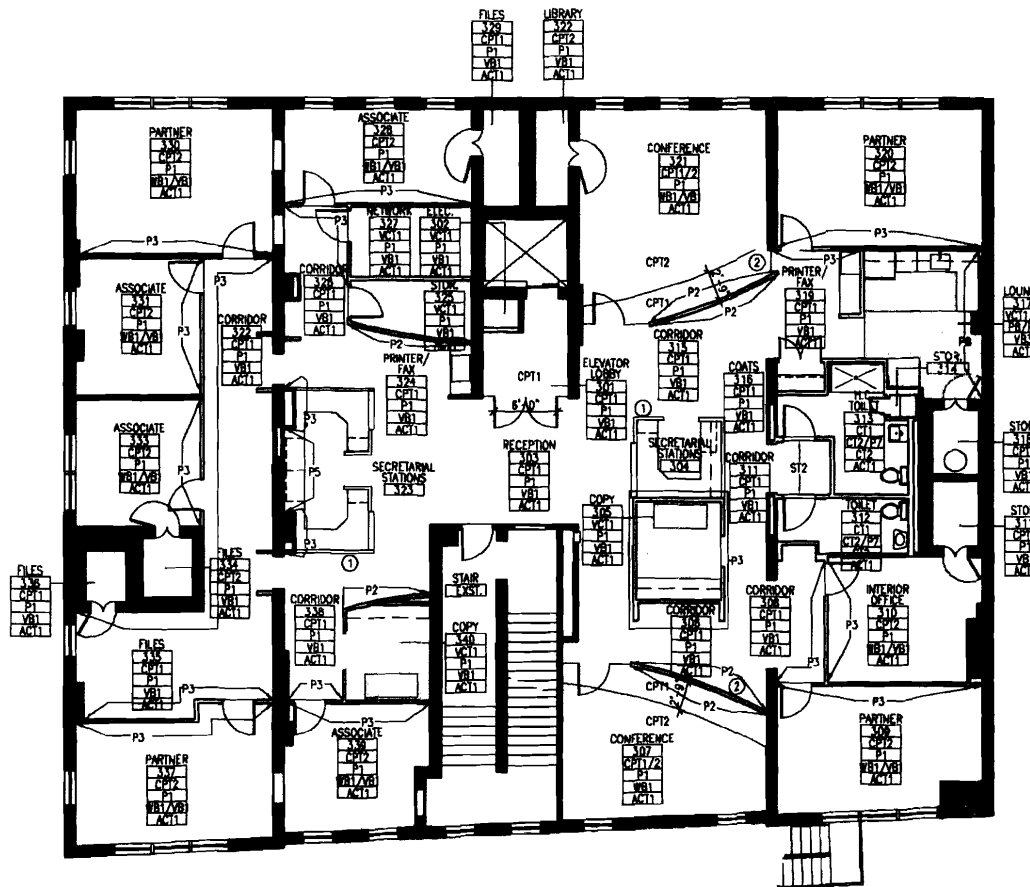
FINISH PLAN KEY NOTES

- ① P3 AT LOW WALL AT SEC
- ② VB2 AT CURVED WALLS -
- ③ WB1 AT EXTERIOR WALLS

DIRECT GLUE DOWN CARPET -
 CARPET ADHESIVE -
 VINYL CARPET/TILE JOINER -
 RESILIENT FLOORING -
 ADHESIVE -



A5 TYPICAL CARPET
 SCALE: FULL



FINISH PLAN GENERAL NOTES

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- P2: ACCENT, BENJAMIN MOORE, 1558, FIELDSTONE, SEMI-GLOSS, CURVED WALLS
- P3: ACCENT, BENJAMIN MOORE, OC-28, COLLINGWOOD, ACCENT WALLS, EGGSHELL
- P4: DOORS, BENJAMIN MOORE, #980, DOORS, SEMI-GLOSS
- P5: ACCENT, BENJAMIN MOORE, 2142-10, EGGSHELL
- P6: NOT USED
- P7: TOILET ROOMS, BENJAMIN MOORE, OC-52, GRAY OWL, SEMI-GLOSS
- P8: KITCHEN, ACCENT, BENJAMIN MOORE, 2142-20, EGGSHELL

FABRIC WALL COVERING

- WC1: HBF TEXTILES, COCO, 845-18 PLATINUM ON 2" SNAPLOC SYSTEM
- WC2: MAHARAM, TREAT 484570, ON 1/2" SNAPLOC, TACKABLE

WOOD

- WD1: QUARTER CUT CLEAR MAPLE, NATURAL FINISH, 40% SHEEN

CERAMIC TILE

- CT1: DAL-TILE, 1X1, 0100 WHITE GLOSS, TOILET ROOM WALL
- CT2: DAL-TILE, 2X2, SEMI-GLOSS, DO 26, TOILET ROOM FLOOR.

VINYL COMPOSITION TILE

- VCT1: ARMSTRONG, EXCELDON, STONETEX, 52122, PEBBLE GRAY
- VCT2: ARMSTRONG, EXCELDON, STONETEX, 52128 DESERT DUST
- VCT3: ARMSTRONG, EXCELDON, STONETEX 52127, STONE WHITE

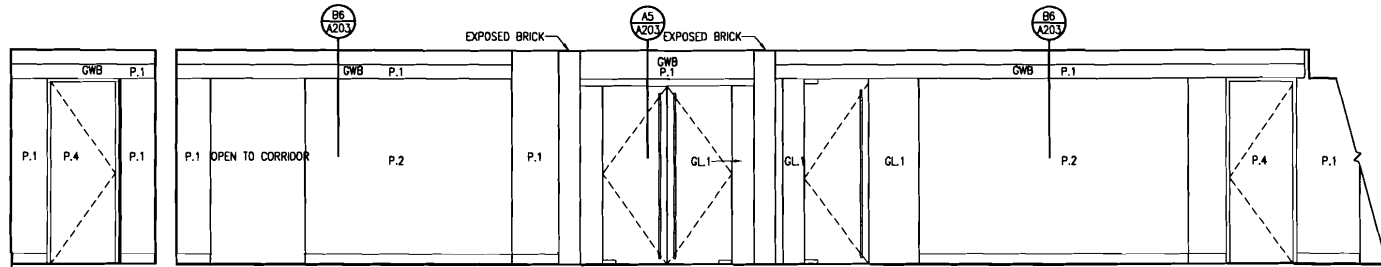
PLASTIC LAMINATE

- PL1: MIDNITE, SLATE, 50228, SUEDE
- PL2: WILSONART, D431-80 ALABASTER
- PL3: WILSONART, 4813-80, NICKEL EV
- PL4: WILSONART, 4808-80, OXYGEN EV
- PL5: NEWMAR, MRO0047, SHALE GREEN MATRIX

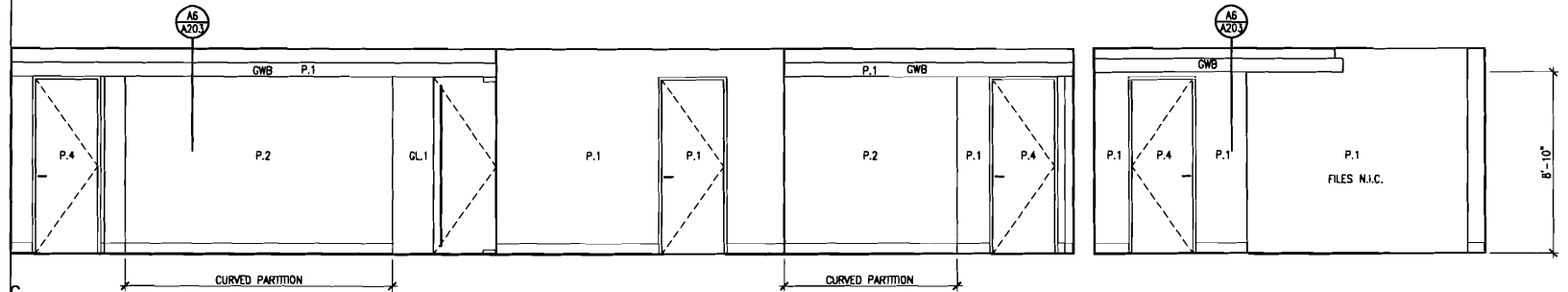
BASE

FINISH PLAN KEY NOTE

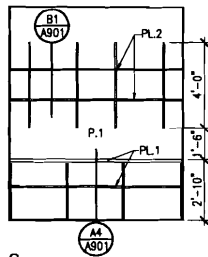
- ① P3 AT LOW WALL
- ② WB2 AT CURVED WALL
- ③ WB1 AT EXTERIOR



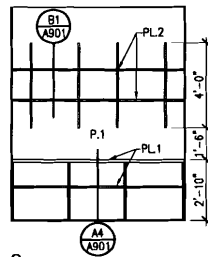
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1. CORRIDOR 332 / RECEPTION 303 / CORRIDOR 315



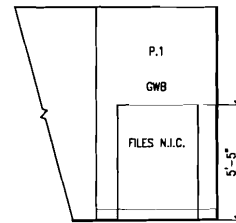
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1. CORRIDOR 306 / RECEPTION 303 / CORRIDOR 338 / FILES 335



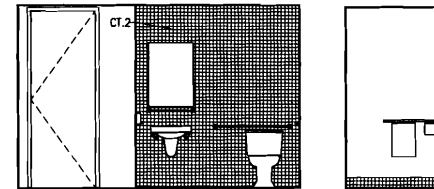
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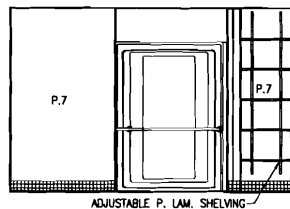
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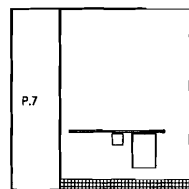
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3. CORRIDOR 308



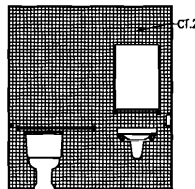
A B
4. TOILET 312



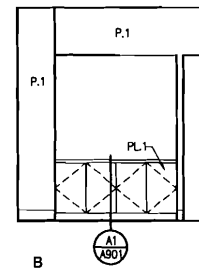
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1. H.C. TOILET 313



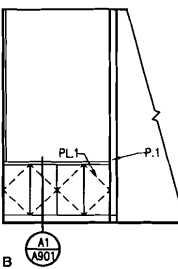
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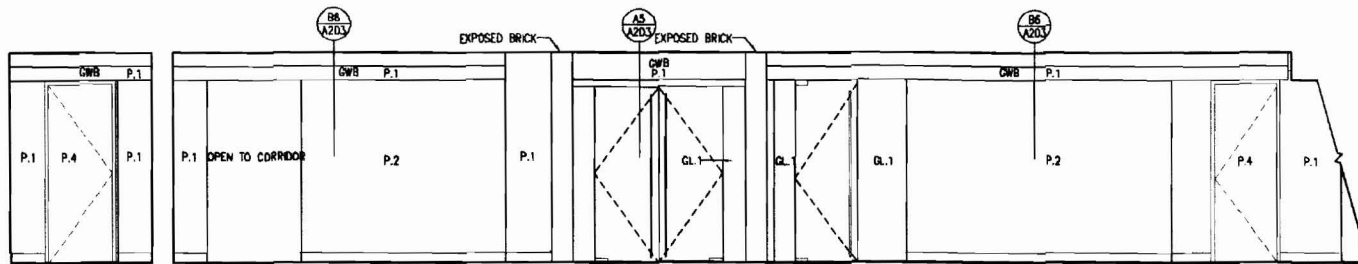
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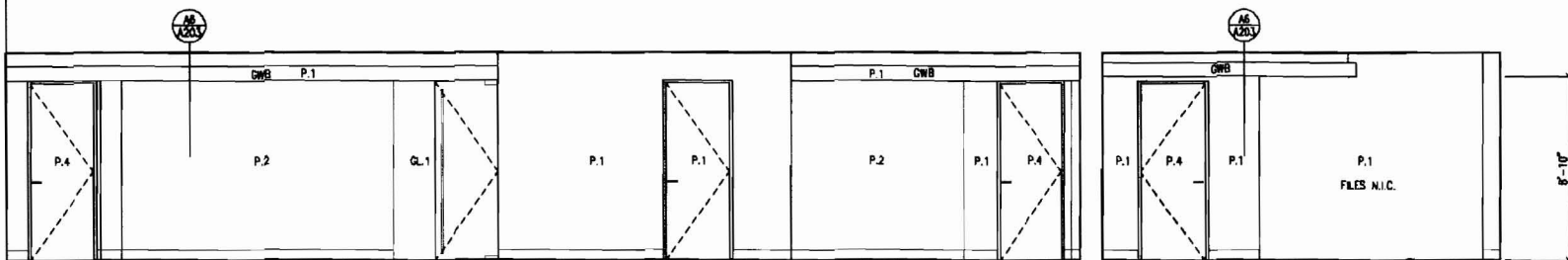
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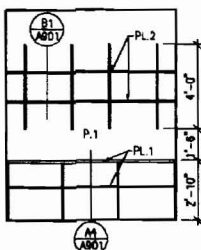
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4. PRINTER/FAX 324



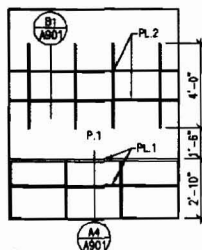
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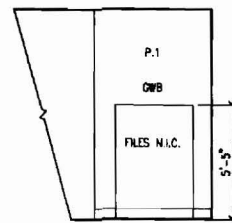
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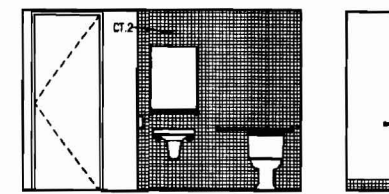
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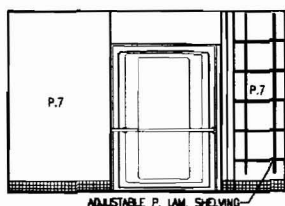
3. COPY 304 SIM. TO 305



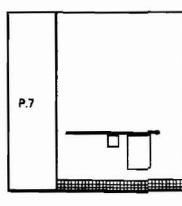
3. CORRIDOR 308



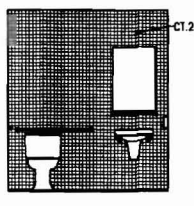
4. TOILET 312



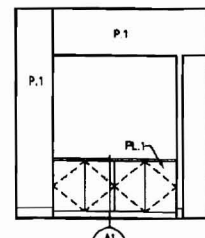
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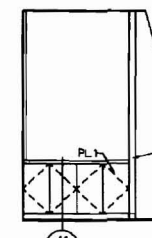
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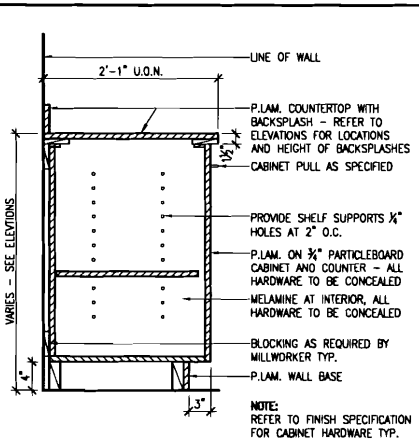
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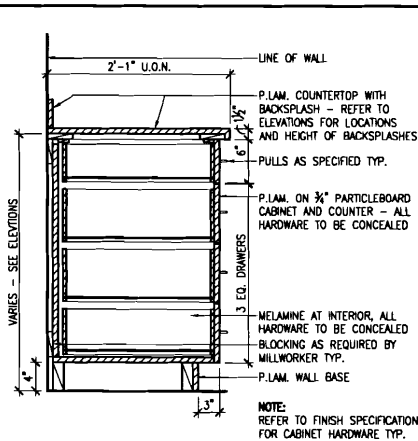
2. PRINTER/FAX 319



