



UNIVERSITY OF  
SOUTH CAROLINA

Columbia, SC

# COKER - 7TH FLOOR PHARMACY RENOVATION

State Project #H27-6101  
GMK Project #12023.01  
April 23, 2013  
ISSUED FOR CONSTRUCTION

Prepared by:



Design/Planning/Construction  
1201 Main Street  
Columbia, South Carolina 29201-3299  
tel. 803-256-0000 fax 803-255-7243

## DRAWING INDEX

### STRUCTURAL

S1 FRAMING PLAN

### ARCHITECTURAL

A0.0 GENERAL NOTES, SYMBOLS, GRAPHIC STANDARDS AND DETAILS  
A0.1 LIFE SAFETY PLAN (NOT INCLUDED)  
A1.7 PARTIAL SIXTH AND SEVENTH FLOOR DEMOLITION PLANS, DEMOLITION NOTES  
A1.8 PARTIAL ROOF AND BASEMENT PLANS (DEMOLITION AND RENOVATION FOR HVAC WORK)  
A2.7 PARTIAL SEVENTH FLOOR DIMENSION AND ANNOTATION PLANS  
A4.0 DETAILS  
A6.0 INTERIOR ELEVATIONS  
A7.7 PARTIAL SEVENTH FLOOR REFLECTED CEILING PLAN, CEILING DETAILS  
A8.0 DOOR TYPES AND DETAILS, WALL TYPES, DOOR AND FINISH SCHEDULES  
A8.0 MILLWORK DETAILS  
A11.7 PARTIAL SEVENTH FLOOR EQUIPMENT PLAN, EQUIPMENT SCHEDULE

### PLUMBING

P0.0 PLUMBING NOTES, ABBREVIATIONS, SCHEDULES AND SYMBOLS  
P1.6 PARTIAL SIXTH FLOOR PLAN PLUMBING DEMOLITION  
P1.7 PARTIAL SEVENTH FLOOR DEMOLITION PLAN  
P2.7 PARTIAL SIXTH AND SEVENTH FLOOR WASTE AND VENT PIPING PLAN  
P3.7 PARTIAL SIXTH AND SEVENTH FLOOR PLUMBING PIPING PLAN

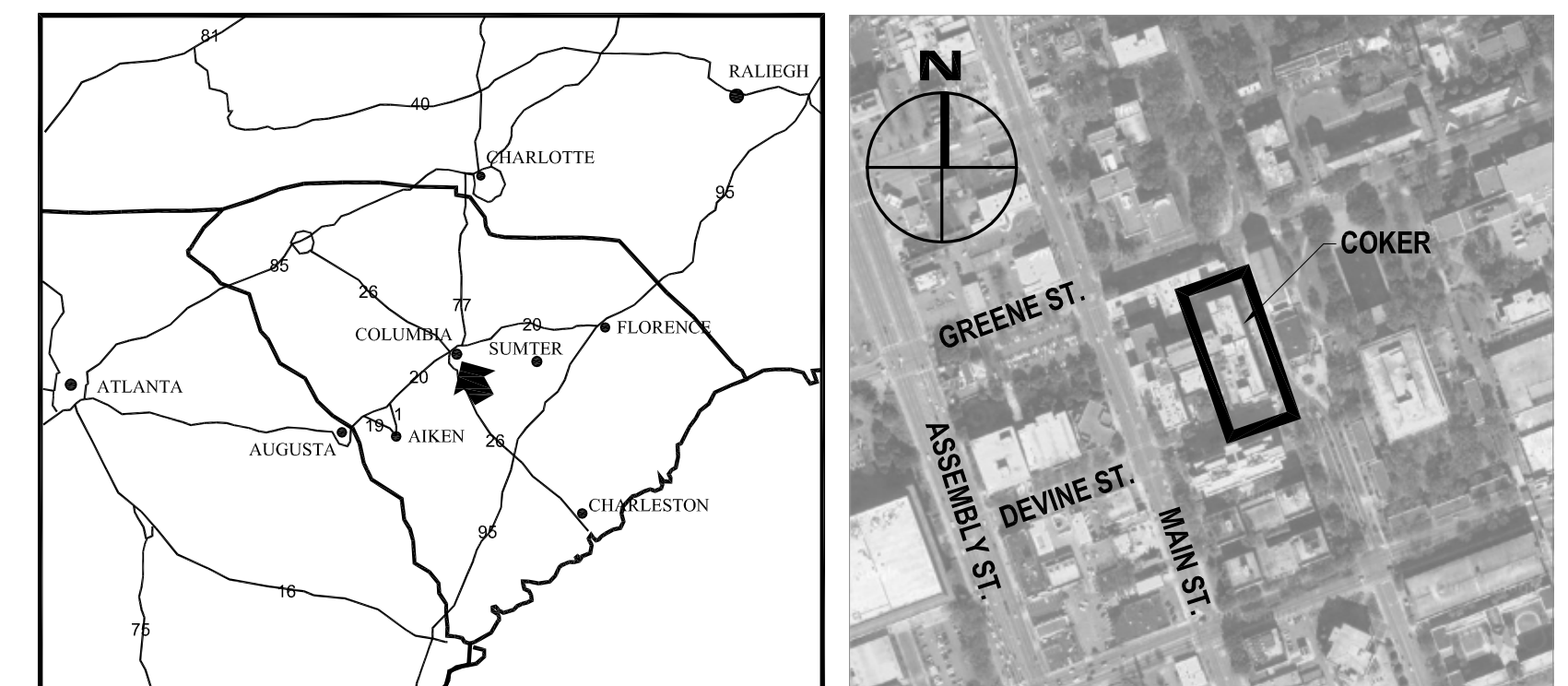
### MECHANICAL

M1.7 PARTIAL SEVENTH FLOOR & ROOF PLAN - HVAC DEMOLITION  
M2.0 PARTIAL BASEMENT FLOOR PLAN - HVAC RENOVATIONS  
M2.1 PARTIAL FIRST, SECOND, THIRD, FOURTH, FIFTH AND SIXTH FLOOR PLAN - HVAC RENOVATIONS  
M2.7 PARTIAL SEVENTH FLOOR PLAN - HVAC DUCTWORK & PIPING  
M2.8 PARTIAL ROOF PLAN - HVAC RENOVATIONS  
M5.1 HVAC CONTROL SCHEMATICS  
M5.2 HVAC CONTROL SCHEMATICS  
M6.1 HVAC DETAILS  
M6.2 HVAC DETAILS  
M6.3 HVAC DETAILS  
M7.1 HVAC LEGENDS, NOTES, ABBREVIATIONS AND SCHEDULES

### ELECTRICAL

E0.0 ELECTRICAL SYMBOLS, SCHEDULES AND DETAILS  
E1.7 SIXTH AND SEVENTH FLOOR DEMOLITION PLANS  
E2.7 SIXTH FLOOR RENOVATION PLAN AND SEVENTH FLOOR LIGHTING AND POWER PLANS  
E3.7 BASEMENT AND ROOF POWER PLANS

### KEY PLAN



SET NO. \_\_\_\_\_

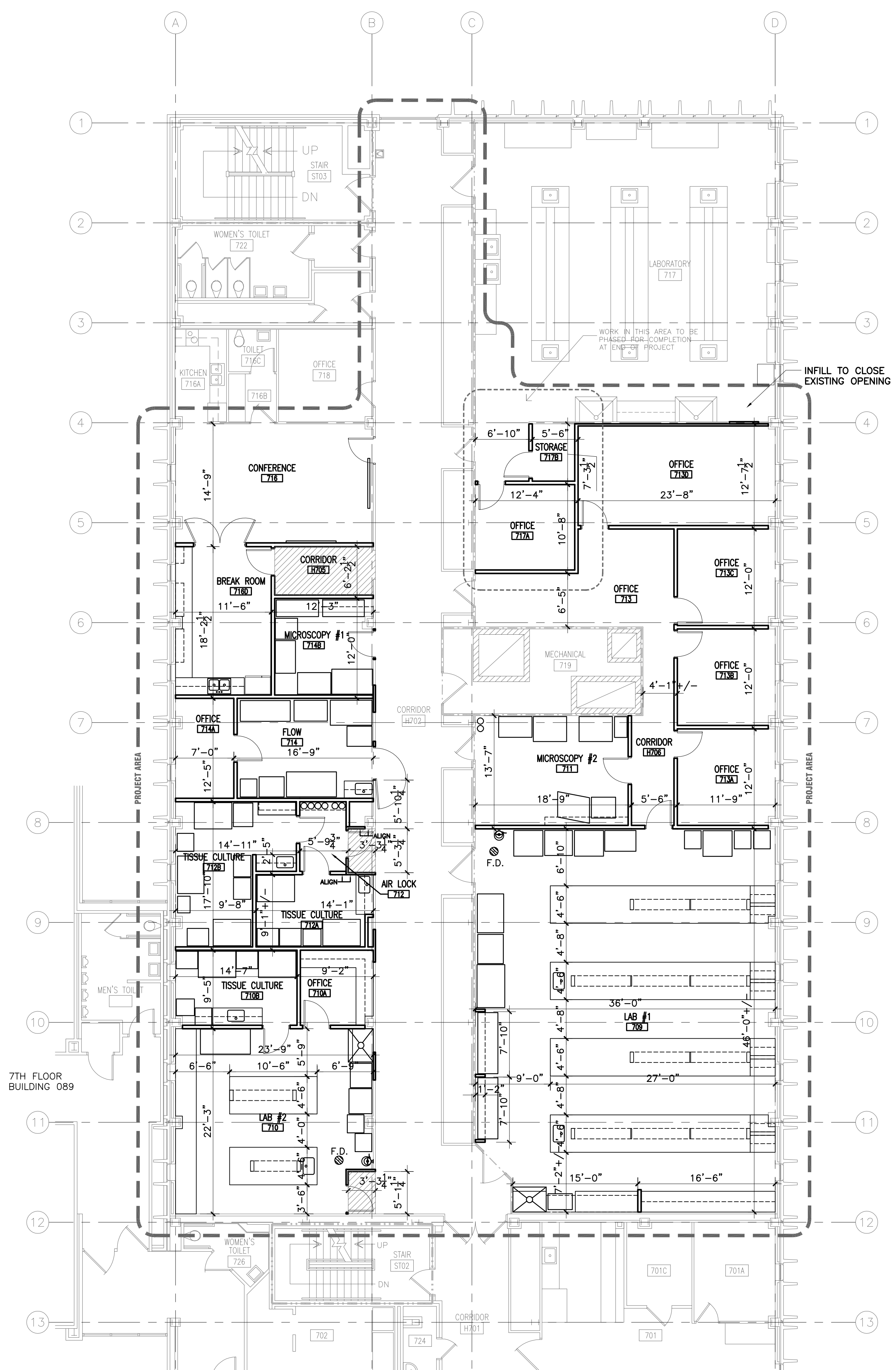
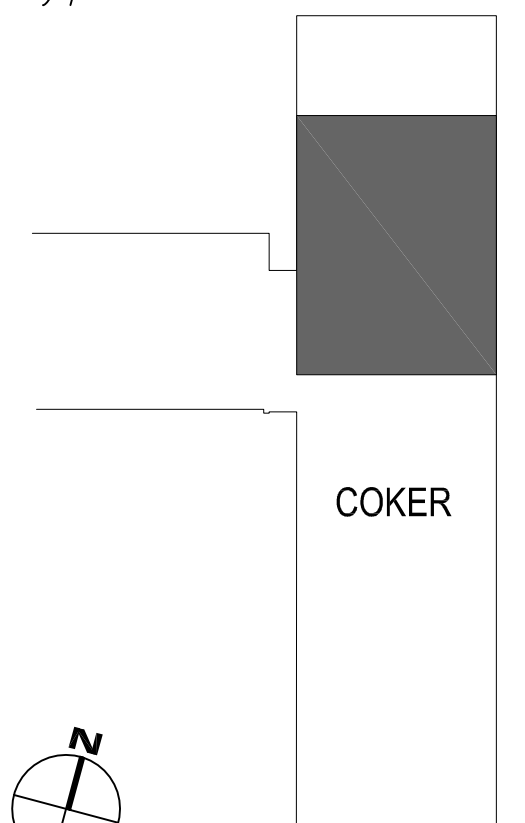