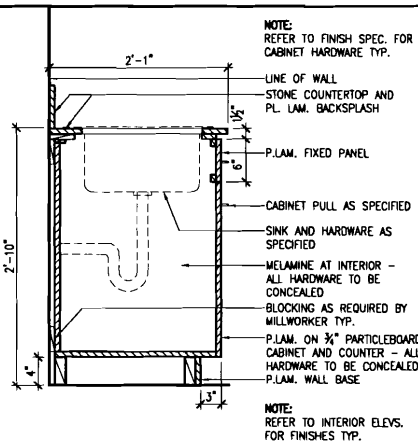
4. PRINTER/FAX 324



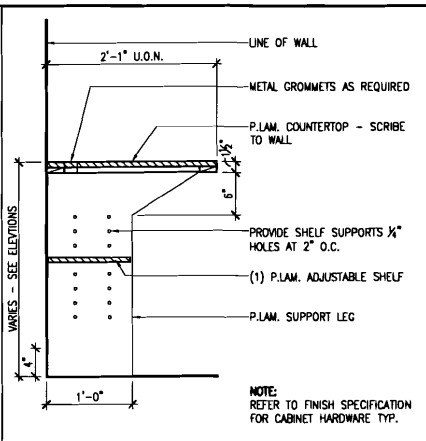
A1 BASE CABINET
SCALE: 1" = 1'-0"
CAS101



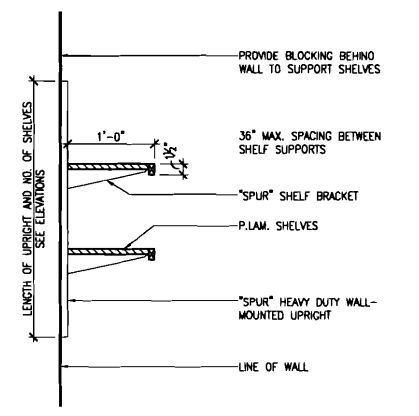
A2 BASE CABINET WITH FOUR (4) DRAWERS
SCALE: 1" = 1'-0"
CAS103



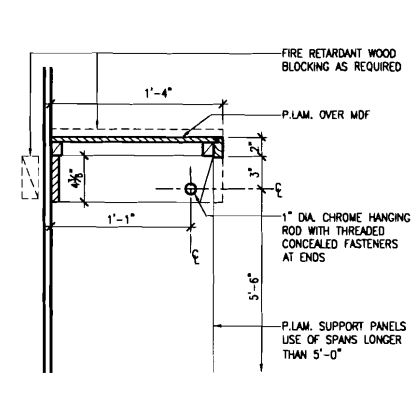
A3 BASE CABINET WITH SINK
SCALE: 1" = 1'-0"
CAS104



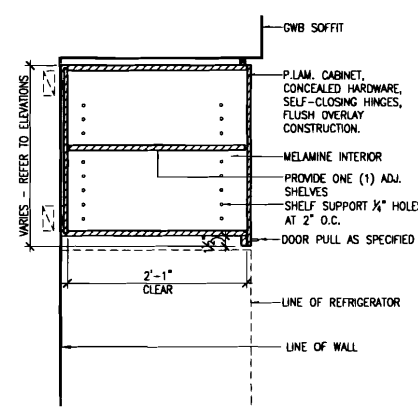
A4 COUNTER WITH SUPPORT
SCALE: 1" = 1'-0"
CAS110



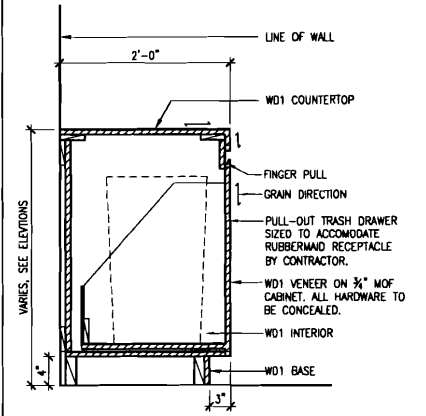
B1 WALL-MOUNTED ADJUSTABLE SHELVING
SCALE: 1" = 1'-0"
CAS201



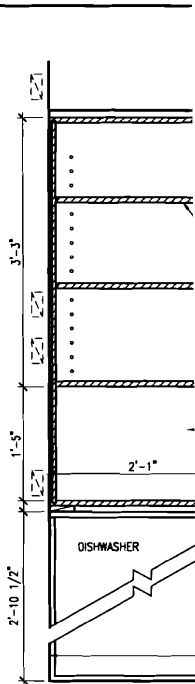
B2 COAT ROD AND SHELF
SCALE: 1 1/2" = 1'-0"
CAS202



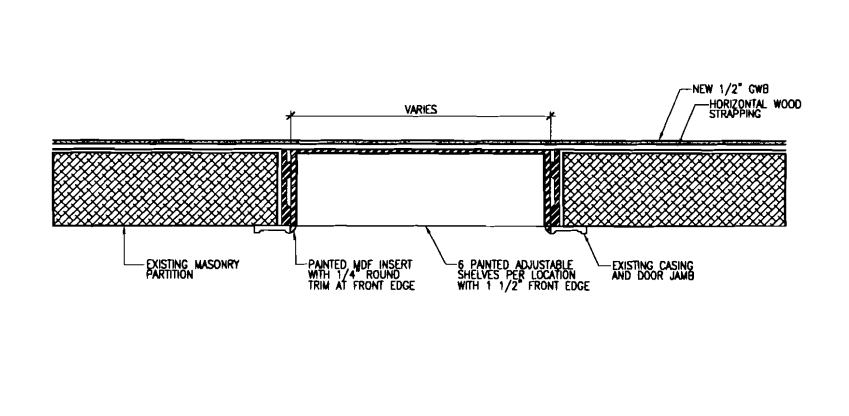
B3 OVERHEAD CABINET ABOVE REFRIGERATOR
SCALE: 1" = 1'-0"
CAS206



B4 SECTION AT TRASH DRAWER
SCALE: 1" = 1'-0"
ML121



A5 TALL CABINET AT
SCALE: 1" = 1'-0"



C1 SECTION AT BUILT-IN SHELVING
SCALE: 1" = 1'-0"
CAS311

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

1. GENERAL PROVISIONS: DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK IN CONTRACT. REFER TO ALL DRAWINGS ASSOCIATED WITH THIS PROJECT (EACH TRADE) FOR EXACT LOCATION OF ALL EQUIPMENT AND REQUIRED MOUNTING HEIGHTS.
2. SCOPE: PERFORM WORK AND PROVIDE NEW MATERIAL AND EQUIPMENT AS SHOWN ON DRAWINGS AND AS SPECIFIED IN THIS SECTION OF THE SPECIFICATIONS. PROVIDE ALL COMPONENTS AND MATERIALS, WHETHER SPECIFICALLY SHOWN OR NOT, THAT ARE NECESSARY TO MAKE THE SYSTEMS COMPLETE AND FULLY OPERATIONAL. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: 1) THE DESIGN INTENT AS ILLUSTRATED ON THESE DRAWINGS, 2) ALL TESTING AND CERTIFICATIONS NECESSARY FOR COMPLIANCE AND ANY REQUIRED REMEDIAL ACTIONS AND RETESTING DUE TO FAILURE.
3. SITE VISIT: VISIT AND CAREFULLY EXAMINE SITE TO IDENTIFY EXISTING CONDITIONS THAT MAY AFFECT WORK OF THIS SECTION BEFORE SUBMITTING BID. NO EXTRA PAYMENT WILL BE ALLOWED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY DISCOVERED.
4. RELATED WORK: THE FOLLOWING WORK IS NOT INCLUDED IN THIS SECTION AND WILL BE PROVIDED UNDER OTHER SECTIONS: 1) TEMPORARY LIGHTING AND POWER FOR USE DURING CONSTRUCTION AND TESTING UNLESS SPECIFICALLY NOTED IN OTHER SPECIFICATION SECTIONS, 2) TELECOMMUNICATIONS WIRING AND DEVICES UNLESS SPECIFICALLY NOTED ON THE DRAWINGS 3) AUTOMATIC TEMPERATURE CONTROL AND DIRECT DIAL COMMUNICATIONS WIRING UNLESS SPECIFICALLY NOTED ON THE DRAWINGS AND 4) PAINTING.
5. CODES, STANDARDS, AUTHORITIES AND PERMITS: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE STATE BUILDING CODE, THE STATE ELECTRICAL CODE, ALL INSTALLATION STANDARDS AND OTHER APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENT, OTHER AUTHORITIES HAVING JURISDICTION AND APPLICABLE BASE BUILDING STANDARDS AND SPECIFICATIONS. CODES, LAWS AND ORDINANCES PROVIDE A BASIS FOR THE MINIMUM INSTALLATION CRITERIA. THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE SCOPE REQUIRED FOR THIS PROJECT, WHICH MAY EXCEED MINIMUM CODE, LAW AND STANDARDS CRITERIA. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES HAVING JURISDICTION AS REQUIRED FOR THE EXECUTION OF ALL WORK ASSOCIATED WITH THIS PROJECT.
6. INTERPRETATION OF DOCUMENTS: ADVISE THE ENGINEER IN WRITING (RFI) PRIOR TO PROCEEDING WITH PROCUREMENT OR INSTALLATION THAT THE DESIGN INTENT IS UNCLEAR OR THAT CONSTRUCTION DOCUMENTS DO NOT COINCIDE WITH MANUFACTURER'S RECOMMENDATIONS. ALL COSTS FOR REWORK NECESSARY TO RESOLVE DISCREPANCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. REQUEST FOR INFORMATION: RFI ISSUED TO RESOLVE A CONFLICT OR DISCREPANCY SHALL BE PROVIDED WITH THE PREFERRED SOLUTION VIA WRITTEN DESCRIPTION OR SKETCH.
8. SUBMITTALS: PROVIDE SPECIFIED MATERIALS AND EQUIPMENT UNLESS "EQUAL" OR "APPROVED EQUAL" IS EXPLICITLY INDICATED ON THE DRAWINGS. DEVIATIONS TO SPECIFIED MATERIALS SHALL BE AT THE SOLE RISK OF THE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR ALL ASSOCIATED CHANGES TO THIS AND OTHER TRADES. SUBMITTALS SHALL INDICATE REVIEW AND APPROVAL BY THE RESPONSIBLE CONTRACTOR. SUBMIT FOR REVIEW (6) SETS OF MANUFACTURER'S PRODUCT DATA FOR ALL LIGHTING, LAMPS, BALLASTS AND CONTROLS WITH ANY APPLICABLE UTILITY REBATE FORMS FILLED OUT; DEVICES (RECEPTACLES AND SWITCHES) AND PLATES; FIRE ALARM SYSTEM COMPONENTS; PANELBOARDS, CIRCUIT BREAKERS AND DISCONNECT SWITCHES.
9. OPERATION AND MAINTENANCE DATA: SUBMIT (3) SETS OF OPERATING AND MAINTENANCE MANUALS INCLUDING SYSTEM DESCRIPTION, WIRING DIAGRAMS, WRITTEN WARRANTY, RECOMMENDED SPARE PARTS AND ROUTINE MAINTENANCE REQUIREMENTS WITH RECOMMENDED INTERVALS FOR ALL SUPPLIED EQUIPMENT.
10. RECORD DRAWINGS: CAD RECORD DRAWING FILES SHALL BE SUBMITTED AT THE COMPLETION OF THE PROJECT SHOWING THE "AS-BUILT" CONDITION INCLUDING WORK INSTALLED AND ALL MODIFICATIONS OR ADDITIONS TO ORIGINAL DESIGN. OBTAIN THE AUTOCAD FILES FOR PREPARATION OF AS-BUILT DRAWINGS FROM THE ARCHITECT. THE ARCHITECT AND ENGINEER ARE NOT GRANTING ANY OWNERSHIP OR PROPERTY INTEREST IN THE CAD DRAWINGS BY THE DELIVERY OF THE CAD FILES. THE RIGHTS TO USE THE CAD FILES AND DRAWINGS ARE LIMITED TO USE FOR THE SOLE PURPOSE OF ASSISTING IN THE PERFORMANCE OF CONTRACTUAL OBLIGATIONS WITH RESPECT TO THIS PROJECT. ANY REUSE AND/OR OTHER USE WILL BE AT THE CONTRACTOR'S SOLE RISK AND WITHOUT LIABILITY TO THE ARCHITECT AND ENGINEER.
11. WARRANTIES: WARRANTY INSTALLATION IN WRITING FOR ONE YEAR FROM DATE OF OWNER'S ACCEPTANCE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. REPAIR, REPLACE OR PROVIDE TEMPORARY ACCOMMODATIONS FOR DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN 24 HOURS OF NOTIFICATION. WARRANTY SHALL INCLUDE A CONTACT PERSON (NAME AND 24 HOUR TELEPHONE NUMBER) FOR SERVICE REQUESTS. CORRECT DAMAGE CAUSED WHILE MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER WARRANTY PERIOD AT NO ADDITIONAL COST.
12. COORDINATION: CONFER WITH ALL OTHER TRADES RELATIVE TO LOCATION OF ALL APPARATUS AND EQUIPMENT TO BE INSTALLED AND SELECT LOCATIONS SO AS NOT TO CONFLICT WITH OR HINDER PROGRESS OF WORK OF OTHER SECTIONS. WORK INSTALLED OR CREATED INTERFERING OR RESTRICTS ACCESS REQUIRED BY CODE OR TO CONDUCT MAINTENANCE AND/OR ADJUSTMENTS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
13. SUPPORTS: INCLUDE ALL STRUCTURAL STEEL SUPPORTS, HANGER BRACKETS, ETC., REQUIRED FOR THE EXECUTION OF THE WORK OF THIS SECTION. HANGERS SHALL BE PREFINISHED CHANNEL AND THREADED ROD USED WITH APPROVED CLAMPS, HARDWARE, ETC.

14. CUTTING AND PATCHING: INCLUDE ALL CORING, CUTTING, PATCHING AND FIREPROOFING NECESSARY FOR THE EXECUTION OF THE WORK OF THIS SECTION. STRUCTURAL ELEMENTS SHALL NOT BE CUT WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
15. SAFETY PRECAUTIONS: LIFE SAFETY AND ACCIDENT PREVENTION SHALL BE A PRIMARY CONSIDERATION, COMPLY WITH ALL OF THE SAFETY REQUIREMENTS OF THE OWNER AND OSHA THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. FURNISH, PLACE AND MAINTAIN PROPER GUARDS AND ANY OTHER NECESSARY CONSTRUCTION REQUIRED TO SECURE SAFETY OF LIFE AND PROPERTY.
16. PROTECTION OF WORK AND PROPERTY: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF ALL WORK INCLUDED UNDER THIS SECTION UNTIL THE COMPLETION AND FINAL ACCEPTANCE OF THIS PROJECT. PROTECT ALL EQUIPMENT AND MATERIALS FROM DAMAGE FROM ALL CAUSES INCLUDING, BUT NOT LIMITED TO, FIRE, VANDALISM AND THEFT. ALL MATERIALS AND EQUIPMENT DAMAGED OR STOLEN SHALL BE REPAIRED OR REPLACED WITH EQUAL MATERIAL OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. PROTECT ALL EQUIPMENT, OUTLETS AND DRAININGS, AND ROOF PENETRATIONS WITH TEMPORARY PLUGS, CAPS AND COVERS. PROTECT WORK AND MATERIALS OF OTHER TRADES FROM DAMAGE THAT MIGHT BE CAUSED BY WORK OR WORKMEN UNDER THIS SECTION AND MAKE GOOD DAMAGE THUS CAUSED. DAMAGED MATERIALS ARE TO BE REMOVED FROM THE SITE, NO SITE STORAGE OF DAMAGED MATERIALS WILL BE ALLOWED. ANY DAMAGE TO EXISTING SYSTEMS AND EQUIPMENT CAUSED BY THIS CONTRACTOR DURING INSTALLATION SHALL BE REPAIRED AND/OR REPLACED AT THIS CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE BUILDING OWNER.
17. SEISMIC RESTRAINT REQUIREMENTS: PROVIDE SEISMIC RESTRAINTS AS REQUIRED IN ACCORDANCE WITH THE STATE BUILDING CODE. A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER, LICENSED IN THE APPLICABLE STATE FOR THE PROJECT LOCATION, SHALL PREPARE THE SEISMIC RESTRAINT DESIGN AND CERTIFY THAT THE DESIGN IS IN COMPLIANCE WITH THE STATE BUILDING CODE REQUIREMENTS.
18. PROJECT CLOSEOUT: A CERTIFICATE OF COMPLETION SHALL BE ISSUED BY THE CONTRACTOR INDICATING THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES AND CODES. FINAL INSPECTION BY THE ENGINEER SHALL BE CONDUCTED AFTER RECEIPT OF THE CERTIFICATE OF COMPLETION. NO LIFE SAFETY DEFICIENCIES IN THE EGRESS OR EXIT LIGHTING SYSTEMS, FIRE ALARM SYSTEM OR THE EMERGENCY POWER SYSTEM SHALL BE PRESENT WHEN REQUESTING FINAL INSPECTION. PREMATURE REQUESTS FOR FINAL INSPECTIONS THAT REQUIRE REINSPECTION OF DEFICIENT ITEMS WILL RESULT IN BACK CHARGES OF THE COSTS ASSOCIATED WITH THE REINSPECTION.

PART 2 - PRODUCTS

1. IDENTIFICATION: NAMEPLATES SHALL INDICATE EQUIPMENT TAG, VOLTAGE CHARACTERISTICS AND SOURCE OF POWER. REFER TO EDDO NAMEPLATE DETAIL FOR ADDITIONAL INFORMATION.
2. RACEWAYS AND CONDUIT: ELECTRICAL METALLIC TUBING (EMT) SHALL BE UTILIZED WITH SET SCREW TYPE FITTINGS. PROVIDE CONDUIT EXPANSION FITTINGS WITH EXTERNAL BONDING JUMPERS EQUAL TO OZ GEDNEY TYPE TX FOR EMT WHEN CROSSING EXPANSION JOINTS. UL LISTED LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC) AND FLEXIBLE METAL CONDUIT (FMC) SHALL BE USED FOR FINAL CONNECTIONS TO EQUIPMENT WHERE FLEXIBILITY OR VIBRATION ISOLATION ARE REQUIRED.
3. WIRE AND CABLE: ALL CONDUCTORS SHALL BE TYPE THHN/THWN OR XHHW, COPPER, RATED 75/90°C, 600 VOLT INSULATION UNLESS OTHERWISE NOTED. MINIMUM SIZE CONDUCTOR SHALL BE #12 AWG COPPER. CONDUCTORS #10 AWG AND LARGER SHALL BE STRANDED. #12 AWG AND SMALLER SHALL BE SOLID. EACH BRANCH CIRCUIT AND FEEDER SHALL BE PROVIDED WITH AN INSULATED GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122. CONDUCTOR COLOR CODING SHALL BE IN ACCORDANCE WITH THE FOLLOWING: COLOR CODING OF CONDUITS SHALL BE IN ACCORDANCE WITH THE FOLLOWING INCLUDING CONDUCTORS INSTALLED IN RACEWAYS AND IN ALL CABLE ASSEMBLIES (MC AND/OR AC). FLEXIBLE METAL CABLE (MC) CABLE SHALL BE UL LISTED WITH INSULATED THHN PHASE AND GROUND CONDUCTORS WITHIN A GALVANIZED STEEL INSULATING ARMOR. ALUMINUM ARMOR IS NOT ACCEPTABLE.
4. WIRING DEVICES AND PLATES: ALL DEVICES SHALL BE SPECIFICATION GRADE WITH NYLON PLATE, COLOR AS SPECIFIED BY THE ARCHITECT OR TO MATCH EXISTING. ALL DEVICES SHALL HAVE A GREEN GROUNDING TERMINAL ON THE YOKE. RECEPTACLES SHALL BE UL FEDERAL SPECIFICATION WC-598 EXTRA HEAVY DUTY 20A 125V EQUAL TO COOPER 5362. GFCI RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE 20A 125V EQUAL TO COOPER GFCI. SWITCHES SHALL BE INDUSTRIAL-INSTITUTIONAL HEAVY DUTY SPECIFICATION GRADE 20A 120/277V EQUAL TO COOPER 2200 SERIES.
5. SAFETY DISCONNECT SWITCHES: DISCONNECT SWITCHES SHALL BE THREE-POLE HEAVY DUTY TYPE RATED FOR 600 VOLT IN NEARBY ENCLOSURES UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL SWITCHES SHALL BE HORSEPOWER RATED AND SUITABLE FOR SERVICE ENTRANCE USE WHERE INDICATED ON THE DRAWINGS. PROVIDE WITH SOLID NEUTRAL. WHERE FOUR WIRE CIRCUITS ARE ILLUSTRATED, MANUAL MOTOR STARTERS SHALL HAVE QUICK MAKE, QUICK BREAK TOGGLE MECHANISMS WITH ALLOWANCE FOR UP TO 10% FIELD ADJUSTMENT TO NOMINAL OVERLOAD HEATER VALUES. MANUAL MOTOR STARTERS SHALL BE SINGLE PHASE AND MAY BE USED FOR APPLICATIONS UP TO 1 HP AT 277 VOLT. ACCEPTABLE MANUFACTURERS SHALL BE GE, SIEMENS OR EATON CUTLER-HAMMER.
6. PANELBOARDS: PANELBOARDS SHALL BE CIRCUIT BREAKER TYPE WITH THERMAL MAGNETIC PROTECTION AND SHORT CIRCUIT TRIP. ACCESS RESTRICTED. INTERRUPTING CAPACITY SHALL BE 10,000 AMP SYMMETRICAL AT 208 VOLT. REFER TO PANEL SCHEDULES FOR EXACT MC RATINGS OF EQUIPMENT. PANELBOARD COVERS SHALL BE DOOR-IN-DOOR DESIGN. ACCEPTABLE MANUFACTURERS SHALL BE GE, SIEMENS OR EATON CUTLER-HAMMER.

7. LIGHTING: FLUORESCENT FIXTURES SHALL HAVE ELECTRONIC BALLAST WITH HIGH POWER FACTOR, SOUND RATING "A" AND SHALL BE CBM-CERTIFIED. TOTAL HARMONIC DISTORTION SHALL BE LESS THAN 10%. BALLAST SHALL BE PROGRAMMED RAPID START OR INSTANT START AND HAVE A MINIMUM BALLAST FACTOR OF 0.88. ACCEPTABLE BALLAST MANUFACTURER ARE OSRAM SYLVANIA INC., ADVANCE ELECTRIC, OR APPROVED EQUAL. ELECTRONIC BALLAST THAT OPERATE T-5 AND COMPACT FLUORESCENT LAMPS SHALL HAVE END-OF-LAMP-LIFE SHUT DOWN TO PROTECT AGAINST LAMP OVER HEATING. LAMPS SHALL HAVE MINIMUM CRI RATING OF 82.
8. FIRE ALARM SYSTEM MODIFICATIONS: MODIFICATIONS MADE TO THE BASE BUILDING FIRE ALARM SYSTEM SHALL BE MADE IN COMPLIANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS. ALL NEW COMPONENTS SHALL BE UL LISTED FOR THEIR INTENDED PURPOSE AND CROSS-LISTED FOR USE ON THE EXISTING SYSTEM.

THE ADDITION OF NEW INITIATING DEVICES OR NOTIFICATION APPLIANCES TO THE EXISTING SLC AND CAN SHALL NOT ADVERSELY EFFECT SUPERVISION. THE WIRING CLASS AND STYLE FOR THE ADDITION OF DEVICES SHALL BE CONSISTENT WITH EXISTING AND PER THE RISER DIAGRAM INCLUDED IN THESE DRAWINGS.

NEW DEVICES SHALL BE PROGRAMMED TO INITIATE ACTION IN ACCORDANCE WITH THE EXISTING SEQUENCE OF OPERATION AS APPROVED BY THE AHJ. SYSTEM SUBMITTAL SHALL INCLUDE AN INPUT/OUTPUT MATRIX CLEARLY DEFINING THE SEQUENCE FOR EACH ADDED DEVICE.

PROVIDE DISTRIBUTED INTELLIGENT POWER SUPPLIES TO ACCOMMODATE THE POWER REQUIREMENTS OF MC CIRCUITS. POWER SUPPLIES SHALL COMMUNICATE WITH THE FACP VIA DATA COMMUNICATIONS, WHEREBY EACH POWER SUPPLY SHALL REPORT A LOSS OF AC POWER, BATTERY FAIL OR GROUND FAULT, AND EACH NOTIFICATION APPLIANCE CIRCUIT SERVED SHALL BE INDIVIDUALLY MONITORED FOR WIRING INTEGRITY. STANDBY BATTERIES SHALL SUPPORT THE SYSTEM IN THE EVENT OF A LOSS OF PRIMARY POWER FOR 60 HOURS OF FULL SUPERVISORY OPERATION FOLLOWED BY 10 MINUTES OF ALARM. BATTERIES SHALL BE MOUNTED INTEGRAL TO THE POWER SUPPLY CABINET.

VISUAL SIGNAL SHALL BE SELF-SYNCHRONIZING XENON STROBES RATED BY UL 1871 TEST CRITERIA AND IN ACCORDANCE WITH NFPA 72. VISUAL SIGNALS SHALL HAVE A MINIMUM EFFECTIVE INTENSITY OF 15 CANDELA (CD) OR AS OTHERWISE SPECIFIED ON THE DRAWINGS. DEVICES SPECIFIED AS 1/100 SHALL BE 15/75000 DUAL RATED. MULTIPLE STROBES VISIBLE FROM A SINGLE DOCUMENT SHALL BE SYNCHRONIZED.

SUBMITTALS: PROVIDE THE FOLLOWING DOCUMENTS FOR REVIEW AND EVALUATION: 1) POINT TO POINT WIRING DIAGRAMS OF THE PROPOSED MODIFICATION INCLUDING ALL CONDUCTOR QUANTITY AND SIZING 2) PANEL LAYOUTS INDICATING MODULE PLACEMENT AND SPARE CAPACITY ALLOWANCE FOR FUTURE EXPANSION 3) MANUFACTURER'S CATALOG CUT SHEETS OF ALL COMPONENTS AND DEVICES WITH INTERCONNECTION DIAGRAMS 4) BATTERY CAPACITY CALCULATIONS INDICATING REQUIRED AND SPARE CAPACITY 5) POWER SUPPLY CAPACITY CALCULATIONS INCLUDING EACH CIRCUIT LOAD, VOLTAGE DROP AND SPARE CAPACITY 6) WRITTEN TEST REPORT FOR NOTIFICATION OF SUCCESSFUL COMPLETION OF EACH REQUIRED TEST AND SYSTEM RECORD OF COMPLETION. 7) AS-BUILT DRAWINGS INCLUDING ALL DEVICE ADDRESSES AND ALPHANUMERIC DESCRIPTORS ASSIGNED IN THE CONTROL PANEL.

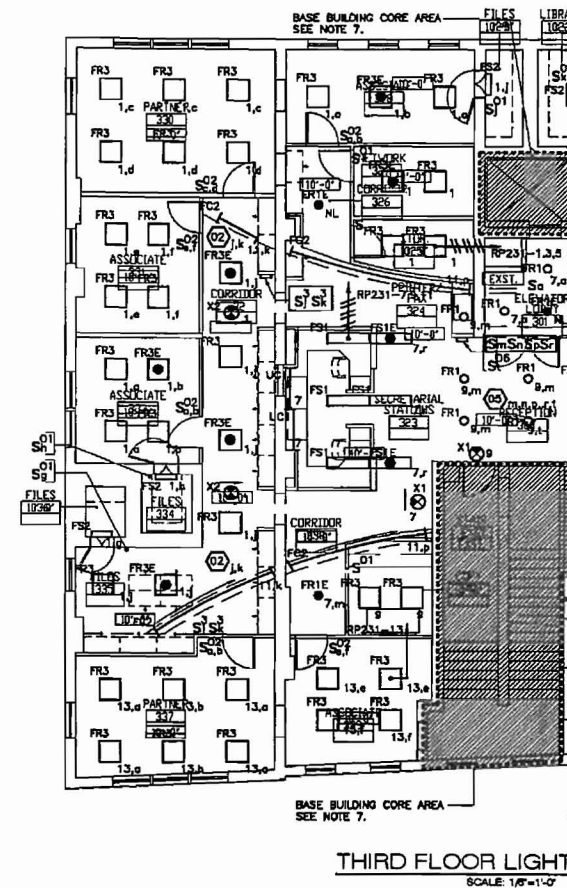
PART 3 EXECUTION

1. GENERAL: ALL INTERRUPTIONS AND SHUTDOWNS OF EXISTING ELECTRICAL SYSTEMS AND SERVICES SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE OWNER AND ENGINEER. THE CONTRACTOR SHALL INCLUDE ALL PREMIUM TIME ASSOCIATED WITH THE SYSTEM AND SERVICE INTERRUPTIONS AND SHUTDOWNS.
2. IDENTIFICATION: FURNISH AND INSTALL NAMEPLATES ON ALL ELECTRICAL EQUIPMENT INCLUDING PANELS, JUNCTION BOXES AND DISCONNECT SWITCHES.
3. RACEWAYS AND CONDUIT: REFER TO POWER, LIGHTING AND FIRE ALARM DRAWINGS FOR ALLOWABLE WIRING METHODS. EMT MAY BE USED WITH SET SCREW FITTINGS IN CONCEALED AND EXPOSED LOCATIONS WHERE NOT EXPOSED TO PHYSICAL DAMAGE OR MOISTURE. ALL RACEWAYS, WHICH PASS THROUGH BUILDING EXPANSION JOINTS, SHALL BE EQUIPPED WITH EXPANSION FITTINGS. ALL CONDUITS SHALL BE SUPPORTED IN AN APPROVED MANNER TO THE BUILDING STRUCTURE. SUPPORT FROM CONDUITS, DUCTWORK, PIPING, ETC. WILL NOT BE PERMITTED. RACEWAYS SHALL BE RUN CONCEALED UNLESS NOTED OTHERWISE. PERPENDICULAR AND/OR PARALLEL TO THE BUILDING STRUCTURE, NECA STANDARDS SHALL DEFINE MINIMUM QUALITY LEVEL FOR INSTALLATION WHERE APPLICABLE.
4. WIRE AND CABLE: BRANCH CIRCUIT WIRING IS NOT ILLUSTRATED ON THE DRAWINGS AND IS INDICATED BY CIRCUIT NUMBERS NEXT TO FIXTURES, EQUIPMENT AND DEVICES. PROVIDE COMPLETE WIRING SYSTEM TO MEET ILLUSTRATED INTENT. THE INSTALLATION OF MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY SHALL REQUIRE THE DERATING OF ALL ASSOCIATED CONDUCTORS. ALL CIRCUITS SHALL CONTAIN A FULL SIZE, INSULATED GROUND CONDUCTOR.
5. WIRING DEVICES AND PLATES: ALL DEVICES OTHER THAN 20A 120V SHALL BE CLEARLY LABELED WITH PERMANENTLY APPLIED NAMEPLATES (OR ENGRAVED FACEPLATES) DETAILING THE VOLTAGE CHARACTERISTICS AND CIRCUIT NUMBER.
6. SAFETY DISCONNECT SWITCHES: FUSES SHALL BE CLASS RK-1 SIZED PER DRAWING AND NAMEPLATE REQUIREMENTS. INSTALL REJECTION CLIPS TO PROHIBIT INSTALLATION OF OTHER THAN CURRENT LIMITING FUSES.
7. PANELBOARDS: PROVIDE NEW UPDATED TYPEWRITTEN DIRECTORIES OF BRANCH CIRCUITS IN ALL PANELBOARDS, NEW AND EXISTING, WHICH ARE MODIFIED UNDER THIS CONTRACT. INDICATE CIRCUIT CHANGES IN AS-BUILT RECORD DRAWINGS.
8. LIGHTING: ALL LIGHT FIXTURES SHALL BE SUPPORTED IN AN APPROVED MANNER TO THE BUILDING STRUCTURE WITH A MINIMUM OF TWO SAFETY CHAINS, CONNECTED AT OPPOSITE ENDS OF THE FIXTURE. SUPPORT FROM CONDUITS, DUCTWORK, PIPING, ETC. WILL NOT BE PERMITTED.