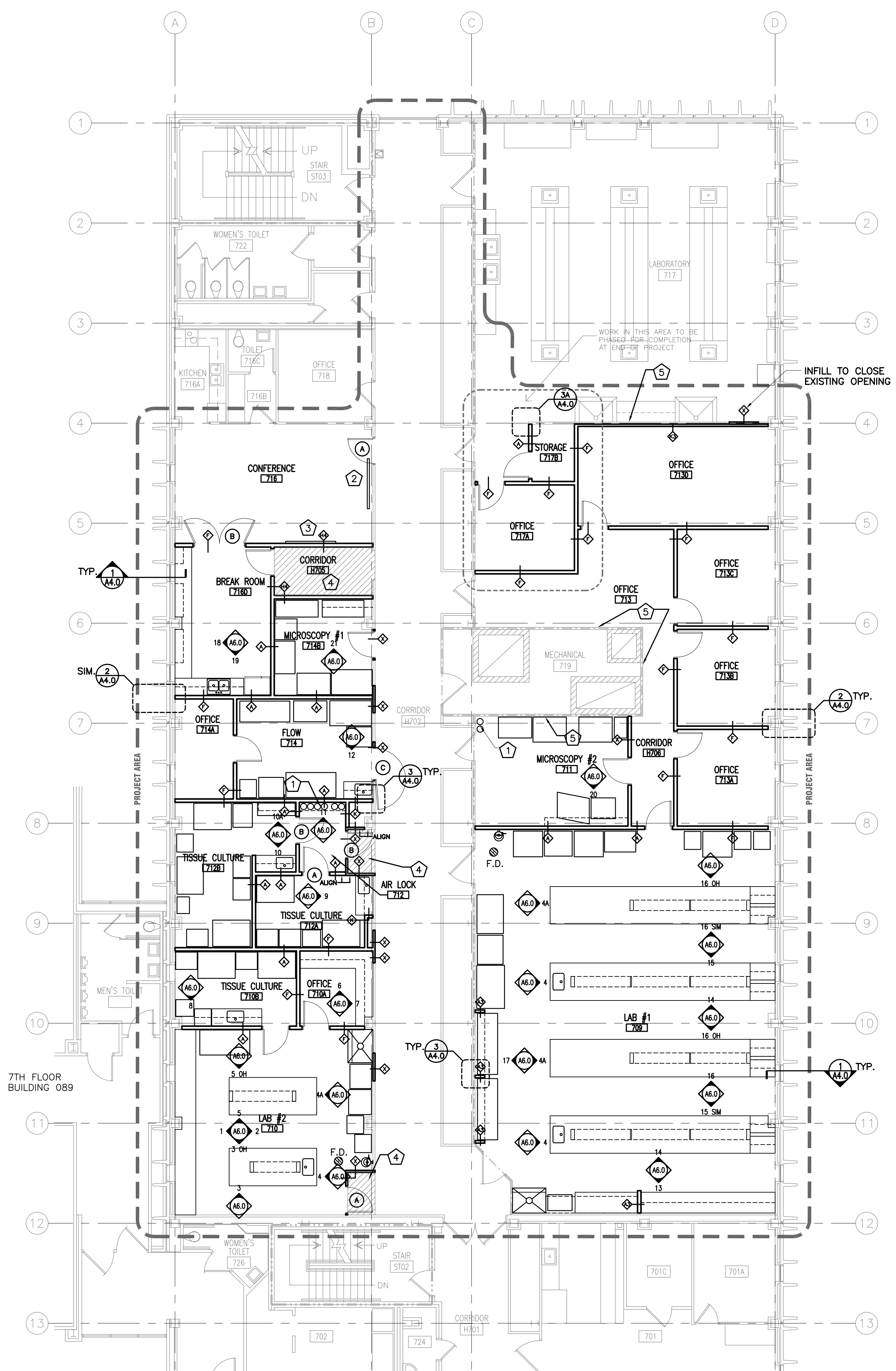




number	item	date



**1 PARTIAL SEVENTH FLOOR DIMENSION PLAN**  
1/8" = 1'-0"



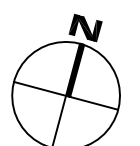
**2 PARTIAL SEVENTH FLOOR ANNOTATION PLAN**  
1/8" = 1'-0"

**GENERAL FLOOR PLAN NOTES**

REFER TO A6.0 FOR ALL SYMBOL DEFINITIONS AND GENERAL NOTES  
REFER TO A8.0 FOR WALL TYPES

**KEYED FLOOR PLAN NOTES**

- ① GAS CYLINDERS AND TANK BRACKETS BY OWNER.
- ② RE-INSTALL CEILING MOUNTED PROJECTION SCREEN.
- ③ RE-INSTALL CHALKBOARD.
- ④ NEW FLOORING FLUSH WITH EXISTING TERRAZZO.









ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PROVIDED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

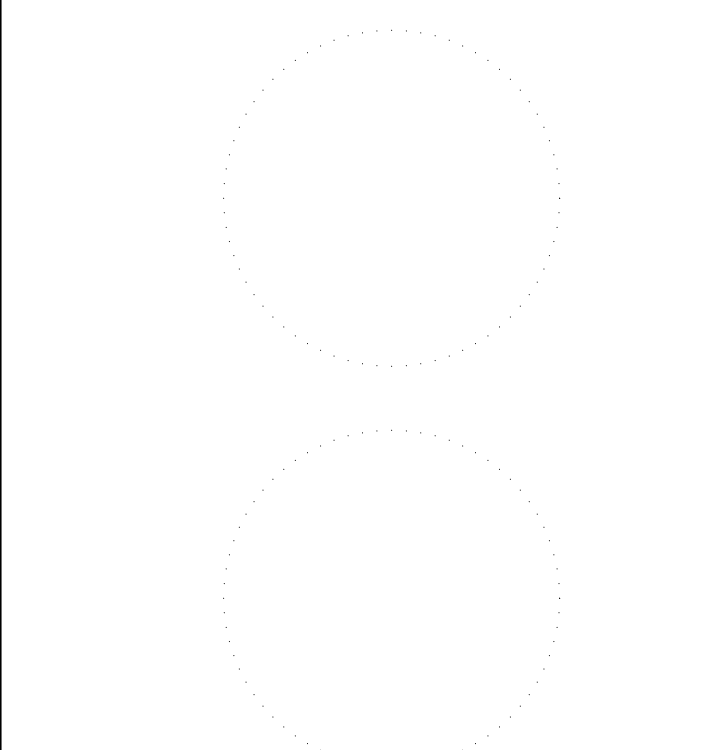
consultants

owner



project name  
**COKER - 7th FLOOR  
PHARMACY RENOVATION**  
State project number  
**H27-6101**  
project number  
**12023.01**