LIGHTING FIXTURE SCHEDULE								
TYPE	MANUFACTURERS	CATALOG NUMBER	DESCRIPTION	LAMPS		INPUT		REMARKS
				NO.	TYPE	VOLTS	WATTS	
FC1	CORELITE	#CS-S-N-1-TS-1-C-120-LENGTH	FLUORESCENT TS COVE LIGHTING ELECTRONIC BALLAST	1	FP54/TS40/830	120	62	
FC2	COLUMBIA	#SS-4-2-32-EBBLH-120	FLUORESCENT, 4 FOOT STAGGERED STRIP, ELECTRONIC BALLAST	2	FD32/78/830	120	59	
FP1	EUREKA	#4212-EC-SC-MOUNTING-24-WH-CF026	PENDANT MOUNTED 2'X2' WITH COMPACT FLUORESCENT LAMPS, WHITE FINISH, LUTRON DIMMING BALLAST	2	CFDT26/E/IN/830	120	60	SEE NOTES 8,12
FR1	EDISON PRICE	#TRPV 26/6-120-ECOL-WF	6" VERTICAL FLUORESCENT LAMP DOWNLIGHT, CLEAR REFLECTOR	1	CFDT26/E/IN/830	120	30	
FR10	EDISON PRICE	#TRPV 26/6-120-ECOL-WF-LUTRON	6" VERTICAL FLUORESCENT LAMP DOWNLIGHT CLEAR REFLECTOR DIMMING BALLAST	1	CFDT26/E/IN/830	120	30	SEE NOTE 12
FR1E	EDISON PRICE	#TRPV 26/6-120-ECOL-WF-EM	6" VERTICAL FLUORESCENT LAMP DOWNLIGHT, CLEAR REFLECTOR WITH EMERGENCY BATTERY BALLAST	1	CFDT26/E/IN/830	120	30	SEE NOTE 13
FR1DE	EDISON PRICE	#TRPV 26/6-120-ECOL-WF-LUTRON-EM	6" VERTICAL FLUORESCENT LAMP DOWNLIGHT WITH CLEAR REFLECTOR, LUTRON DIMMING BALLAST, EM BATTERY	1	CFDT26/E/IN/830	120	30	SEE NOTES 12,13
FR2	NOT USED							
FR3	LEDALITE	#97-22-01-ST-B-1-40-S-1-120-E	RECESSED 2'X2' LIGHT HIGH EFFICIENCY ACRYLIC OPTICS LENS, BIAx LAMP	1	FT40DL BIAx 830/RS	120	38	
FR3E	LEDALITE	#97-22-01-ST-B-1-40-S-1-120-E	RECESSED 2'X2' LIGHT HIGH EFFICIENCY ACRYLIC OPTICS LENS, BIAx LAMP, EMERGENCY BALLAST	1	FT40DL BIAx 830/RS	120	38	SEE NOTE 14
FR4	NOT USED							
FR5	LITECONTROL	#85N-1-4-TS-R/BW-G-ELB-120	RECESSED PERIMETER WALL SLOT LINEAR FLUORESCENT WITH BAFFLED SHIELDING	1	FP28/TS/830	120	32	
FS1	ZUMTOBEL	#ML4A-14-2545-MD-UNV	SURFACE MOUNTED FLUORESCENT, 2-LAMP WITH MICROGRID DIFFUSER, WHITE ENAMEL FINISH	2	FP54/TS40/830	120	121	
FS1E	ZUMTOBEL	#ML4A-14-2545-MD-EM	SURFACE MOUNTED FLUORESCENT, 2-LAMP WITH MICROGRID DIFFUSER, WHITE ENAMEL FINISH, EM BALLAST	2	FP54/TS40/830	120	121	SEE NOTE 11
FS2	MERCURY	#MP1-1-17-OCT-A-WHT-ELB-120	FLUORESCENT WALL MOUNTED STRIP FIXTURE WITH ACRYLIC LENS	1	FD17/830/	120	20	
FW1	BELFER	#1320-42-120-E-MWR/1320A-DTS-WH	COMPACT FLUORESCENT INDIRECT RECESSED WALL SCONCE DIRECT/DECORATIVE	1	CFDT42/E/IN/830	120	44	
FW1E	BELFER	#1320-42-120-E-MWR/1320A-DTS-WH-EM	COMPACT FLUORESCENT INDIRECT RECESSED WALL SCONCE DIRECT/DECORATIVE, EM BALLAST	1	CFDT42/E/IN/830	120	44	SEE NOTE 14
IR1	EDISON PRICE	#ANGLUX MR-ECOL-WF	LOW VOLTAGE ADJUSTABLE MR16 ACCENT LIGHT	1	MR16 IR/NFL	120	50	
IR2	EDISON PRICE	#DLMR/4-ECOL-WF	DECORATIVE LOW VOLTAGE MR16 DOWNLIGHT	1	MR16 IR/NFL	120	50	
IR3	BECA	#1224/560	RECESSED TUNGSTEN HALOGEN MINI BI-PIN WET LOCATION DOWNLIGHT WITH STAINLESS STEEL TRIM	1	T40/CL/AX/12V	120/12	50	
IR4	ELLIPTIPAR	#1200-0100-T-02-A-000	SEMI-RECESSED ADJUSTABLE WALL WASHER TUNGSTEN HALOGEN LAMP WITH WHITE FINISH	1	100W TUNGSTEN HALOGEN	120	100	
UC1	COLUMBIA	#UC-48-1-32-EBB-120-RS	FLUORESCENT UNDER CABINET LIGHTING 4 FOOT SECTION, ACRYLIC LENS	1	FD32/78/830	120	29	PROVIDE WITH ROCKER SWITCH FOR ON/OFF CONTROL
UC1A	COLUMBIA	#UC-48-1-32-EBB-120	FLUORESCENT UNDER CABINET LIGHTING, 4 FOOT SECTION, ACRYLIC LENS WITH ROCKER SWITCH	1	FD32/78/830	120	29	
X1	DUAL-LITE	#LE-C-S-R-XX-N-E	CEILING MOUNTED, LED EXIT SIGNAGE, RED LETTERS ON MIRROR BACKGROUND, SELF-CONTAINED NICKLE CADMIUM BATTERY	-	LED	120	3.9	NOTE 10
X2	LITHONIA	#LRP-1-RMR-XX-120-ELN	CEILING MOUNTED, LED EXIT SIGNAGE, RED LETTERS ON MIRROR BACKGROUND, SELF-CONTAINED NICKLE CADMIUM BATTERY	-	LED	120	3.9	NOTE 10

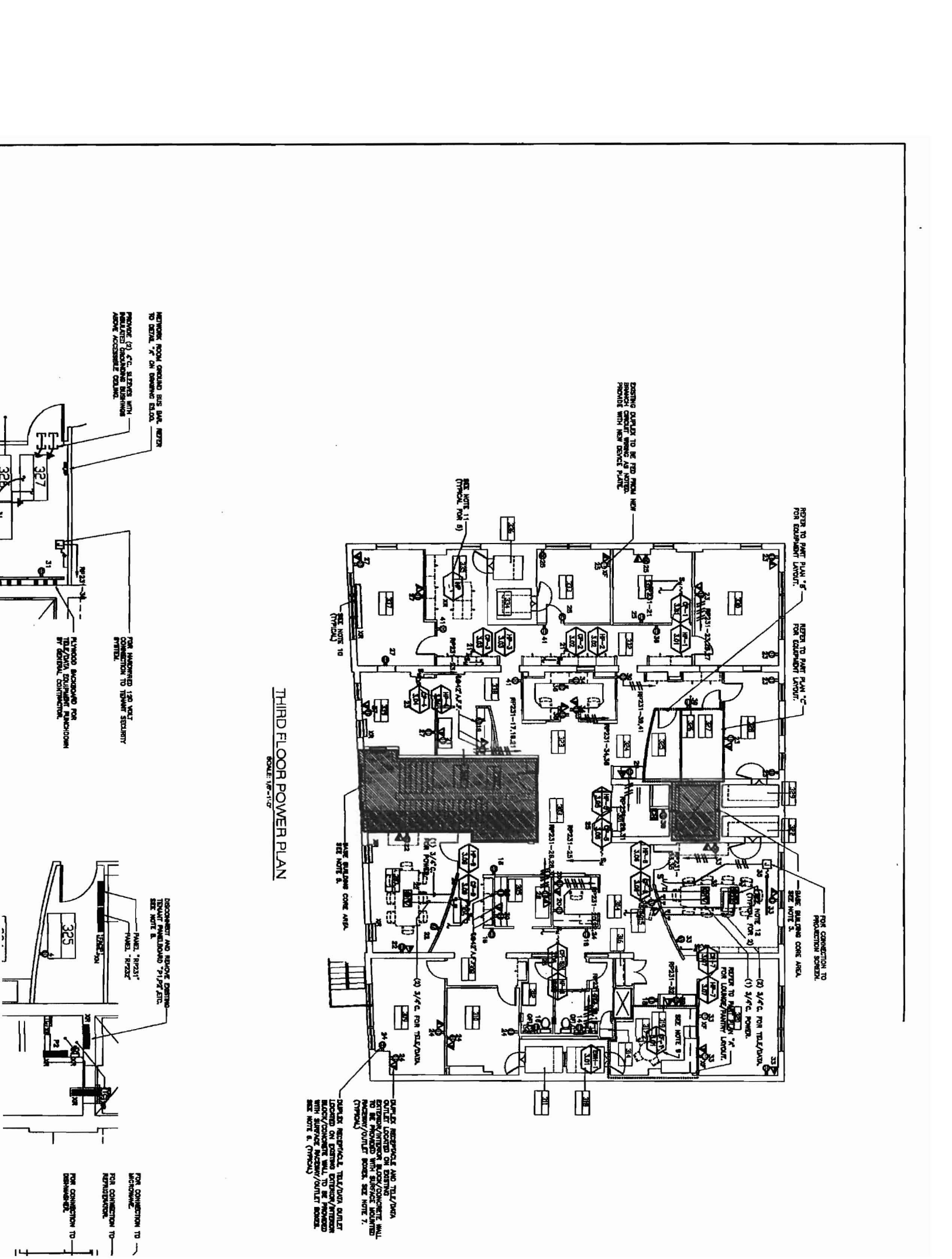
NOTES:

- NOTES 2-8 APPLY TO ALL APPLICABLE LIGHTING FIXTURES. THE REMARKS COLUMN SHALL NOTE ADDITIONAL REQUIREMENTS.
- FIXTURES SPECIFIED WITH CATALOG NUMBERS ESTABLISH QUALITY LEVEL. FOR EQUAL FIXTURES FROM MANUFACTURERS LISTED WITHOUT CATALOG NUMBERS, WHERE ONLY ONE MANUFACTURER LISTED, THERE SHALL BE NO SUBSTITUTION.
- VERIFY EXACT MOUNTING CONDITIONS AND PROVIDE APPROPRIATE ACCESSORIES AND HARDWARE TO ACCOMMODATE REQUIREMENTS.
- FIXTURE TYPE INDICATED ONCE ON A CONTINUOUS ROW SHALL BE TYPICAL OF ALL FIXTURES IN THE ROW UNLESS NOTED OTHERWISE.
- CONTINUOUS ROWS OF FIXTURES SHALL BE PROVIDED WITH ALL NECESSARY HARDWARE AND FILLERS TO PROVIDE THE EXACT LENGTHS AS INDICATED ON THE PLANS. FIXTURES IN SOFFITS SHALL BE CONTINUOUS END TO END.
- PROVIDE ALL FLUORESCENT FIXTURES WITH ELECTRONIC BALLASTS WITH MAXIMUM THD OF 20%, PF GREATER THAN 97% AND BF GREATER



LIGHTING NOTES:

- REFER TO DRAWING E0.00 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
- REFER TO ARCHITECTURAL DRAWINGS, INCLUDING BUT NOT LIMITED TO, REFLECTED CEILING PLANS AND ELEVATIONS FOR ASSOCIATED NOTES, MOUNTING DETAILS AND EXACT LOCATIONS OF ALL LIGHTING FIXTURES.
- PROVIDE COMMON FACE PLATE AND METAL INTERIOR BOX BARRIERS FOR ALL MULTIPLE GANG SWITCH LOCATIONS.
- VOLTAGE DROP HAS BEEN CONSIDERED IN THE DESIGN OF ALL BRANCH CIRCUIT AND FEEDER SIZES BASED UPON THE ILLUSTRATED EQUIPMENT LAYOUTS AND SHORTEST CONDUCTOR/RACEWAY ROUTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS TAKEN THAT WILL INCREASE CONDUCTOR/RACEWAY ROUTING LENGTHS. BRANCH CIRCUITS LONGER THAN 75' FOR 120V FROM PANEL TO LAST OUTLET SHALL BE INCREASED A MINIMUM OF ONE SIZE ABOVE THAT SPECIFIED TO LIMIT VOLTAGE DROP TO LESS THAN 3%.
- PROVIDE CONSTANTLY ENERGIZED (UNSWITCHED) BRANCH CIRCUIT TO ALL EXIT SIGNS AND EGRESS LIGHTS FROM LOCAL 120V CIRCUIT SERVING RESPECTIVE AREA.
- BRANCH CIRCUITRY SHALL BE INSTALLED IN CONDUIT FROM THE PANELBOARD TO THE FIRST OUTLET. LIGHTING BRANCH CIRCUITRY MAY BE TYPE MC CABLE WHERE CONCEALED ABOVE SUSPENDED CEILINGS OR IN METAL STUD WALLS. ELECTRICAL CONTRACTOR TO PROVIDE WIRING/BOX SERIES WITH ALL ASSOCIATED INTERNAL/EXTERNAL ELBOWS, CONNECTORS, BOXES/FACEPLATES, SUPPORTS AND DEVICES AS INDICATED ON FLOOR PLANS.
- MAINTAIN/RECONNECT CONTINUITY OF BRANCH CIRCUITRY ASSOCIATED WITH ALL EXISTING LIGHTING TO REMAIN. EXISTING PANELBOARD ON THIRD FLOOR TO BE DISCONNECTED AND REMOVED. ELECTRICAL CONTRACTOR TO EXTEND PANELBOARD 120V CIRCUITS TO EXISTING HOUSE PANEL LOCATED ON SECOND FLOOR.
- TYPE "FS2" LIGHTING FIXTURE BRANCH CIRCUIT WIRING TO BE INSTALLED THROUGH



THIRD FLOOR POWER PLAN

SCALE: 1/8" = 1'-0"

RETURNS FROM ROOMS SHOWN ARE SHOWN WITH
TO DETAIL "A" ON DRAWING E-100.