seals/signature

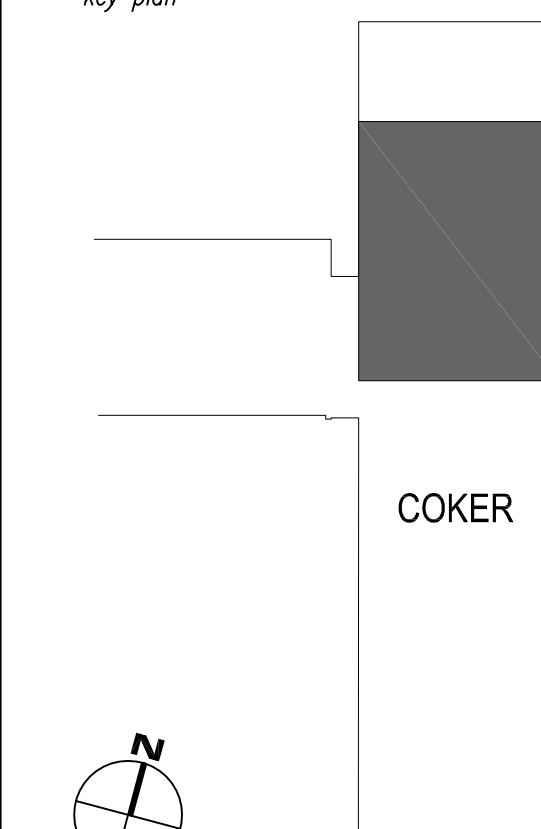


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

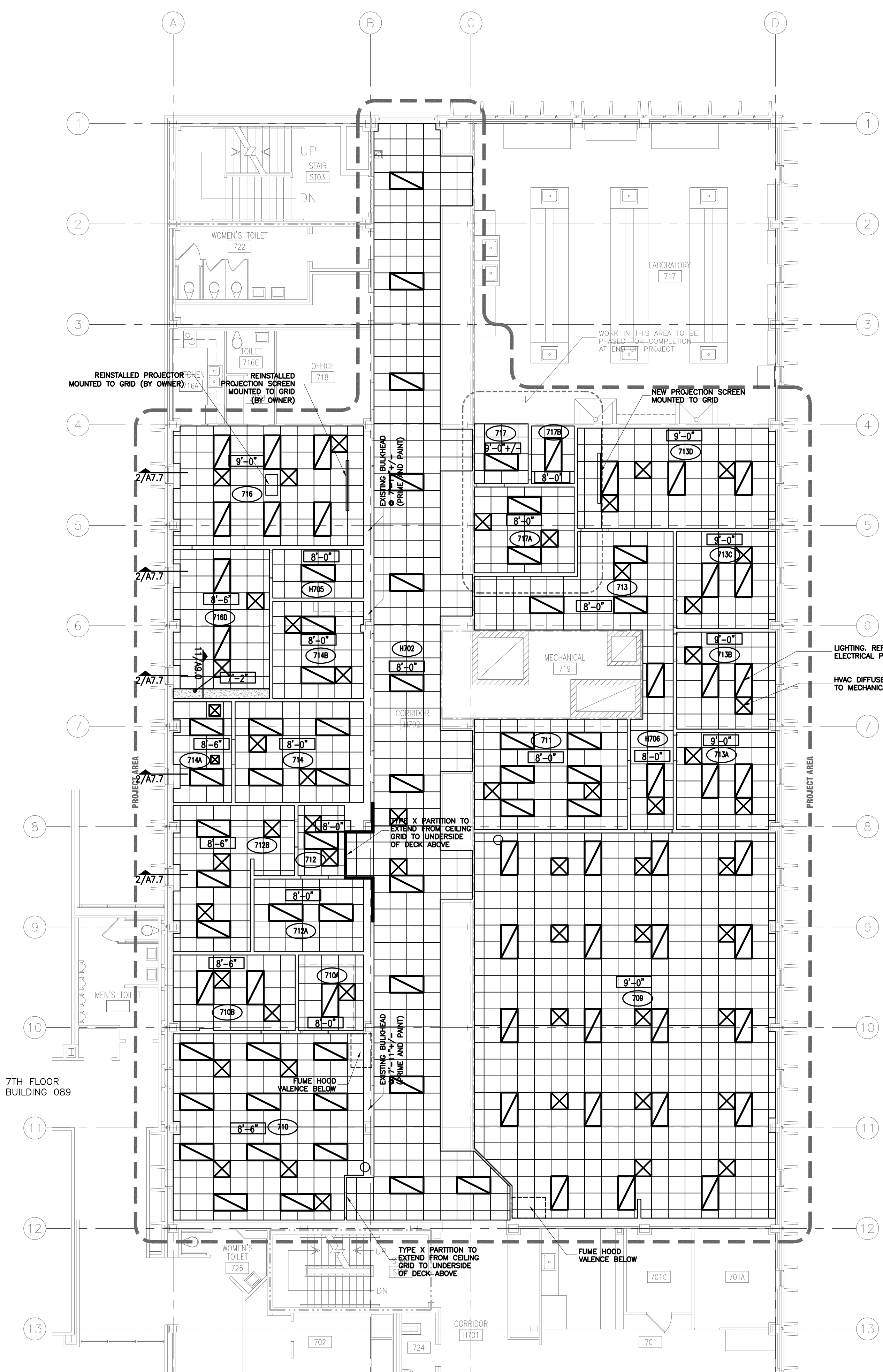


sheet title  
**PARTIAL SEVENTH FLOOR  
REFLECTED CEILING PLAN  
CEILING DETAILS**

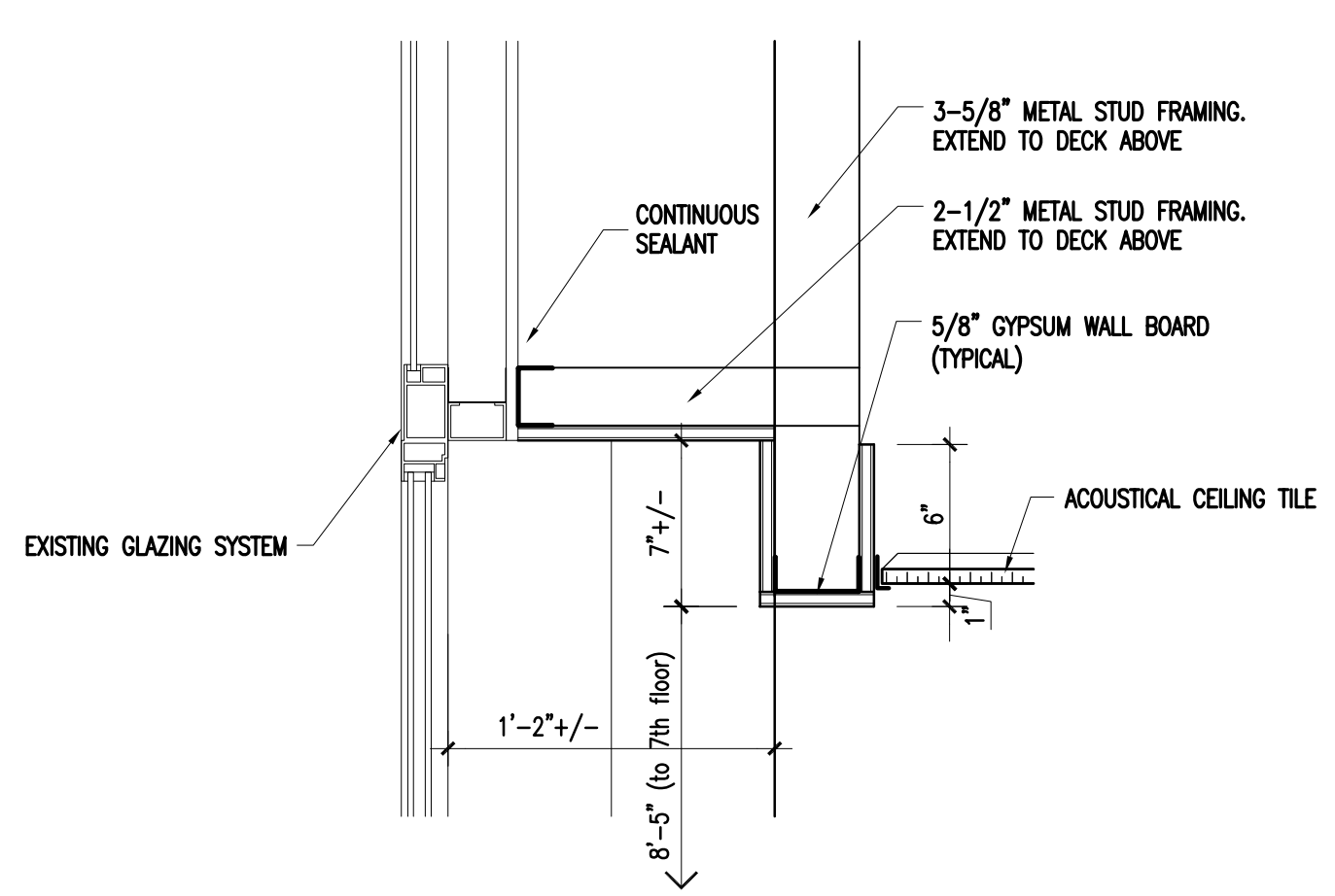
sheet number

**A7.7**

drawn by **RTC**  
checked by **TMM**