REMARKS (1) 3/4" C. FOR TEL/DATA
REMARKS (2) 3/4" C. FOR TEL/DATA
REMARKS (3) 3/4" C. FOR TEL/DATA

REMARKS AND SERVICE SYSTEMS
THAT ARE SHOWN ON THIS PLAN
SEE NOTE 1.

FOR CONNECTION TO
FOR CONNECTION TO
FOR CONNECTION TO

EXISTING OUTLET TO BE FED FROM NEW
CIRCUIT WITH NEW DEVICE PLANT.

FOR CONNECTION TO
FOR EQUIPMENT LAYOUT.

FOR CONNECTION TO
PROJECTION SCREEN.

EXTERIOR RECEPTACLE AND TEL/DATA
OUTLET LOCATED ON EXISTING
EXTERIOR/INTERIOR WALL/CONCRETE WALL
TO BE PROVIDED WITH SURFACE MOUNTED
RECEPTACLE/OUTLET BOX. SEE NOTE 7.
(TYPICAL)

SEE NOTE 13
(1) 3/4" C. FOR TEL/DATA
(2) 3/4" C. FOR TEL/DATA
FOR LAYOUT/PLANNING LAYOUT.

SEE NOTE 10
(TYPICAL)

SEE NOTE 11
(TYPICAL FOR 8)

SEE NOTE 12
(TYPICAL)

SEE NOTE 14
(TYPICAL)

SEE NOTE 15
(TYPICAL)

SEE NOTE 16
(TYPICAL)

SEE NOTE 17
(TYPICAL)

SEE NOTE 18
(TYPICAL)

SEE NOTE 19
(TYPICAL)

SEE NOTE 20
(TYPICAL)

SEE NOTE 21
(TYPICAL)

SEE NOTE 22
(TYPICAL)

SEE NOTE 23
(TYPICAL)

SEE NOTE 24
(TYPICAL)

SEE NOTE 25
(TYPICAL)

SEE NOTE 26
(TYPICAL)

SEE NOTE 27
(TYPICAL)

SEE NOTE 28
(TYPICAL)

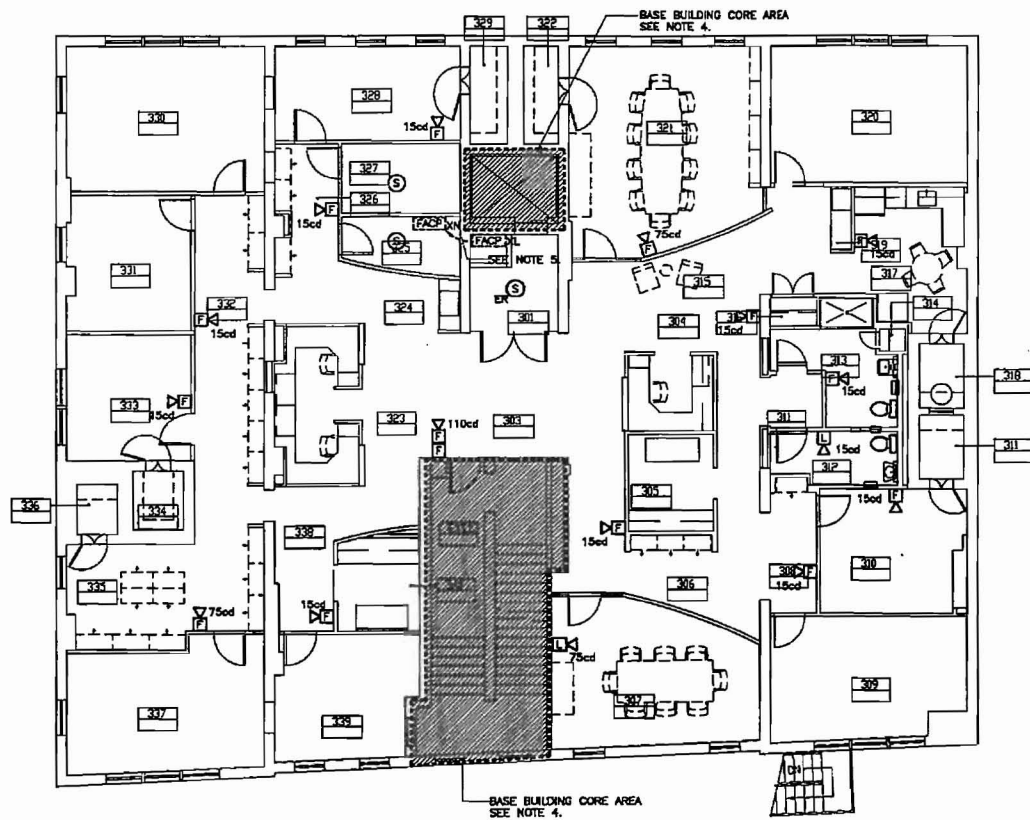
SEE NOTE 29
(TYPICAL)

SEE NOTE 30
(TYPICAL)

SEE NOTE 31
(TYPICAL)

SEE NOTE 32
(TYPICAL)

SEE NOTE 33
(TYPICAL)

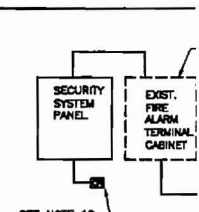


THIRD FLOOR FIRE ALARM PLAN

SCALE: 1/8"=1'-0"

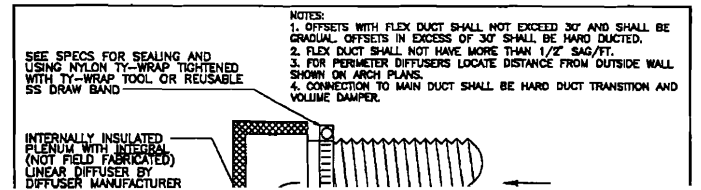
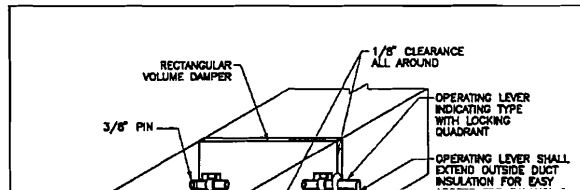
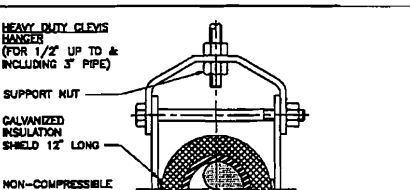
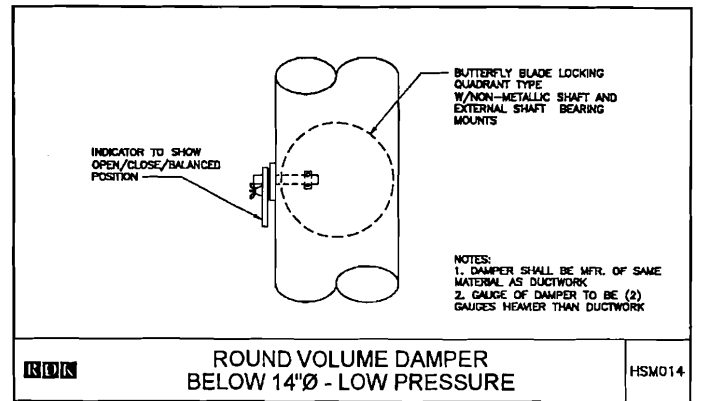
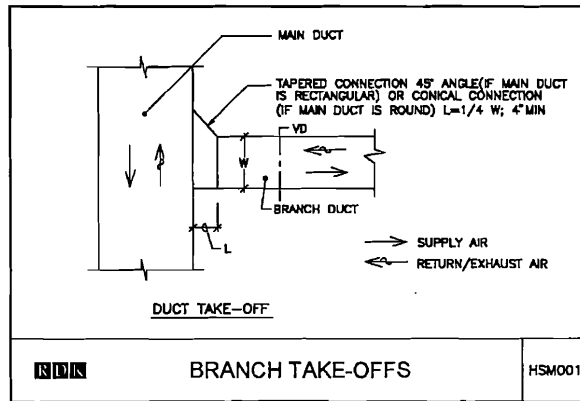
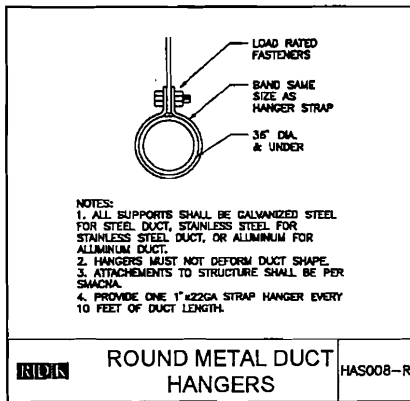
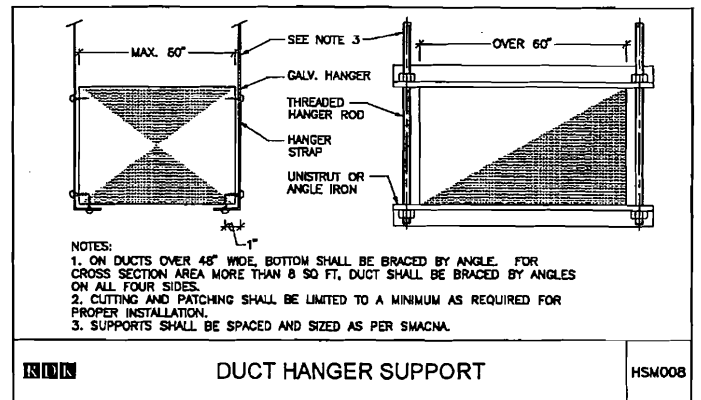
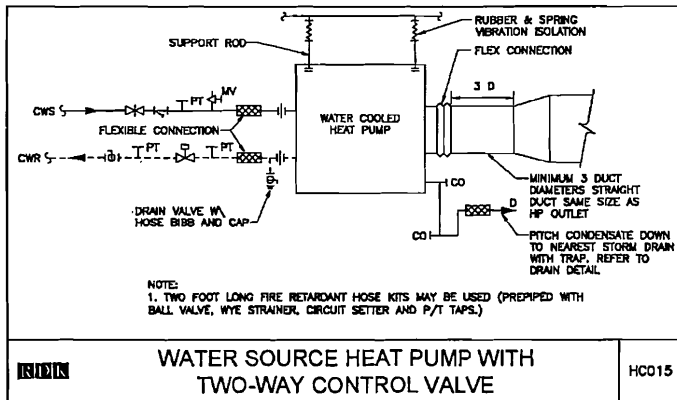
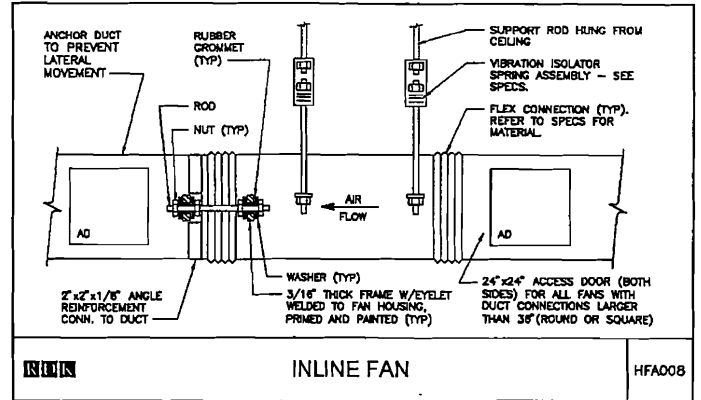
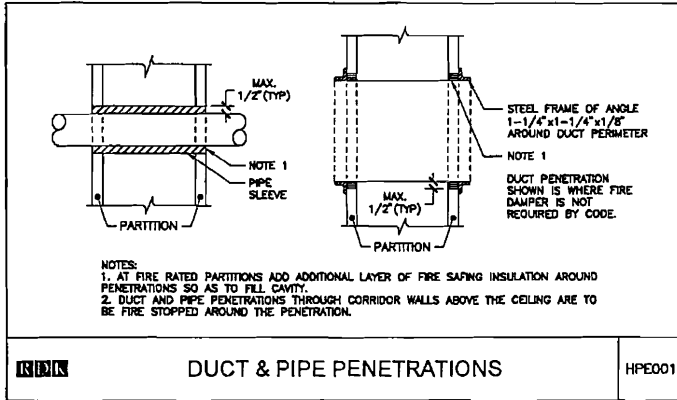
FIRE ALARM NOTES:

1. REFER TO DRAWING E0.00 FOR
2. FIRE ALARM BRANCH CIRCUITRY TO THE FIRST DEVICE. FIRE ALARM WHERE CONCEALED ABOVE SUSPE ELECTRICAL CONTRACTOR TO PROVIDE INTERNAL/EXTERNAL ELBOWS, CON DEVICES AS INDICATED ON FLOOR
3. MC CABLE FOR FIRE ALARM SI ENTIRE LENGTH. JUNCTION BOX CI ALARM WIRING RACEWAYS SHALL E
4. MAINTAIN/RECONNECT CONTINUU EXISTING FIRE ALARM DEVICES TO CLOSET 302 TO BE DISCONNECTED. RECONNECT FACP 120V CIRCUIT T SECOND FLOOR. IN ADDITION, EXTI CONTROL WIRING TO NEW FACP LI
5. RELOCATE EXISTING FIRE ALARM EXTEND ALL EXISTING CIRCUITS AS CLOSET 302. ELECTRICAL CONTRA FOR DISCONNECTING EXISTING FIRE PANEL. COORDINATE REQUIREMENT TIME AND PERSONNEL FIRE WATCH BUILDING CAN NOT BE OCCUPIED



NOTES:

1. THIS DRAWING IS INTENDED TO FLOOR PLANS FOR EXACT LOCATIO DIAGRAMS FOR INTERCONNECTION DRAWINGS WITH COMPONENT CUT
2. ALL FINAL CONNECTIONS INTO 1 EQUIPMENT MANUFACTURER REQUIRE FINAL CONNECTION AND ASSOCIATE
3. ALL NEW FIRE ALARM DEVICES TO THE EXISTING SYSTEM.
4. EXISTING SMOKE DETECTORS, P SHALL BE MAINTAINED, UNLESS OT SYSTEM OPERATIONAL, AND APPROV TO MAINTAIN SYSTEM OPERATION C TO ACCOMMODATE THE NEW DEVC
5. FIRE ALARM SYSTEM MODIFICATI DEPARTMENT RULES AND REGULATI
6. PROVIDE POWER BOOSTERS SE ADDITIONAL SPARE CAPACITY. PROVIDE SUFFICIENT AND ILLUSTRATED WITH
7. PROVIDE UL LISTED LOCKING DI CONTROL CIRCUIT IN THE PANELS
8. VISUAL APPLIANCES WITHIN SAM
9. STROBES INDICATED AS 15cd SI
10. PROVIDE SIGNAL TO CARD REA FIRE ALARM CONDITION. COORDINAT
11. EXISTING FIRE ALARM TERMINAL 322.
12. ELECTRICAL CONTRACTOR TO CO EXISTING BUILDING SYSTEM INSTALL
13. ALL WIRING SHALL BE #14AWG



NOTE: TYPE 'B' USED W/ ALLOW T

NOTES:
 - TYPE
 - DOES W/
 - BUCK
 TRANSIT

NOTES:
 1. THESE
 DIFFU
 2. PROV
 3. PROV
 4. FLEX
 5. LENG
 6. PROV

PROPS
 TAKE-
 FITTING

BELLMCO
 CONNEX
 MODEL

DUCT SIZE	H	HT
6 x 4	10	10
10 x 4	16	16
16 x 4	24	24
8 x 5	10	10
10 x 5	15	15
12 x 5	18	18
14 x 5	24	24
6 x 6	10	10
10 x 6	16	16
16 x 6	24	24
8 x 8	16	16
10 x 8	24	24
12 x 8	30	30
14 x 8	36	36

DUCT SIZE

DUCT SIZE	H	HT
6 x 4	10	10
10 x 4	16	16
16 x 4	24	24
8 x 5	10	10
10 x 5	15	15
12 x 5	18	18
14 x 5	24	24
6 x 6	10	10
10 x 6	16	16
16 x 6	24	24
8 x 8	16	16
10 x 8	24	24
12 x 8	30	30
14 x 8	36	36

DIFFUSER, GRILLE & REGISTER SCHEDULE								
TAG	SELECTION RANGE (CFM)	NECK SIZE (IN.)	OVERALL SIZE (IN.)	SERVICE	MOUNTING	MANUFACTURER AND MODEL NUMBER (AS STANDARD)	NC OR AIR PRESSURE DROP NOT TO EXCEED	REMARKS
SA	0-240	8"ø	48x4	SUPPLY	SURFACE	TITUS ML-39	25	1,2
SC	0-350	8"ø	24x24	SUPPLY	LAY-IN	TITUS OMNI	25	
RA	0-720	14x14	16x16	RETURN	SURFACE	TITUS 350FL	25	
EA	0-150	6x6	6x6	EXHAUST	SURFACE	TITUS 350FL	25	

NOTES:

- PROVIDE WITH MATCHING TITUS PLENUM BOX.
- LINEAR DIFFUSER TO HAVE (2) 1" SLOTS. BALANCE DIFFUSER FOR VERTICAL DOWNFLOW ON EXTERIOR SLOT, AND HORIZONTAL DISCHARGE ON INTERIOR SLOT.

FAN SCHEDULE															
TAG	LOCATION	SERVICE	CFM	FAN TYPE	E.S.P. (IN.WG)	WHEEL			MOTOR				MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS	
						DIA. (IN.)	TYPE	DRIVE	RPM	BHP	HP	V			PH
F-1	LOUNGE	LDUNGE/TOILETS	315	INLINE	0.35	12	BI	BELT	1725	0.07	1/4	115	1	GREENHECK BSQ-80-4	

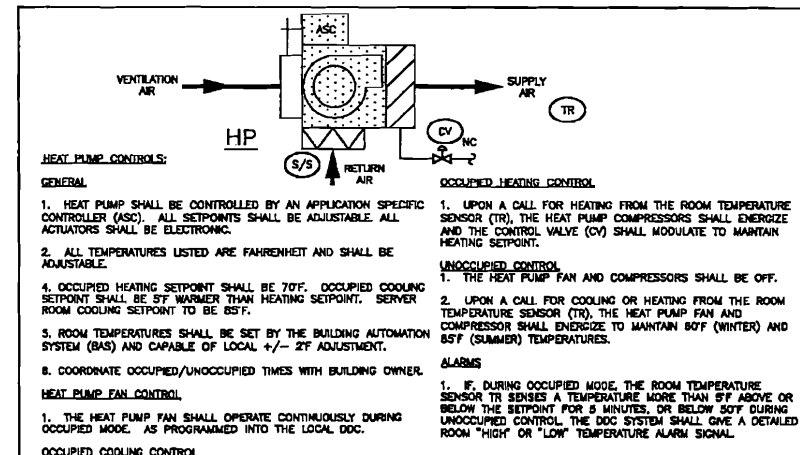
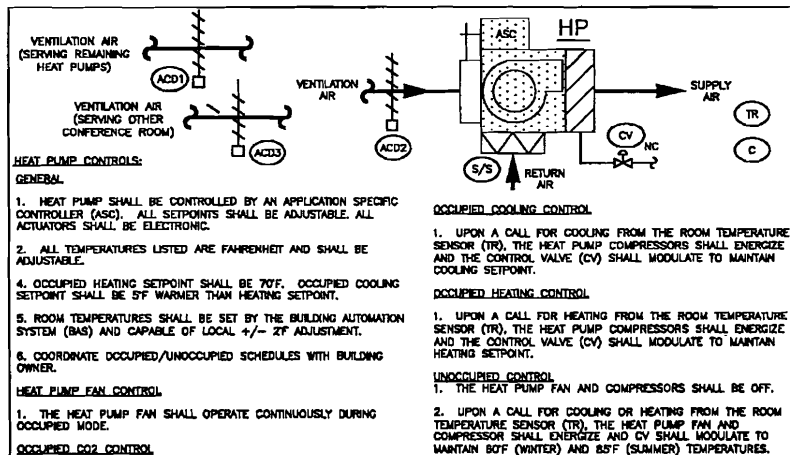
NOTES:

- PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH.
- PROVIDE WITHOUT INTEGRAL BACKDRAFT DAMPER.

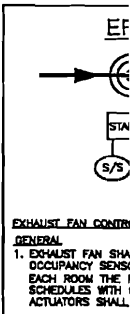
HEAT PUMP SCHEDULE																							
TAG	LOCATION	SERVES	COOLING CAPACITIES							HEATING CAPACITY				WATER SIDE		AIR SIDE			ELECTRICAL CHARACTERISTICS			MANUFACTURER AND MODEL NUMBER (AS STANDARD)	REMARKS
			ENT H2O (°F)	LVG H2O (°F)	EAT (°F)		TOTAL MBH	SENS. MBH	REJECTED BTUH	ENT H2O (°F)	LVG H2O (°F)	TOTAL BTU	EAT (°F)	P.D. (FT. H2O)	CFM	ESP (IN. H2O)	COMPRESSOR						
					DB	WB											FLA	V	PH				
HP-1	CORRIDOR 332	PARTNER 330	85	103.2	75	63	22.7	17.5	30127	70	55.8	30.1	70	3.4	3.4	640	0.5	15.8	208	1	MCQUAY-WCRH024	1,2,3	
HP-2	CORRIDOR 332	ASSOCIATE 331 & 332	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3	
HP-3	FILES 334	SECRETARIAL 323	85	98.8	75	63	15.8	12.0	19965	70	58.5	20.4	70	3.1	2.8	720	.35	8.1	208	1	MCQUAY-WCRH015	1,2,3	
HP-4	COPY 340	PARTNER 337	85	98.8	75	63	15.8	12.0	19965	70	58.5	20.4	70	3.1	2.8	850	0.45	8.1	208	1	MCQUAY-WCRH015	1,2,3	
HP-5	LOBBY 301	SECRETARIAL 304	85	103.2	75	63	18.0	13.9	23672	70	55.7	24.0	70	2.7	2.1	880	0.45	8.5	208	1	MCQUAY-WCRH019	1,2,3	
HP-6	CORRIDOR 315	CONFERENCE 321	85	98.8	75	63	15.8	12.0	19965	70	58.5	20.4	70	3.1	2.8	820	0.5	8.1	208	1	MCQUAY-WCRH019	1,2,3	
HP-7	FAX 316	PARTNER 320	85	85.0	75	63	8.5	7.1	10789	70	61.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3	
HP-8	TOILET 312	PARTNER 306	85	102.4	75	63	11.1	9.0	14471	70	55.5	14.7	70	1.7	5.3	360	0.4	7.4	208	1	MCQUAY-WCRH012	1,2,3	
HP-9	COPY 305	CONFERENCE 307	85	95.0	75	63	8.5	7.1	10789	70	61.5	11.8	70	2.4	8.8	370	0.4	8.0	208	1	MCQUAY-WCRH009	1,2,3	
HP-10	NETWORK 327	NETWORK 327	85	105.0	85	71	9.0	7.3	11513	70	54.8	11.2	60	1.3	2.8	410	0.25	6.0	208	1	MCQUAY-WCRH009	1,2,3	

NOTES:

- PROVIDE WITH FLEXIBLE HOSE KIT, EXTRA SET OF FILTERS, HANGERS BRACKETS AND 300 PSI COIL.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCH.
- PROVIDE CONDENSATE PUMP ALL ASSOCIATED PIPING SUPPORTS, CONTROLS AND ANY OTHER APPURTENANCES REQUIRED TO MAKE PUMP OPERATIONAL WITH ASSOCIATED HEAT PUMP. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.



CONTR	
TAG	TAG
TAG	TAG
TAG	TAG
C	
ACD	AUTO
ACV	AUTO
ALM	ALARM
ATC	AUTO
BSD	BACK
CT	CURR
CV	CONT
DAT	DISC
DDC/FP	DRCS
ES	END
FA	FAUL
H	HUM
HJLT	HEAT
HIGH	HIGH
NC	NORM
NO	NORM
SSSD	SLIPP
SSP	SLACT
T	TEMP
TR	TEMP
WC	WATE



HVAC GENERAL NOTES

- GENERAL NOTES APPLY TO ALL DRAWINGS.
- THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID, ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. ABSOLUTELY NO CLAIMS FOR EXTRA COMPENSATION WILL BE CONSIDERED FOR EXISTING CONDITIONS VISIBLE OR REASONABLY INFERRABLE FROM A CAREFUL EXAMINATION OF THE EXISTING BUILDING.
- THIS CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS AT THE SITE AND THE "AS-BUILT" BASE BUILDING CONTRACT DOCUMENTS PRIOR TO THE START OF ANY WORK TO DETERMINE WHAT EFFECT THE EXISTING CONDITIONS WILL HAVE ON HIS WORK. POTENTIAL PROBLEM AREAS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER IMMEDIATELY.
- THIS CONTRACTOR SHALL CONNECT HIS WORK TO VARIOUS EXISTING PIPING, DUCTWORK, AND CONTROL SYSTEMS IN THE BASE BUILDING. THE NEW WORK SHALL BE COMPATIBLE WITH THE EXISTING SYSTEMS. LOCATION OF EQUIPMENT OR THE ROUTING OF THE VARIOUS SYSTEMS AS WELL AS OPENINGS IN FLOOR SLABS OR WALLS SHALL BE GOVERNED BY THE EXISTING CONDITIONS AS THEY APPEAR IN THE FIELD OR ON THE "AS-BUILT" DRAWINGS.
- CARE SHALL BE TAKEN DURING THE INSTALLATION TO NOT DAMAGE OR INTERRUPT BUILDING SYSTEMS AND SERVICES THAT ARE ALREADY INSTALLED. DAMAGE TO SUCH SYSTEMS OR EQUIPMENT CAUSED BY THIS CONTRACTOR DURING INSTALLATION SHALL BE REPAIRED AND/OR REPLACED AT THIS CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE BUILDING OWNER.
- SHUTDOWN OF EXISTING SYSTEMS FOR CONNECTION TO EXISTING SERVICES SHALL BE COORDINATED WITH THE CONSTRUCTION MANAGER OR GENERAL CONTRACTOR AND BUILDING OWNER. THIS CONTRACTOR SHALL SUBMIT REQUESTS, WHERE THEY AFFECT THE OPERATION OF THE BUILDING SYSTEMS, AT LEAST ONE WEEK IN ADVANCE OF ANY REQUIRED SHUTDOWN. THE ACTUAL SHUTDOWN PERIOD SHALL BE AS SHORT AS POSSIBLE AND AT A TIME MUTUALLY AGREEABLE TO THE BUILDING OWNER AND THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR.
- DRAWINGS ARE DIAGRAMMATIC, THEREFORE DETERMINE EXACT LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AND DUCTS (INCLUDING DIVIDED DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT AND/OR PIPE TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR TERMINAL DEVICES.
- ALL MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY INDICATED AS REUSED, SHALL BE NEW.
- DUCTWORK SHALL NOT RUN ALONG FULL HEIGHT PARTITIONS.
- ACCESS PANELS SHALL BE PROVIDED TO ALLOW FOR CLEANING OF COILS AND SERVICING OF DAMPERS, HEATERS, VALVES, AND ALL CONCEALED MECHANICAL EQUIPMENT.
- THE INSIDE OF ALL DUCTWORK VISIBLE THROUGH A GRILLE OR DIFFUSER SHALL BE PAINTED FLAT BLACK.
- INSTALL NEW AND RELOCATED THERMOSTATS 4.5 FEET AFF OR AS DIRECTED OTHERWISE BY ARCHITECT.
- WHEN SECTION OF DUCTWORK IS NOT LABELED FOR SIZE, THE LARGER SIZE INDICATED ON THE DIMENSIONED DUCT SHALL PREVAIL. SIZE OF DUCT RUN-OUTS TO DIFFUSER SHALL EQUAL DIFFUSER NECK SIZE.
- THE FIRE PROOFING OF THE BUILDING STRUCTURE IS NOT TO BE REMOVED FOR THE INSTALLATION OF HANGERS, SUPPORTS, DUCTWORK, ETC. IF FIRE PROOFING IS DAMAGED, IT SHALL BE REPAIRED AT THE EXPENSE OF THE TRADE.