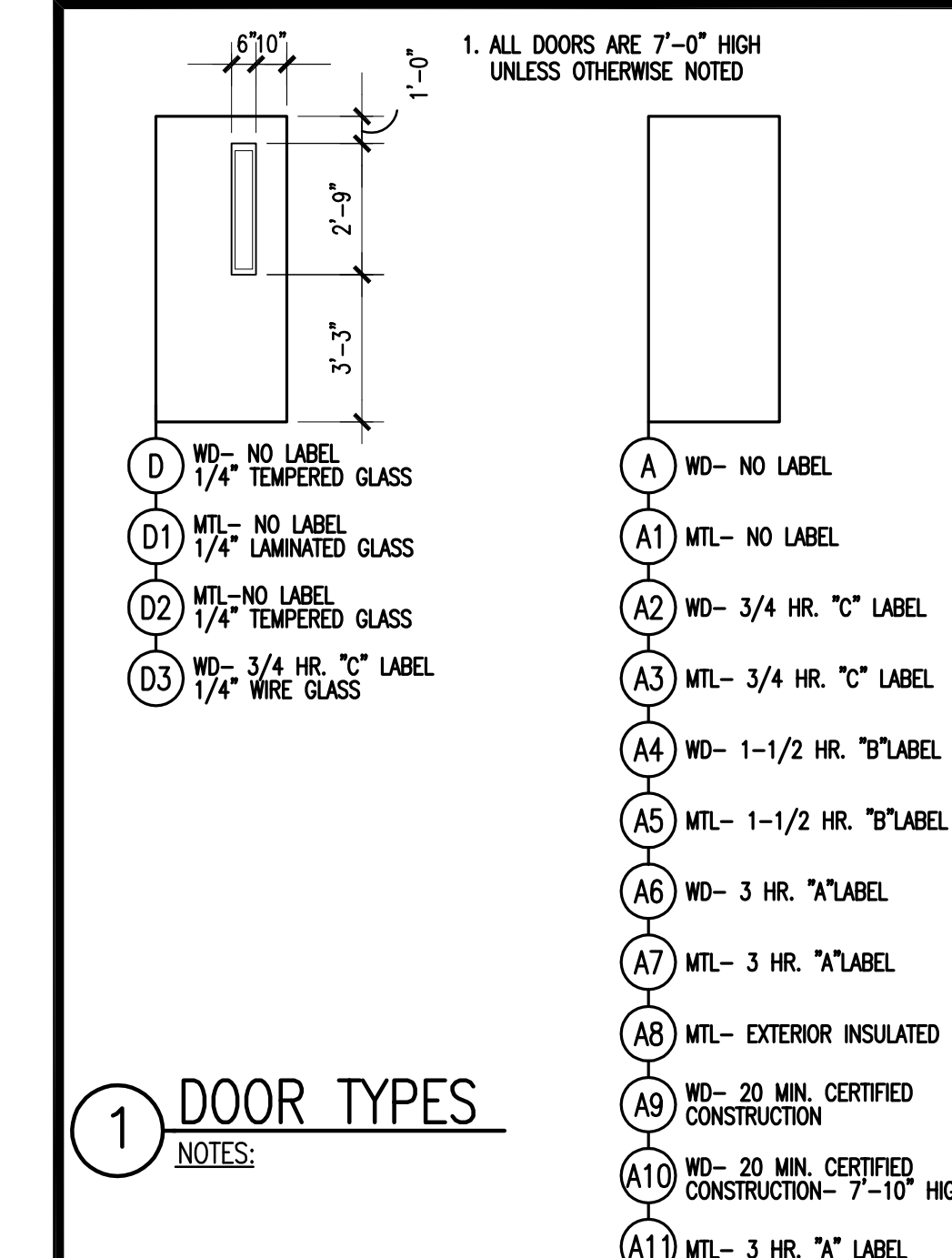
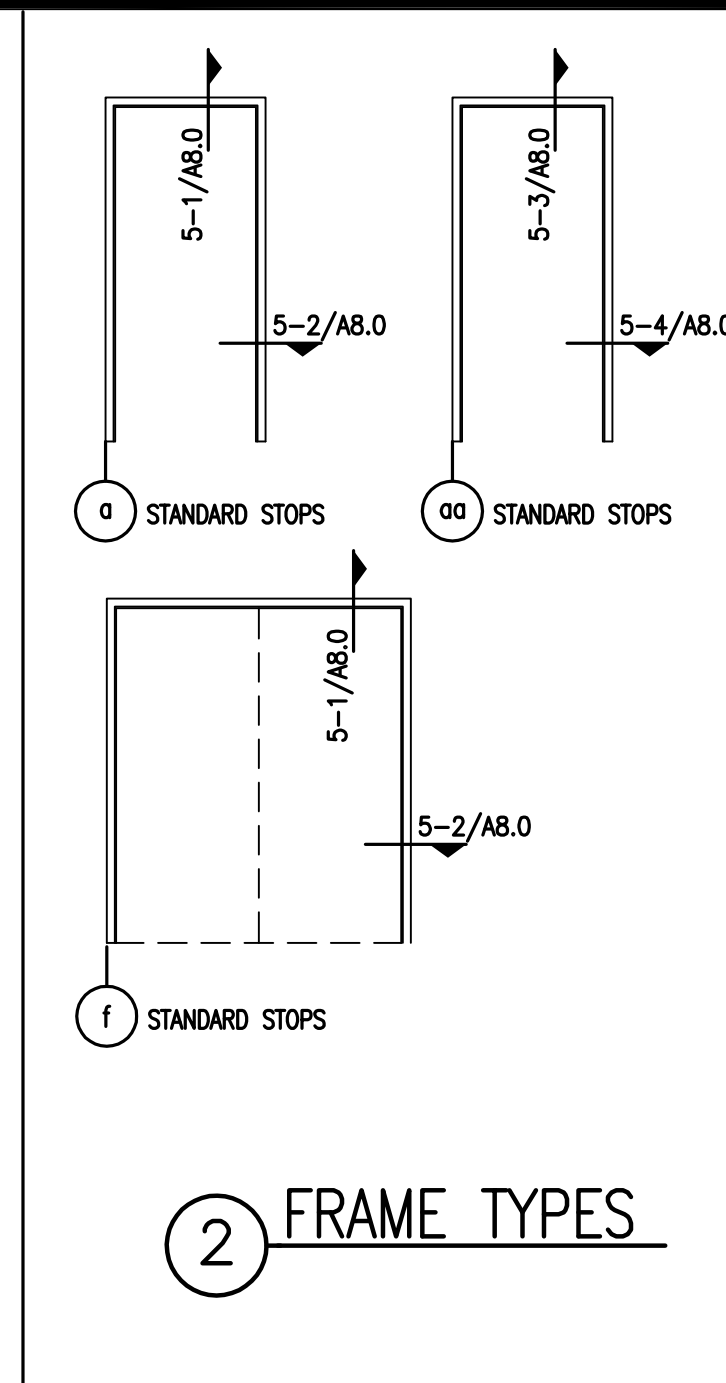
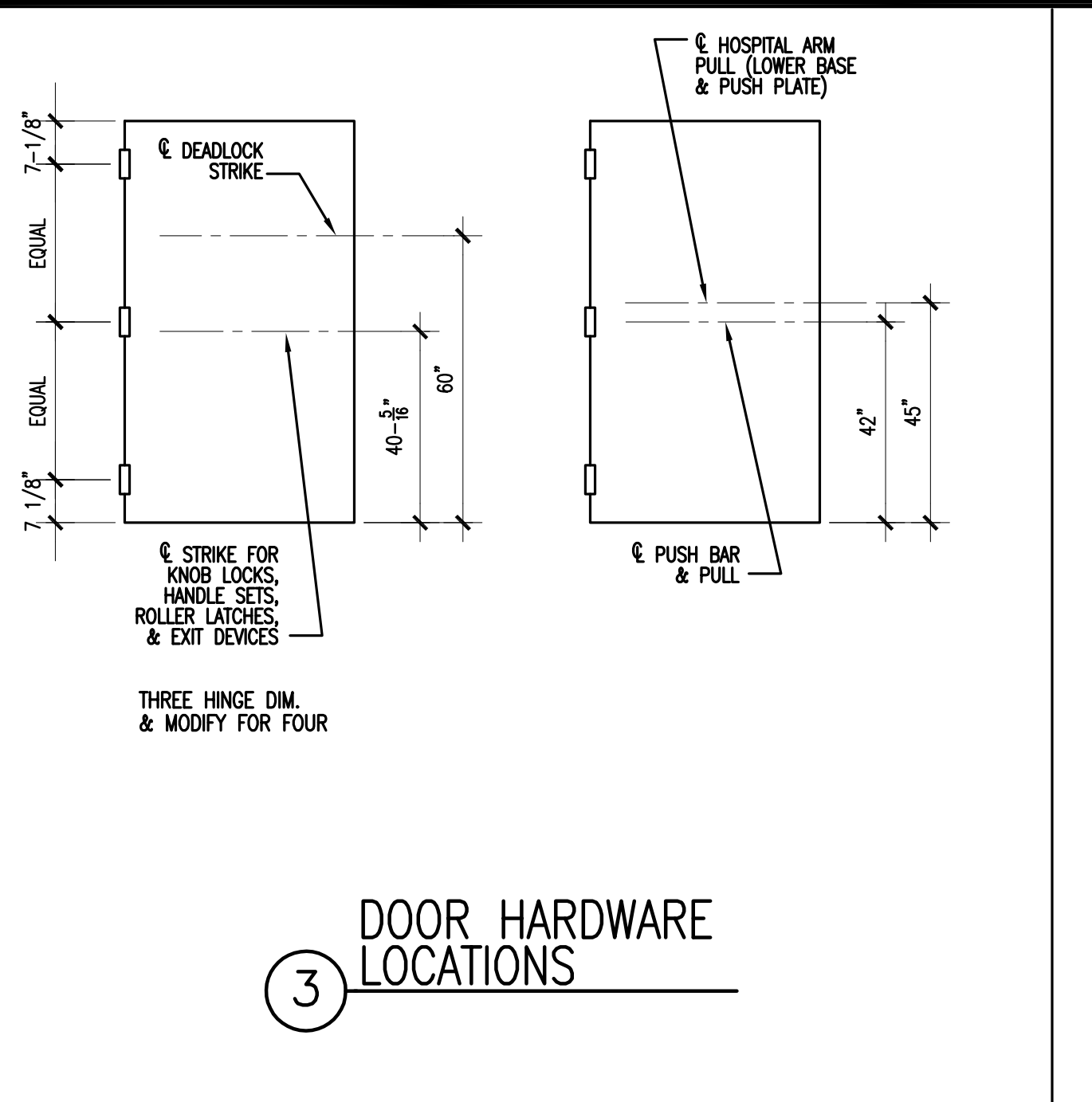
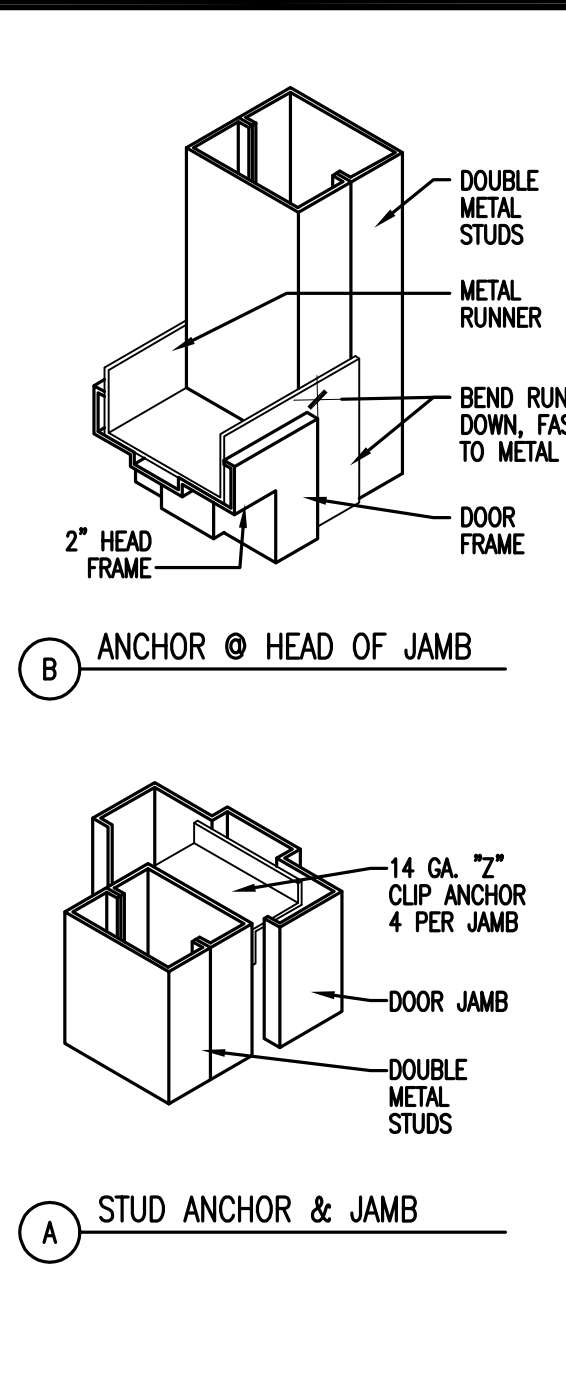
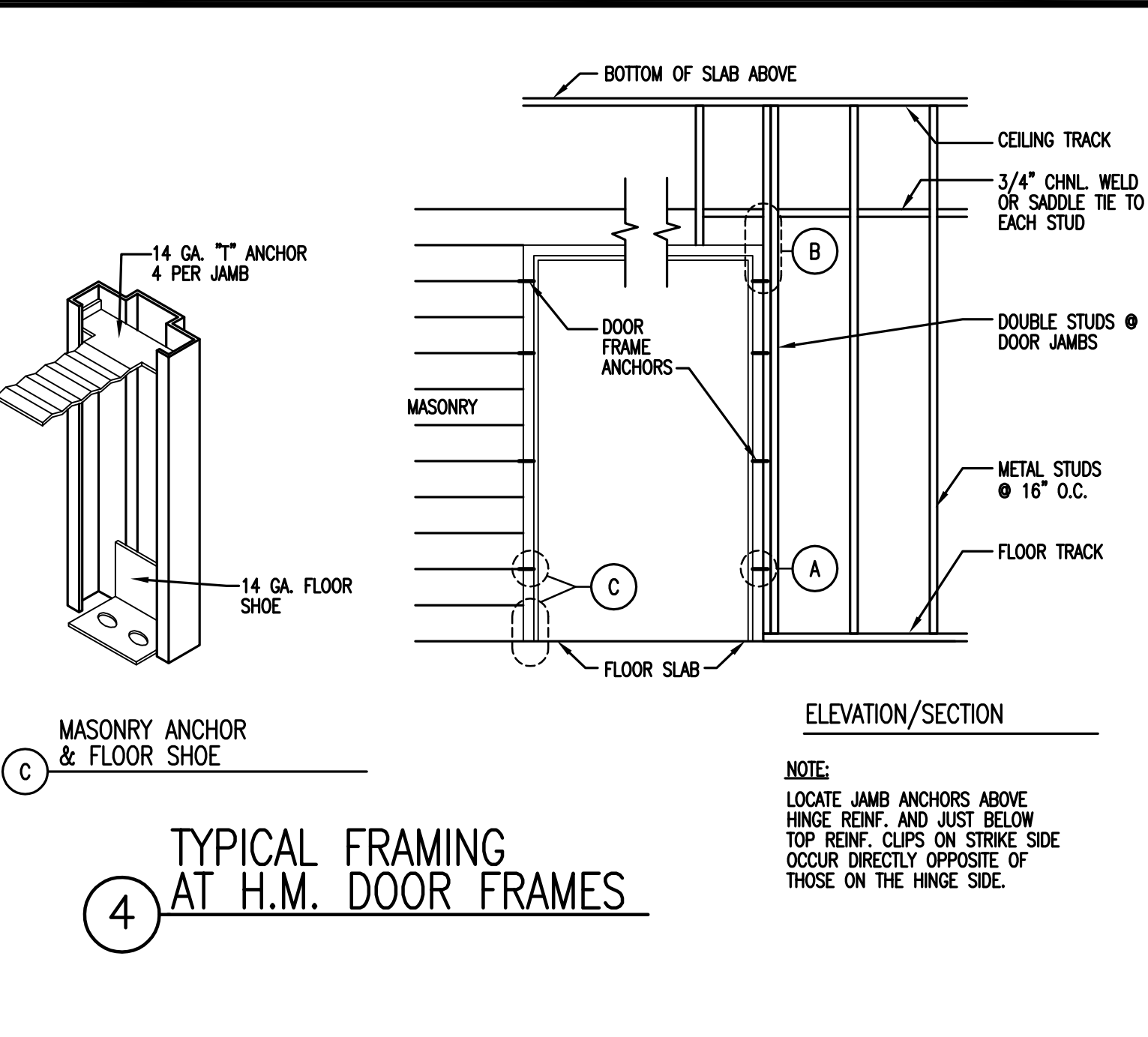
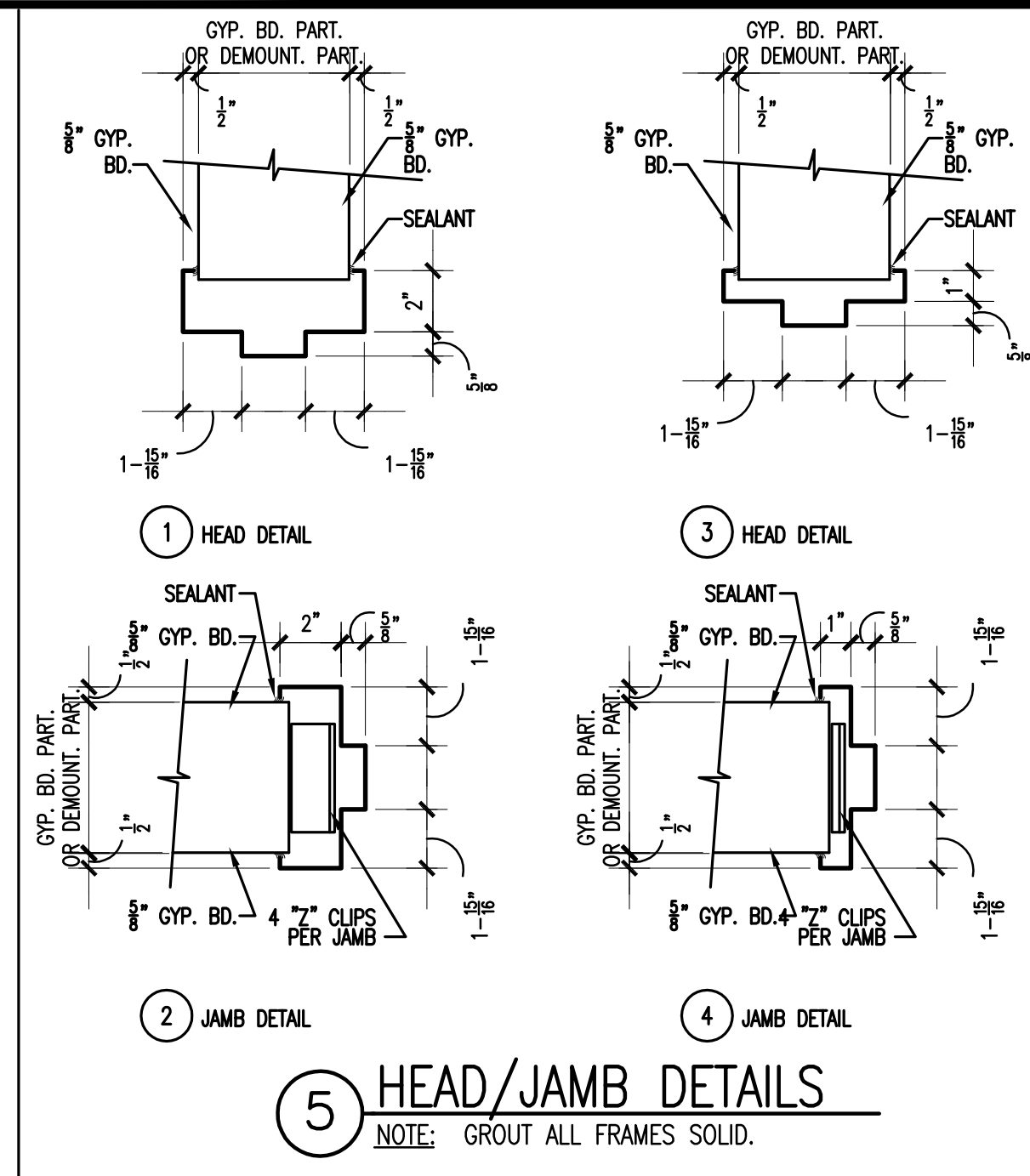
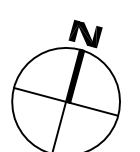
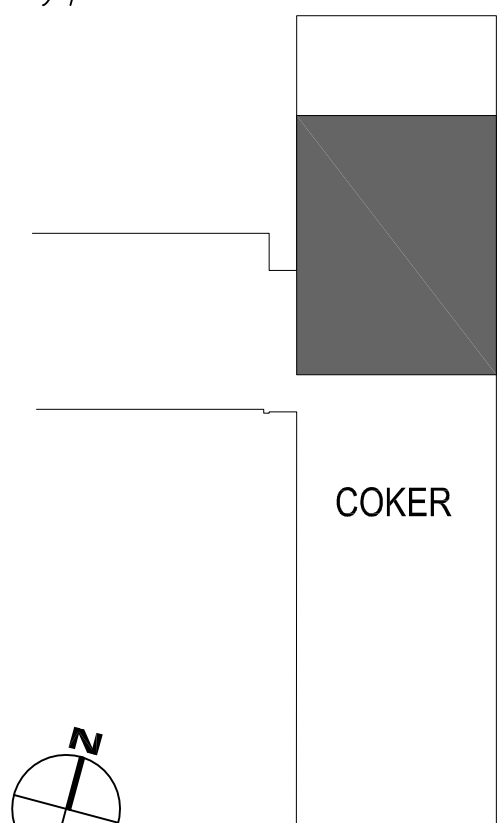