PART 1 - GENERAL

- GENERAL PROVISIONS: DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK IN CONTRACT.
- SCOPE: PERFORM WORK AND PROVIDE NEW MATERIAL AND EQUIPMENT AS SHOWN ON DRAWINGS AND AS SPECIFIED IN THIS SECTION OF THE SPECIFICATIONS. PROVIDE ALL COMPONENTS AND MATERIALS, WHETHER SPECIFICALLY SHOWN OR NOT, THAT ARE NECESSARY TO MAKE THE SYSTEMS COMPLETE AND FULLY OPERATIONAL INTENDED IN THE CONSTRUCTION DOCUMENTS. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: 1) THE DESIGN INTENT AS ILLUSTRATED ON THESE DRAWINGS, 2) REQUIREMENTS INCLUDED IN THE "NARRATIVE REPORT FOR COMPLIANCE WITH SECTION 1301.B.4.1 OF THE MASSACHUSETTS STATE BUILDING CODE (780CMR) - APPROVAL AND ACCEPTANCE", AND 3) ALL TESTING AND CERTIFICATIONS NECESSARY FOR COMPLIANCE INCLUDING ANY REQUIRED REMEDIAL ACTIONS AND RETESTING DUE TO FAILURE.
- SITE VISIT: VISIT AND CAREFULLY EXAMINE SITE TO IDENTIFY EXISTING CONDITIONS THAT MAY AFFECT WORK OF THIS SECTION BEFORE SUBMITTING BID. NO EXTRA PAYMENT WILL BE ALLOWED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY DISCERNED BY AN EXPERIENCED OBSERVER.
- RELATED WORK: THE FOLLOWING WORK IS NOT INCLUDED IN THIS SECTION AND WILL BE PROVIDED UNDER OTHER SECTIONS: 1) TEMPORARY HEAT FOR USE DURING CONSTRUCTION AND TESTING UNLESS SPECIFICALLY NOTED IN OTHER SPECIFICATION SECTIONS, 2) PAINTING, EXCEPT AS SPECIFIED, 3) ELECTRICAL POWER WIRING TO ALL EQUIPMENT OTHER THAN AUTOMATIC TEMPERATURE CONTROL PANELS AND COMPONENTS, AND 4) DUCT MOUNTED SMOKE DETECTORS SHALL BE FURNISHED BY OTHERS FOR MOUNTING AND WIRING TO THE AFS SYSTEM UNDER THIS SECTION.
- CODES, STANDARDS, AUTHORITIES AND PERMITS: CODES, LAWS AND ORDINANCES PROVIDE A BASIS FOR THE MINIMUM INSTALLATION CRITERIA. THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE SCOPE REQUIRED FOR THIS PROJECT, WHICH MAY EXCEED MINIMUM CODE, LAW AND STANDARDS CRITERIA. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACKLOGS FOR THE EQUIPMENT AND OTHER AUTHORITIES WITHIN THE JURISDICTION AS REQUIRED FOR THE EXECUTION OF ALL WORK ASSOCIATED WITH THIS PROJECT. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF: 1) THE STATE BUILDING, ELECTRICAL, MECHANICAL, AND ENERGY CODES, 2) SMACNA, NFPA, ANS/ASHRAE, ASME, UL, AND NEMA STANDARDS, 3) ALL OTHER APPLICABLE CODES, REGULATIONS, STANDARDS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENT AND OTHER AUTHORITIES WITHIN JURISDICTION, AND 4) APPLICABLE BASE BUILDING STANDARDS AND SPECIFICATIONS.
- INTERPRETATIONS OF DOCUMENTS: WHERE DRAWINGS OR SPECIFICATIONS DO NOT COINCIDE WITH MANUFACTURER'S RECOMMENDATIONS, OR ARE UNCLEAR AS TO INTENT, OR REQUIRED MATERIAL QUALITY, ADVISE THE ENGINEER IN WRITING BEFORE PROCEEDING WITH THE WORK. ALL COST FOR REWORK NECESSARY TO RESOLVE DISCREPANCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- REQUESTS FOR INFORMATION: ANY RFI FOR RESOLVING AN APPARENT CONFLICT OR UNCLEARITY, OR A REQUEST FOR ADDITIONAL DETAIL, SHALL INCLUDE A SKETCH OR EQUIVALENT DESCRIPTION OF CONTRACTOR'S PROPOSED SOLUTION.
- SUBMITTALS: PROVIDE SPECIFIED ITEMS AND EQUIPMENT UNLESS "EQUAL" OR "APPROVED EQUAL" IS EXPLICITLY INDICATED ON THE DRAWINGS. DEVIATIONS TO SPECIFIED ITEMS SHALL BE AT THE SOLE RISK OF THE CONTRACTOR. OBTAIN THE AUTOCAD FILES FOR ALL ASSOCIATED CHANGES TO THIS AND OTHER TRADES. REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER SHALL NOT ABSOLVE THE CONTRACTOR FROM MEETING THE FULL DESIGN INTENT OF THE ASSOCIATED SYSTEM(S). SUBMITTALS SHALL INDICATE PRIOR REVIEW AND APPROVAL BY THE RESPONSIBLE CONTRACTOR. SUBMIT FOR REVIEW (6) SETS OF MANUFACTURER'S PRODUCT DATA FOR THE FOLLOWING ITEMS: 1) AIR DISTRIBUTION LAYOUT DRAWINGS AND DETAILS, 2) PIPING DISTRIBUTION LAYOUT DRAWINGS, COMPONENTS, AND DETAILS, 3) ALL EQUIPMENT, 4) CONTROL SCHEMATICS, COMPONENTS, AND SEQUENCES, INCLUDING TIE-IN TO THE EXISTING BUILDING CONTROL OR MANAGEMENT SYSTEM, 5) BALANCING REPORTS, 6) ALL TEST REPORTS, AND 7) ALL CERTIFICATES.
- OPERATION AND MAINTENANCE DATA: SUBMIT (3) SETS OF OPERATING AND MAINTENANCE MANUALS PRIOR TO THE COMPLETION OF THE PROJECT. OBTAIN ON-SITE DEMONSTRATION OF ALL SYSTEMS TO OWNER AFTER SYSTEMS ARE FULLY OPERATIONAL. O&M MANUALS SHALL INCLUDE ALL COMPONENTS (DIFFUSERS, VALVES, ETC.) AS WELL AS SYSTEM DESCRIPTIONS OF ALL SYSTEMS WITH FLOW DIAGRAMS, WIRING DIAGRAMS, WRITTEN WARRANTIES, RECOMMENDED SPARE PARTS AND ROUTINE MAINTENANCE REQUIREMENTS WITH RECOMMENDED INTERVALS FOR ALL MOVING EQUIPMENT AND CONTROLS.
- RECORD DRAWINGS: CAD RECORD DRAWING FILES SHALL BE SUBMITTED AT THE COMPLETION OF THE PROJECT SHOWING THE "AS-BUILT" CONDITION INCLUDING WORK INSTALLED AND ALL MODIFICATIONS OR ALTERATIONS TO ORIGINAL DESIGN. OBTAIN THE AUTOCAD FILES FOR PREPARATION OF AS-BUILT DRAWINGS FROM THE ARCHITECT. THE ARCHITECT AND ENGINEER ARE NOT GRANTING ANY OWNERSHIP OR PROPERTY INTEREST IN THE CAD DRAWINGS BY THE DELIVERY OF THE CAD FILES. THE USE OF THE CAD FILES AND DRAWINGS ARE LIMITED FOR THE SOLE PURPOSE OF CONTRACTOR'S PERFORMANCE OF THE WORK AND FOR THE OBLIGATIONS WITH RESPECT TO THIS PROJECT. ANY REUSE AND/OR OTHER USE BY THE CONTRACTOR WILL BE AT THE CONTRACTOR'S SOLE RISK AND WITHOUT LIABILITY TO THE ARCHITECT AND ENGINEER.
- WARRANTIES: WARRANTY INSTALLATION IN WRITING FOR ONE YEAR FROM DATE OF OWNER'S ACCEPTANCE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. WHERE INDIVIDUAL EQUIPMENT SECTIONS SPECIFY LONGER WARRANTIES, PROVIDE THE LONGER WARRANTY. REPAIR, REPLACE OR PROVIDE TIE-IN FOR DEFECTIVE MATERIALS, EQUIPMENT OR SYSTEMS. WARRANTY SHALL INCLUDE AND INSTALLATION THAT DEVELOP WITHIN 24 HOURS OF NOTIFICATION. WARRANTY SHALL INCLUDE A CONTACT PERSON (NAME AND 24 HOUR TELEPHONE NUMBER) FOR SERVICE REQUESTS. CORRECT DAMAGE CAUSED WHILE MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER WARRANTY PERIOD AT NO ADDITIONAL COST.
- COORDINATION: CONFER WITH ALL OTHER TRADES RELATIVE TO LOCATION OF ALL APPARATUS AND EQUIPMENT TO BE INSTALLED AND SELECT LOCATIONS SO AS NOT TO CONFLICT WITH OR INTERFERE WITH THE WORK OF OTHER SECTIONS. WORK INSTALLED THAT CREATES INTERFERENCE OR RESTRICTS ACCESS REQUIRED BY CODE (INCLUDING CLEARANCES TO ELECTRICAL COMPONENTS) OR TO CONDUCT MAINTENANCE AND/OR ADJUSTMENTS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
- SUPPORTS: INCLUDE ALL STRUCTURAL STEEL SUPPORTS, HANGER BRACKETS, ETC., REQUIRED FOR THE EXECUTION OF THE WORK OF THIS SECTION. THE WELDS AND EDGES OF ALL BRACKETS SHALL BE ENLARGED OR GROVED WITH RADIUS PARTS SHALL BE STEEL ANGLE, CHANNEL, I-BEAM, OR STEEL ROD USED WITH APPROVED CLAMPS, NUTS, ETC. ALL PARTS SHALL BE GALVANIZED OR PAINTED WITH TWO COATS OF RUSTOLEUM PAINT BEFORE INSTALLATION. APPLY TOUCH-UP PAINT (ZINC GALVANIZING FOR GALVANIZED STEEL) AFTER INSTALLATION. SUPPORTS INSTALLED IN EXTERIOR LOCATION SHALL BE PVD COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH STAINLESS STEEL HARDWARE.
- CUTTING AND PATCHING: INCLUDE ALL CORING, CUTTING, PATCHING AND FIREPROOFING NECESSARY FOR THE EXECUTION OF THIS SECTION. PATCHES AND PATCHES SHALL NOT BE CUT WITHOUT WRITTEN APPROVAL OF THE ARCHITECT. REPAIR AND PATCH AROUND THE WORK SPECIFIED HEREIN TO MATCH THE EXISTING ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT. FILL AND PATCH ALL OPENINGS OR HOLES LEFT IN THE EXISTING STRUCTURE BY THE REMOVAL OF EXISTING EQUIPMENT IN THAT PART OF THE SECTION OF THE SPECIFICATIONS. PATCH AND SEAL ALL EXISTING OPENINGS IN DUCTWORK AND PIPING NOT UTILIZED FOR NEW LAYOUT.
- HOISTING, SCAFFOLDING AND PLANKING: INCLUDE THE FURNISHING, SET-UP AND MAINTENANCE OF ALL HOISTING MACHINERY, CRANES, SCAFFOLDS, STAGING AND PLANKING AS REQUIRED FOR THE