**1 PARTIAL SEVENTH FLOOR REFLECTED CEILING PLAN**  
1/8" = 1'-0"



**2 CEILING POCKET DETAIL**  
1-1/2" = 1'-0"

number	item	date



**DOOR SCHEDULE**

ROOM NAME	DOOR NUMBER	DOOR ELEV	DOOR SIZE	FRAME ELEV	HWDR SET
CORRIDOR	H702-A	D	3'-0" X 7'-0"	aa	EXISTING DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
CORRIDOR	H702-B	D	3'-8" X 7'-0"	aa	EXISTING DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
CORRIDOR	H702-C	D	3'-0" X 7'-0"	aa	EXISTING DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
CORRIDOR	H706	D	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
LAB #2	710	D	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	710A	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
MICROSCOPY #2	711	D	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
AIRLOCK	712-A	D	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
AIRLOCK	712-B	D	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	713A	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	713B	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	713C	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	713D	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
FLOW	714	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
MICROSCOPY #1	714B	D	3'-0" X 7'-0"	aa	EXISTING DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
CONFERENCE	716-A	A	3'-0" X 7'-0"	aa	EXISTING DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
CONFERENCE	716-B	A	PR 3'-0" X 7'-0"	f	NEW DOOR & FRAME, NEW HARDWARE, OFFICE FUNCTION
BREAK ROOM	716D	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
LABORATORY	717	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION
OFFICE	717A	A	3'-0" X 7'-0"	a	EXISTING DOOR, NEW FRAME, NEW HARDWARE, OFFICE FUNCTION

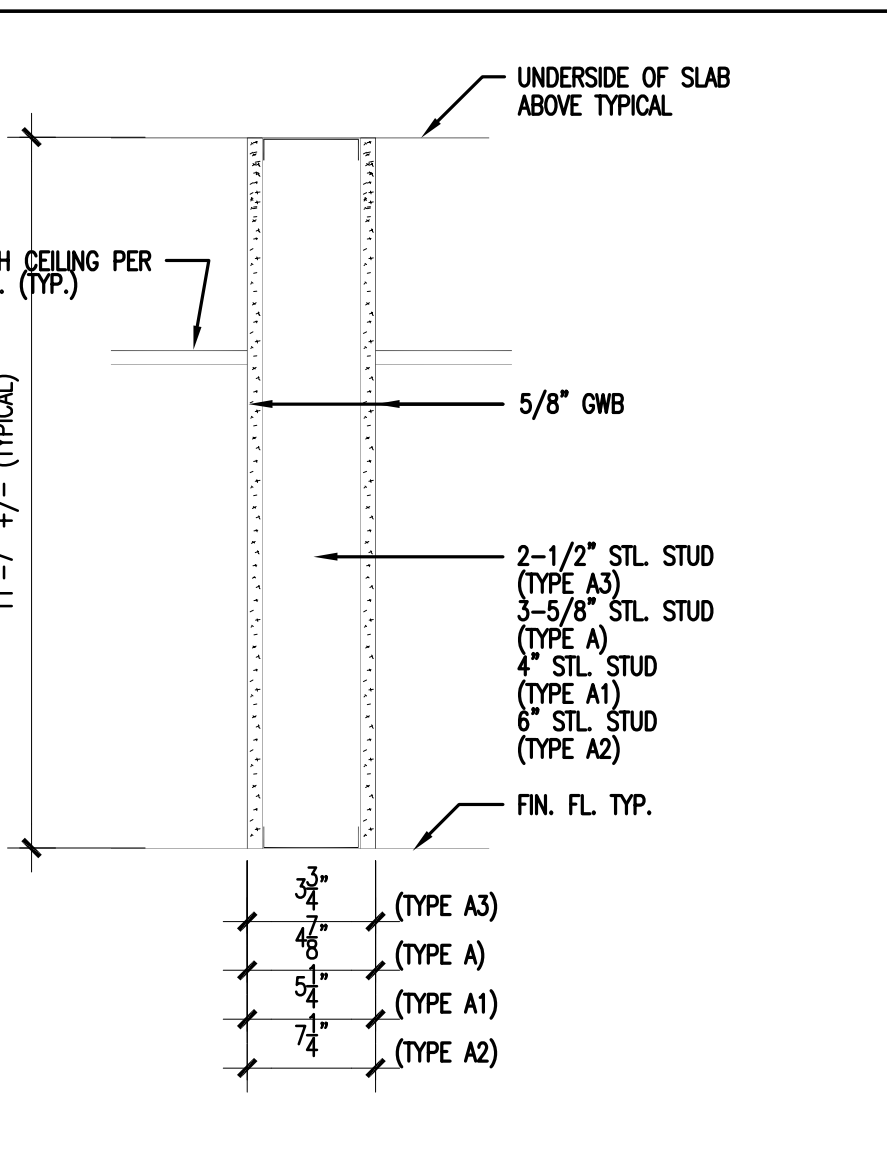
- DOOR HARDWARE:**
- ALL HARDWARE TO BE BHMA OPERATIONAL GRADE 1 - HEAVY DUTY COMMERCIAL.
  - ALL HARDWARE SHALL MEET ANSI 117.1 AND ADA AS APPLICABLE.
  - FINISH SHALL BE SATIN NICKEL.
  - KEYING SHALL BE COORDINATED WITH OWNER AND KEYS PROVIDED.
  - EXACT TRIM, FINISH AND STYLE SHALL MATCH EXISTING 7TH FLOOR HARDWARE.
  - HARDWARE SUPPLIER SHALL COORDINATE WITH DOOR AND FRAME SUPPLIER ON PREPARATION FOR HARDWARE.
  - MINIMUM 7 YEAR WARRANTY.
  - SUBMIT SCHEDULE, SPECS, PRODUCT DATA TO THE ARCHITECT FOR APPROVAL AS PER SECTION 01300.
- STOREROOM FUNCTION:**
- 3 MORTISE HINGES EACH DOOR LEAF FOR DOORS UP TO 3'-6" WIDE. FOR DOORS OVER 3'-6" WIDE PROVIDE 4 HINGES.
  - 1 MORTISE LOCKSET (LEVER), STOREROOM FUNCTION.
  - DOOR SILENCERS IN FRAME.
  - OVERHEAD STOP OR WALL BUMPER AS REQUIRED.
  - CLOSER ON DOORS H702-A, H702-B, H702-C, 714B, 716-A AND 716D.
  - MANUAL FLUSHBOLTS ON INACTIVE LEAF OF DOUBLE DOORS.
- OFFICE FUNCTION:**
- 3 MORTISE HINGES EACH DOOR LEAF FOR DOORS UP TO 3'-6" WIDE. FOR DOORS OVER 3'-6" WIDE PROVIDE 4 HINGES.
  - 1 MORTISE LOCKSET (LEVER), OFFICE FUNCTION.
  - DOOR SILENCERS IN FRAME.
  - OVERHEAD STOP OR WALL BUMPER AS REQUIRED.
  - CLOSER ON DOORS H702-A, H702-B, H702-C, 714B, 716-A AND 716D.
  - MANUAL FLUSHBOLTS ON INACTIVE LEAF OF DOUBLE DOORS.

PREP AND REPAIR ALL REUSED EXISTING DOORS.