HVAC SPECIFICATIONS

- SEISMIC RESTRAINT REQUIREMENTS: PROVIDE SEISMIC RESTRAINTS AS REQUIRED IN ACCORDANCE WITH THE STATE BUILDING CODE. A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER, LICENSED IN THE APPLICABLE STATE FOR THE PROJECT LOCATION, SHALL PREPARE THE SEISMIC RESTRAINT DESIGN AND CERTIFY THAT THE DESIGN IS IN COMPLIANCE WITH THE STATE BUILDING CODE REQUIREMENTS.
 - PROJECT CLOSEOUT: A CERTIFICATE OF COMPLETION SHALL BE ISSUED BY THE CONTRACTOR INDICATING THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES AND CODES. ALL SUBMITTALS, AS-BUILTS, O&M MANUALS, AND BALANCING REPORTS ARE TO BE PROVIDED, FOR ENGINEER'S REVIEW, PRIOR TO REQUEST FOR COMPLETION CERTIFICATES. IN ADDITION, AND ALSO PRIOR TO REQUEST FOR COMPLETION CERTIFICATES, ALL PUNCH LIST ITEMS MUST BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR MUST VERIFY THAT ALL SEQUENCES OF OPERATIONS AND CONTROLS HAVE BEEN INCORPORATED AND ALL SYSTEMS AND EQUIPMENT ARE WORKING PER THE SPECIFIED SEQUENCES OF OPERATIONS. A BLANK CONTRACTOR'S CERTIFICATE FORM CAN BE FURNISHED BY RDK ENGINEERS UPON REQUEST. FINAL INSPECTION BY THE ENGINEER SHALL BE CONDUCTED AFTER RECEIPT OF THE CERTIFICATE OF COMPLETION. PREMATURE REQUESTS FOR FINAL INSPECTIONS THAT REQUIRE REINSPECTION OF DEFICIENT ITEMS WILL RESULT IN BACK CHARGES OF THE COSTS ASSOCIATED WITH THE REINSPECTION.
- ### PART 2 - PRODUCTS
- DUCTWORK: MATERIAL, CONSTRUCTION, AND INSTALLATION SHALL MEET REQUIREMENTS OF MOST RECENT EDITIONS OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS, EXCEPT FOR MORE STRINGENT REQUIREMENTS SPECIFIED OR SHOWN ON DRAWINGS. UNLESS SPECIFIED OTHERWISE, ALL DUCTWORK SHALL BE BUILT TO 2" PRESSURE CLASS WITH SEAL CLASS B. PROVIDE FLEXIBLE CONNECTION ON ALL DUCTS CONNECTING TO FANS AND ROTATING EQUIPMENT. ALL DUCTS SHALL BE GROUNDED WITH FLEXIBLE CONNECTIONS WITH GROUNDING STRAPS. MAXIMUM LENGTH OF FLEXIBLE RUN-OUT TO DIFFUSERS SHALL BE 6 FEET. FOR LONGER RUN-OUTS, ADD RIGID DUCT. DUCTS SHALL BE CONSTRUCTED OF HOT DIPPED GALVANIZED STEEL UNLESS OTHERWISE NOTED.
 - FIRE DAMPERS: PROVIDE FIRE DAMPERS THROUGHOUT AIR SYSTEMS FOR ALL STANDARDS PENETRATING FIRE RATED WALLS AND AS REQUIRED BY APPLICABLE CODES, STANDARDS, AND AUTHORITIES. PROVIDE ACCESS DOOR FOR EACH FIRE DAMPER OF SUFFICIENT SIZE TO REPAIR INTERNAL LINK. FIRE DAMPERS SHALL BE AS MANUFACTURED BY GREENHECK, RUSKIN, ARROW, MALOR, OR APPROVED EQUAL. DAMPER BLADES SHALL BE OUT OF AIR STREAM (UNLESS IS LARGER THAN AVAILABLE IN CURTAIN TYPE, THEN BLADE TYPE SHALL BE USED, SIMILAR TO FIRE/SMOKE DAMPERS, IF ACTUATORS ARE REQUIRED). MECHANICAL CONTRACTOR SHALL INCLUDE THE WIRING IN HIS COSTS. DAMPERS SHALL BEAR 1-1/2 HOUR MINIMUM UL-RATING FIRE DAMPER LABEL AND BE CONSTRUCTED AND INSTALLED AS REQUIRED BY UL 555.
 - VOLUME DAMPERS: PROVIDE MANUAL ADJUSTABLE VOLUME DAMPERS, WITH EXTENDED MOUNT, INDICATING AND LOCKING QUADRANTS ON EACH TAKE-OFF TO REGISTER, GRILLE, OR DIFFUSER (NOT ALL MAY BE SHOWN ON DRAWINGS).
 - DIFFUSERS, REGISTERS, AND GRILLES: PROVIDE DIFFUSERS, REGISTERS AND GRILLES FOR SUPPLY, RETURN, AND EXHAUST OUTLETS, OF SIZE, TYPE, AND DESIGN SHOWN ON DRAWINGS. DIFFUSER SIZES SHOWN ARE NECK SIZES; REGISTER AND GRILLE SIZE ARE NOMINAL. ACCEPTABLE MANUFACTURERS SHALL BE TITUS, ANNESTADT, KREBEGER, TUTTLE & BAILEY, OR METALAIR. SOUND PRESSURE LEVELS ARE NOT TO EXCEED 100.
 - ACOUSTICAL SOUND LINING: MATERIALS AND INSTALLATION SHALL MEET THE FOLLOWING STANDARDS, AS APPLICABLE: NFPA-90A (UL723), NFPA-255 (SMACNA BLANKET APPLICATIONS STANDARD), SMACNA MECHANICAL FASTENERS STANDARD, ADHESIVE AND SEALANT COUNCIL: ADHESIVES STANDARD FOR DUCT LINER - ASC-A-7001A; ASTM E-84 FIRE HAZARD CLASSIFICATION OF 22 FLAME SPREAD, 80 SMOKE DEVELOPED, AND 50 FUEL CONTRIBUTED. INTERNAL AIRFLOW DAMPERS ARE SPECIFIED FOR DUCTS. CONTRACTOR SHALL INCREASE DUCT SIZE FOR LINING. PROVIDE MINIMUM 1" THICK ACOUSTICAL LINING TO MEET THE ENERGY CODE REQUIREMENTS FOR R5 INSULATION FOR SUPPLY AND RETURN DUCTWORK IN CONCEALED SHAFTS AND PLENUMS (EXCEPT FOR AREAS WHERE THE RETURN AIR IS NOT DUCTED, SUCH AS RETURN AIR SHAFTS) OR UNCONDITIONED SPACES. PROVIDE EITHER 1-1/2" THICK LINING OR 1" THICK LINING WITH MINIMUM 1/2" THICK EXTERIOR INSULATION. SEAL ALL JOINTS WITH MANUFACTURER APPROVED MASTIC. USE SHEET METAL NOSSING AT ALL RAW EDGES. LINING SHALL BE BY CERTAIN-TEED, KNAUF, OWENS CORNING, OR MANVILLE FOR THE FOLLOWING: 1) EXHAUST AIR DUCTWORK, INCLUDING PLENUMS, WITH MINIMUM OF 20 FEET FROM HEAT PUMPS AND FANS.
 - DUCT INSULATION (EXTERNAL): INSULATION SHALL BE CERTAIN-TEED, KNAUF, MANVILLE, OR OWENS CORNING. MATERIALS SHALL MEET REQUIREMENTS OF ADHESIVE AND SEALANT COUNCIL STANDARDS AND SMACNA. DUCTWORK THAT IS LINED DOES NOT NEED EXTERNAL INSULATION EXCEPT FOR SUPPLY AND RETURN DUCTWORK LINED WITH ONLY 1" THICK LINING LOCATED IN CONCEALED SHAFTS AND PLENUMS (EXCEPT FOR AREAS WHERE THE RETURN AIR IS NOT DUCTED, SUCH AS RETURN AIR SHAFTS) OR UNCONDITIONED SPACES. TO MEET THE ENERGY CODE R5 REQUIREMENT, ADD MINIMUM 1/2" THICK EXTERIOR INSULATION TO ALL SUPPLY AND RETURN DUCTS. INSULATE ALL SUPPLY AND FRESH AIR DUCTS AND PLENUMS. INSULATE RETURN DUCTS NOT IN CEILING RETURN AIR PLENUMS. INSULATION SHALL BE AT LEAST 1-1/2" THICK. FOR CONCEALED INSULATION, USE FIBROUS GLASS DUCT WRAP WITH FOIL-KRAFT FLAME RESISTANT VAPOR BARRIER. EXPOSED INSULATION SHALL BE RIGID FIBERGLASS INSULATION WITH ALUMINUM VAPOR BARRIER.
 - WATER PIPING AND VALVES: PIPING 2-1/2" AND LARGER SHALL BE WELDED SCHEDULE 40 STEEL. 2" AND SMALLER SHALL BE SCHEDULE 40S. SCHEDULE 40S SHALL BE TYPE L COPPER. CONDENSATE DRAIN PIPING SHALL BE COPPER. PROVIDE FLEX CONNECTORS (DOUBLE SPHERE) AT ALL CONNECTIONS TO ROTATING EQUIPMENT. PROVIDE ELECTRIC FITTINGS TO CONNECT DIFFERENT PIPING MATERIALS. VALVES SHALL HAVE NAME OF MANUFACTURER AND GUARANTEED WORKING PRESSURE EAST OR STAMPED IN BODIES. VALVES AND STRAINERS SHALL BE AS MANUFACTURED BY CRANE, HAMMOND, JENKINS, STOCKHOLM, MUELLER, APOLLO, WATTS, SARCO, OR MILWAUKEE. BALL VALVES SHALL BE USED ON 2" AND SMALLER WATER PIPING. BUTTERFLY USED ON 2 1/2" AND LARGER WATER PIPING. CALIBRATED COMBINATION BALANCING AND SHUT-OFF VALVES SHALL BE BRINERSON, SEWELL, AND COSETT, FLOWSEET, MEPCO, AUTOFLOW, MAQON, OR TACO. PROVIDE DIFFERENTIAL PRESSURE METER KIT WITH FLOW CALIBRATION CHARTS. PROVIDE DRAIN VALVES AT LOW POINTS IN PIPING AND VALVE VENTS AT HIGH POINTS. STRAINERS SHALL BE "Y" TYPE (ALTERNATIVELY, NON-REDOUCING SECTION DIFFUSERS MAY BE USED ON PUMP DISCHARGE). FULL SIZE OF ENTERING PIPE SIZE AND HAVE A MAXIMUM CLEAN PRESSURE DROP OF ONE INCH. STRAINERS SHALL INCLUDE BLOW DOWN VALVE. CHECK VALVES SHALL BE SWING TYPE EXCEPT SPRING SELENT TYPE SHALL BE USED FOR PUMP DISCHARGE (ALTERNATIVELY, MULTIPURPOSE PUMP DISCHARGE VALVES CAN BE USED). AUTOMATIC FLOW CONTROL VALVES SHALL BE BY GROUNDWELL. AUTOFLOW WHERE INDICATED ON THE DRAWINGS. VALVE SHALL BE FULLY OPENED AND SHALL AUTOMATICALLY LIMIT THE RATE OF FLOW TO REQUIRED ENGINEERED CAPACITY WITHIN 5% ACCURACY OVER ITS CONTROL RANGE. PROVIDE DIFFERENTIAL PRESSURE METER KIT. DEDUCT ALTERNATE: CONTRACTOR TO PROVIDE PRICE FOR SCHEDULE 80 CPVC PIPING, VALVES AND FITTINGS.
 - PIPE INSULATION: INSULATION SHALL BE FIBROUS GLASS INSULATION WITH FACTORY-APPLIED FIRE RETARDANT VAPOR BARRIER JACKET WITH K FACTOR OF AT LEAST 0.24 @ 75 DEG. F MEAN TEMPERATURE BY OWENS CORNING, CERTAIN-TEED, MANVILLE OR KNAUF. ASTM E-84 FIRE HAZARD RATINGS SHALL BE 25 FLAME SPREAD, 50 SMOKE DEVELOPED AND 50 FUEL CONTRIBUTED. CONDENSATE DRAIN LINES SHALL BE INSULATED WITH 3/8" THICK RIGID CLOSED CELL FOAM INSULATION. ARMYSTRONG RIGID ARMAFLEX, MANVILLE, OWENS CORNING, OR HALSTEAD/NOMACO (INSULATED), EXCEPT IN COMPUTER ROOM PLANA.
 - PIPE HANGERS AND SUPPORTS: PROVIDE PIPE STANDS, SUPPORTS, HANGERS, AND OTHER SUPPORTING APPLIANCES AS NECESSARY TO SUPPORT WORK REQUIRED BY CONTRACT. CONSTRUCTION DOCUMENTS. SPACING OF HANGERS SHALL BE INSTRUCTED IN ACCORDANCE WITH APPLICABLE BUILDING AND MECHANICAL CODES. SIZE OF HANGERS SHALL INCLUDE THE PIPE INSULATION

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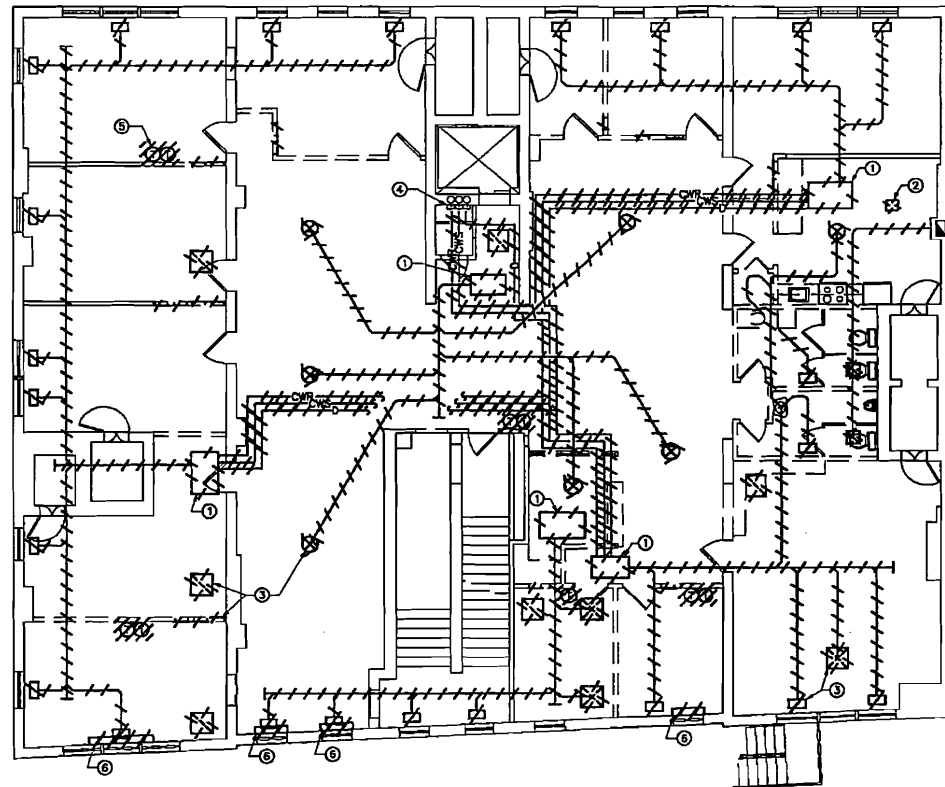
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DEMOLITION NOTES:

- ① EXISTING HEAT PUMP AND ALL ASSOCIATED PIPING, DUCTWORK, SUPPORTS, VALVES, CONTROL WIRING, COND PUMPS AND ANY OTHER APPURTENANCES TO BE REMOVED. OFFER ALL EQUIPMENT TO BE REMOVED TO OWNER OR DISCARD AS DIRECTED.
- ② EXISTING EXHAUST FAN AND ALL ASSOCIATED DUCTWORK, SUPPORTS, CONTROLS AND ANY OTHER APPURTEN TO BE REMOVED. OFFER ALL EQUIPMENT TO BE REMOVED TO OWNER OR DISCARD AS DIRECTED.
- ③ ALL EXISTING DIFFUSERS/GRILLES AND ALL ASSOCIATED DUCTWORK, SUPPORTS AND ANY OTHER APPURTEN TO BE REMOVED. (TYPICAL FOR ALL DIFFUSERS AND GRILLES).
- ④ ALL EXISTING PIPING AND ALL ASSOCIATED SUPPORTS, VALVES AND ANY OTHER APPURTENANCES TO BE REMOVED. CAP PIPING AT RISERS. DRAIN ALL PIPING PRIOR TO REMOVAL. CAP PIPING AT RISERS. CONTRACTOR : CONFIRM EXISTING VALVES AT RISER CLOSE OFF SYSTEM BEFORE ATTEMPTING DRAIN DOWN OF PIPING ON F COMPLETE SYSTEM DRAIN DOWN ONLY NECESSARY IF VALVES DO NOT HOLD.
- ⑤ EXISTING THERMOSTATS AND ALL ASSOCIATED CONTROL WIRING AND ANY OTHER APPURTENANCES TO BE REMOVED. (TYPICAL FOR ALL THERMOSTATS)
- ⑥ EXISTING ELECTRIC BASEBOARD RADIATION AND ALL ASSOCIATED THERMOSTATS, CONTROL WIRING, SUPPORTS AND ANY OTHER APPURTENANCES TO BE REMOVED.

PLUMBING FIXTURE SCHEDULE

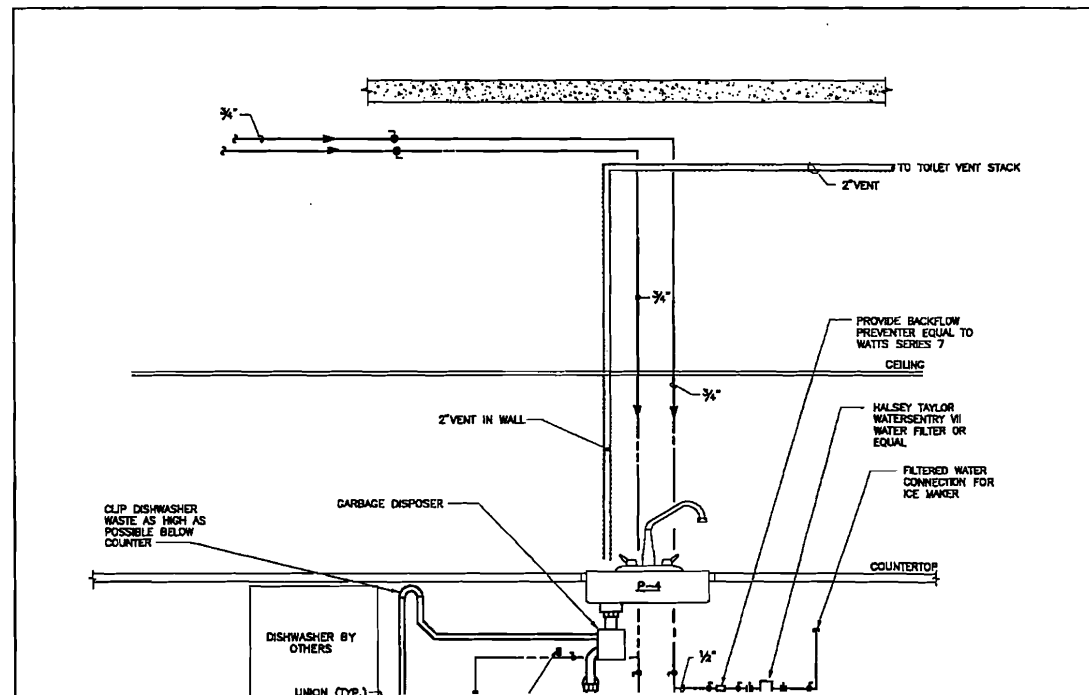
TAG	FIXTURE				FITTING		
	TYPE	MODEL	MANUFACTURER	SIZE	MANUFACTURER	TYPE	SUPPLY
P-1	WATER CLOSET TANK TYPE	K-3481	KOHLER	1.6 GPF	-	-	1/2" CW
P-2	LAVATORY WALL MOUNT 3-HOLE	K-1722	KOHLER	14"x11"x4 1/2"	KOHLER	MODEL K-7307-15	1/2" CW&HW
P-3	SHOWER	4LSS6331A75B-	BEST BATH	63"x60"x30"	HANS GROHE WALLBAR #22712, ALSONS #45280, #49280K, #4800, #490-808-G		-
P-4	KITCHEN SINK 4-HOLE	LRAD-252165R	ELKAY	25"x21 1/4"x6 1/2"	KOHLER	MODEL K-8762 W/HAND SPRAY	1/2" CW&HW

NOTES:

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- 2 X
- 3 X

ELECTRIC WATER HEATER

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		GPH	DEG RISE		KW	V	PH	HZ	
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SYMBOL	TYP
FD-A	FD