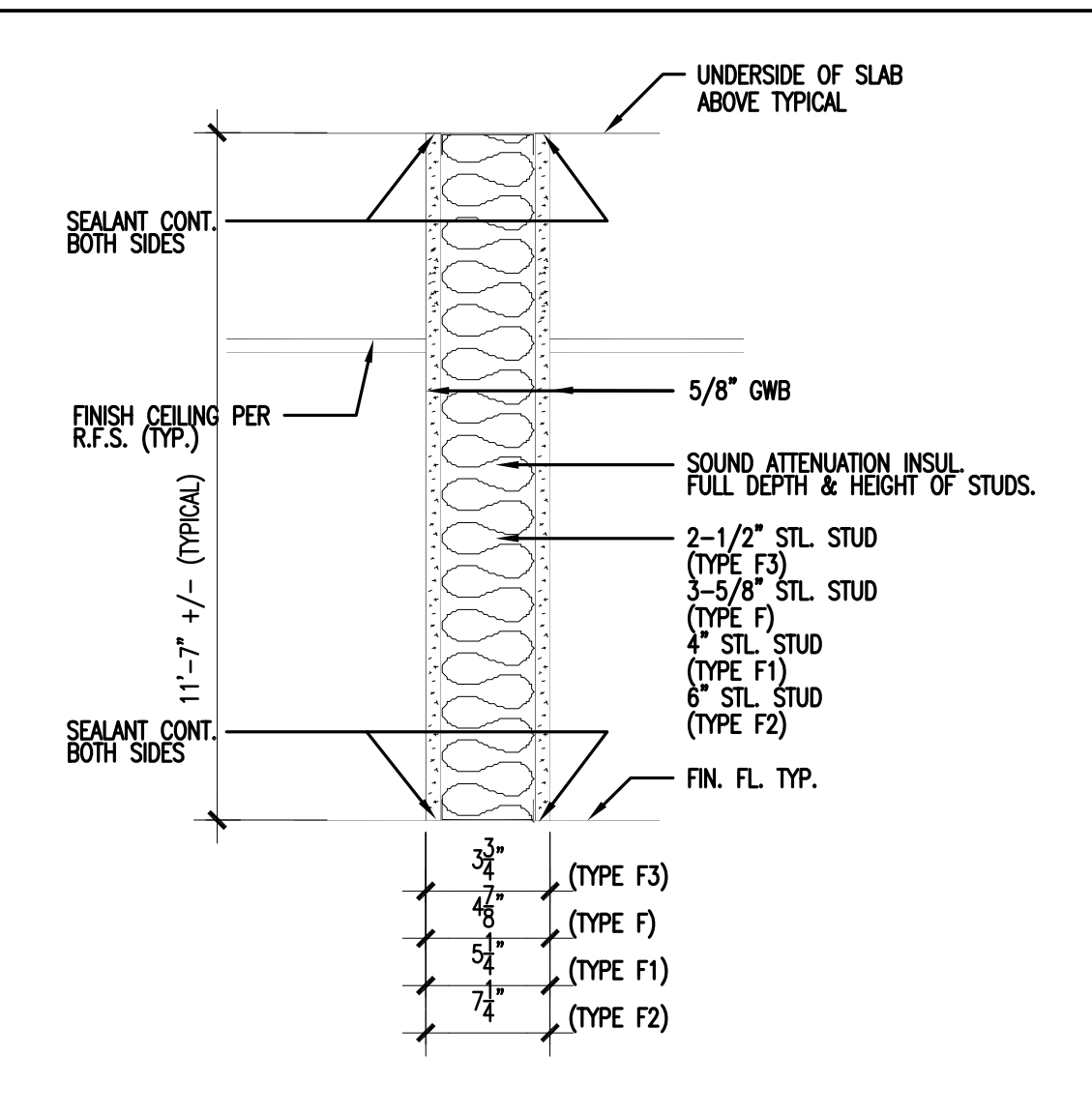
**FINISH SCHEDULE**

ROOM NUMBER	ROOM NAME	SURFACE	FLOOR		BASE	WALLS		CEILING		MILLWORK MATERIALS			REMARKS	
			MATERIAL	ACCENT		MATERIAL/FINISH	ACCENT	MATERIAL	ACCENT	SURF-A	SURF-B	SURF-C		
H702	CORRIDOR		TERR (EX)	VCT	RB	PNT		ACT*						* NEW AC. TILE IN EXISTING GRID
H705	CORRIDOR		PNT		RB	PNT		ACT						
H706	CORRIDOR		VCT		RB	PNT		ACT						
709	LABORATORY #1		PNT		RB	PNT		ACT						
710	LABORATORY #2		PNT		RB	PNT		ACT						
710A	OFFICE		CPT		RB	PNT		ACT						
710B	TISSUE CULTURE		PNT		RB	PNT		ACT						
711	MICROSCOPY #2		PNT		RB	PNT		ACT						
712	AIRLOCK		PNT		RB	PNT		ACT						
712A	TISSUE CULTURE		PNT		RB	PNT		ACT						
712B	TISSUE CULTURE		PNT		RB	PNT		ACT						
713	OFFICE		VCT		RB	PNT		ACT						
713A	OFFICE		CPT		RB	PNT		ACT						
713B	OFFICE		CPT		RB	PNT		ACT						
713C	OFFICE		CPT		RB	PNT		ACT						
713D	OFFICE		CPT		RB	PNT		ACT						
714	FLOW		PNT		RB	PNT		ACT						
714A	OFFICE		CPT		RB	PNT		ACT						
714B	MICROSCOPY #1		PNT		RB	PNT		ACT						
716	CONFERENCE		CPT		RB	PNT		ACT						
716D	BREAK ROOM		VCT		RB	PNT		ACT						
717	LABORATORY		PNT*		RB*	PNT*		ACT*						* ALL NEW FINISHES TO MATCH EXISTING ONLY TOUCH UP AS REQUIRED
717A	OFFICE		CPT		RB	PNT		ACT						
717B	STORAGE		VCT		RB	PNT		ACT						

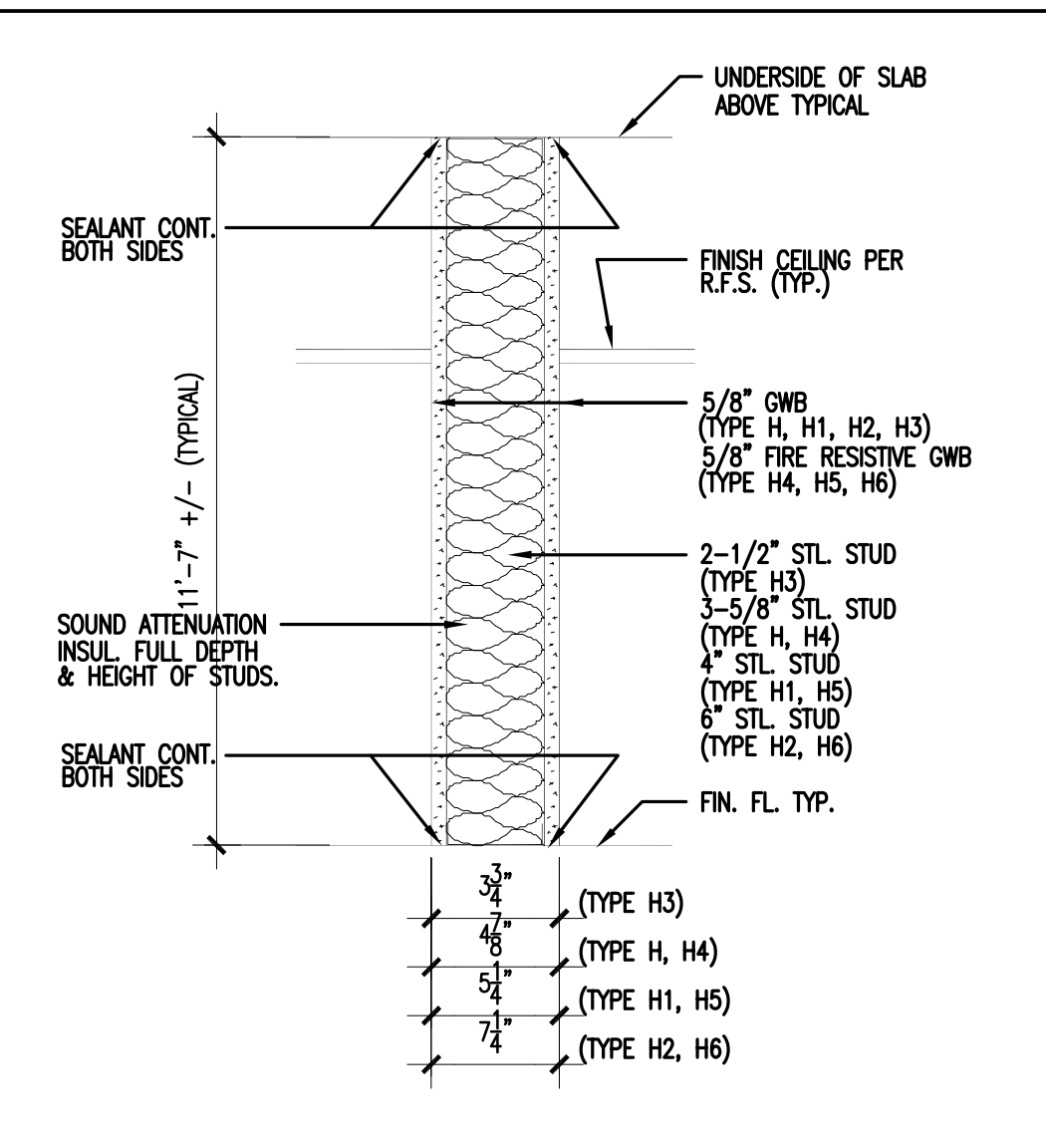
- LEGEND:**
- CPT - CARPET
  - PNT - PAINT
  - RB - RUBBER BASE
  - ACT - ACoustICAL TILE CEILING
  - TERR - TERRAZZO (EXISTING)
  - VCT - VINYL COMPOSITION TILE
  - SY - SHEET VINYL
- GENERAL NOTES:**
- WHERE PAINT IS CALLED FOR, PAINT ALL WALLS OF THE ROOM WHETHER NEW OR EXISTING, EXCEPT FOR LABORATORY 717.
  - RUBBER BASE TO BE APPLIED TO ALL WALLS WHETHER NEW OR EXISTING AND TO BASE OF ALL MILLWORK INDICATED. LABORATORY 717 ONLY REQUIRES BASE TO MATCH EXISTING WHERE WALLS, MILLWORK OR EQUIPMENT IS REMOVED.
  - INSTALL SLAB LEVELER/TOPPING SLAB THROUGHOUT ENTIRE AREA OF THE PROJECT, EXCEPT EXISTING MAIN CORRIDOR H702 WHERE EXISTING FLOORING IS TO REMAIN.



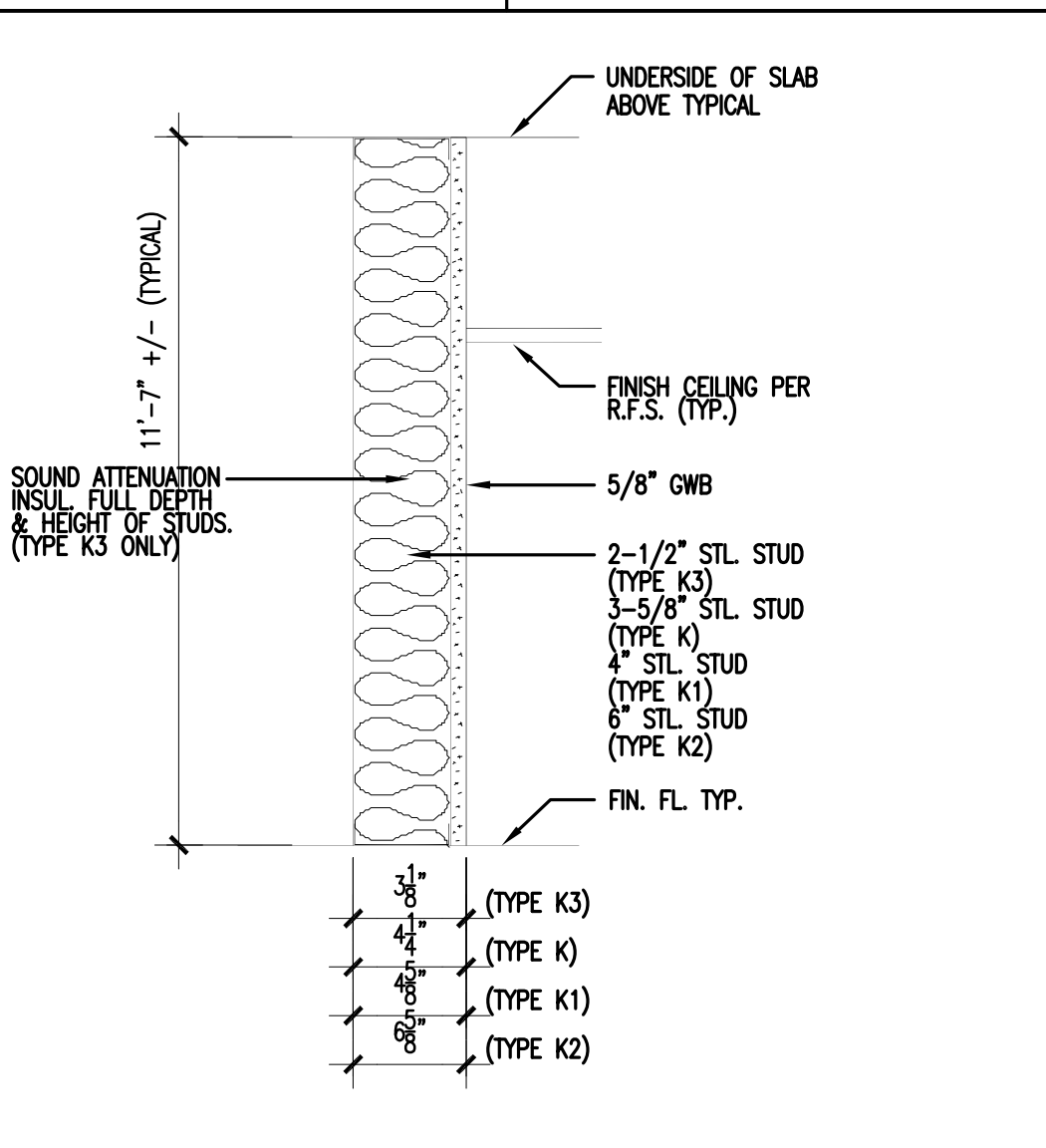
**A** NON-RATED TYPES: A, A1, A2, A3, A4



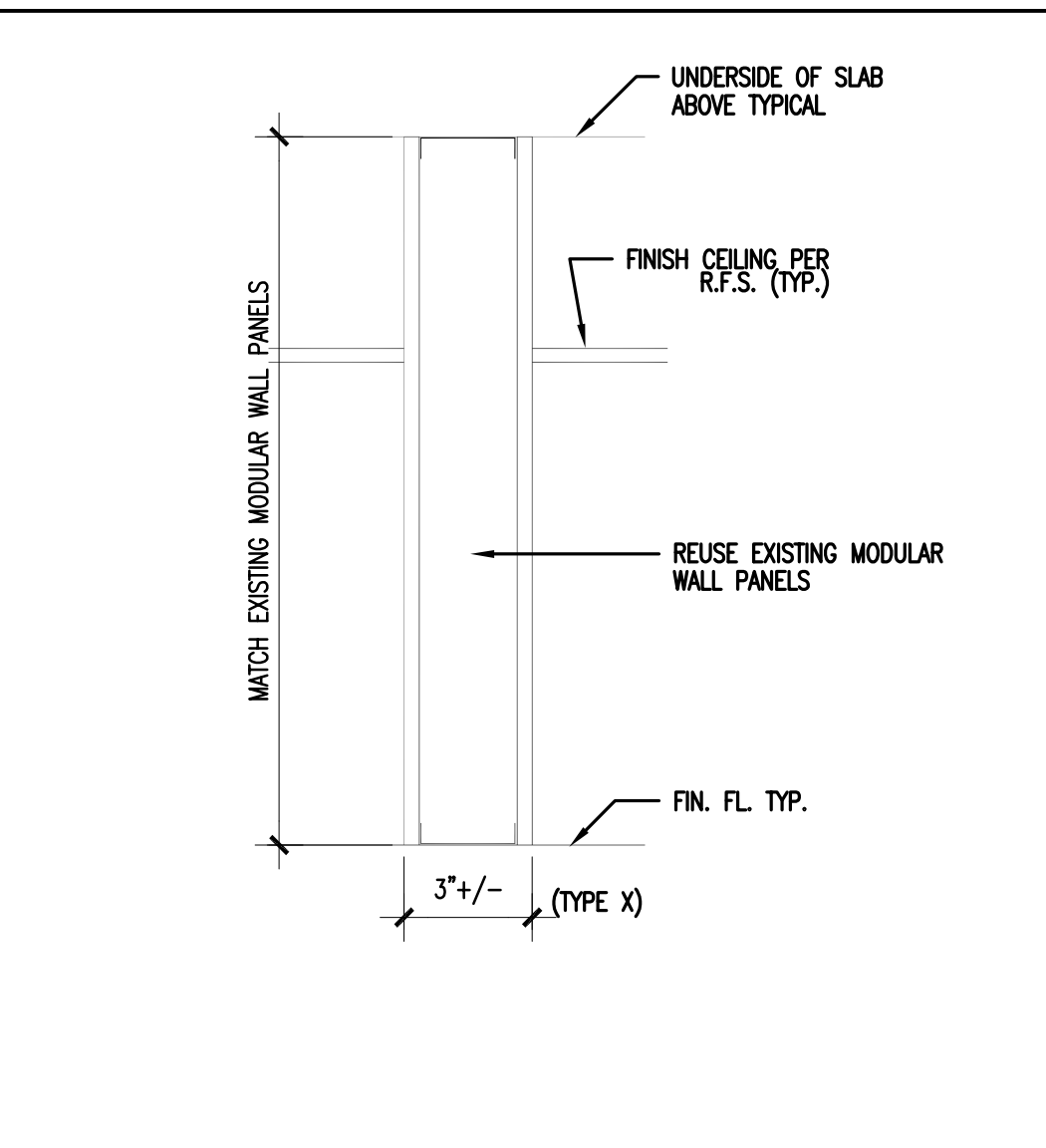
**F** NON-RATED TYPES: F, F1, F2, F3



**H** NON-RATED TYPES: H, H1, H2, H3  
1 HR. U.L. DES. U465 TYPES: H4, H5, H6  
STC 49 GA FILE NO. WF 1076

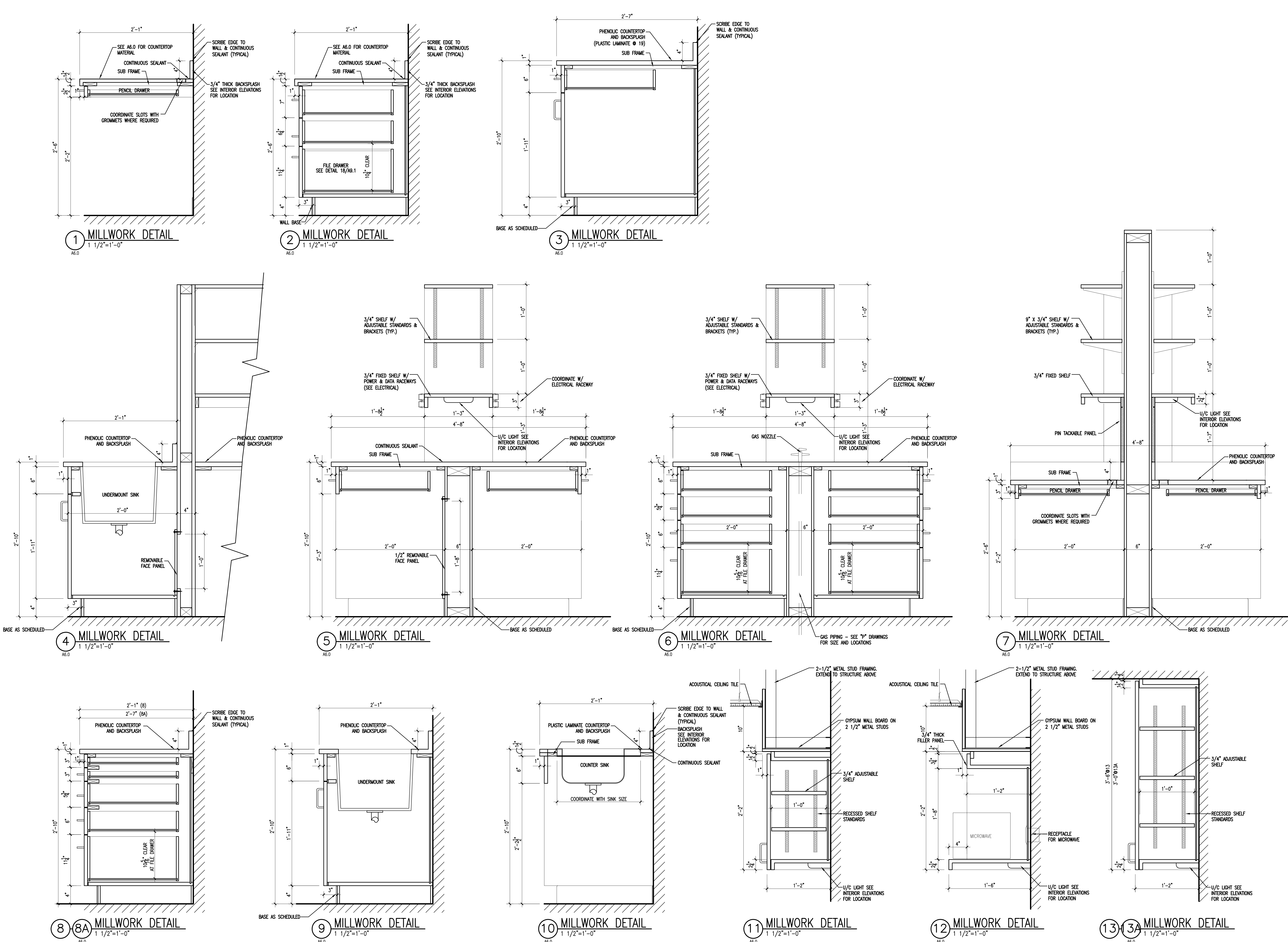
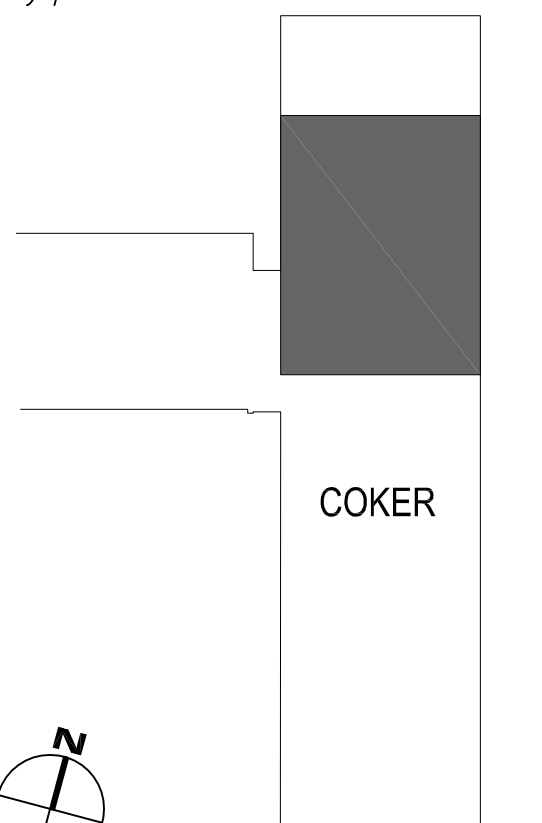


**K** NON-RATED TYPES: K, K1, K2, K3



**X** NON-RATED TYPES: X

number	item	date



WORK IN THIS AREA TO BE PHASED FOR COMPLETION AT END OF PROJECT

Design/Planning/Construction  
1201 Main Street, Suite 2100  
Columbia, S.C. 29201  
tel. 803-256-0000  
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PROVIDED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OF THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner



project name  
**COKER - 7th FLOOR PHARMACY RENOVATION**

State project number  
**H27- 6101**

project number  
**12023.01**

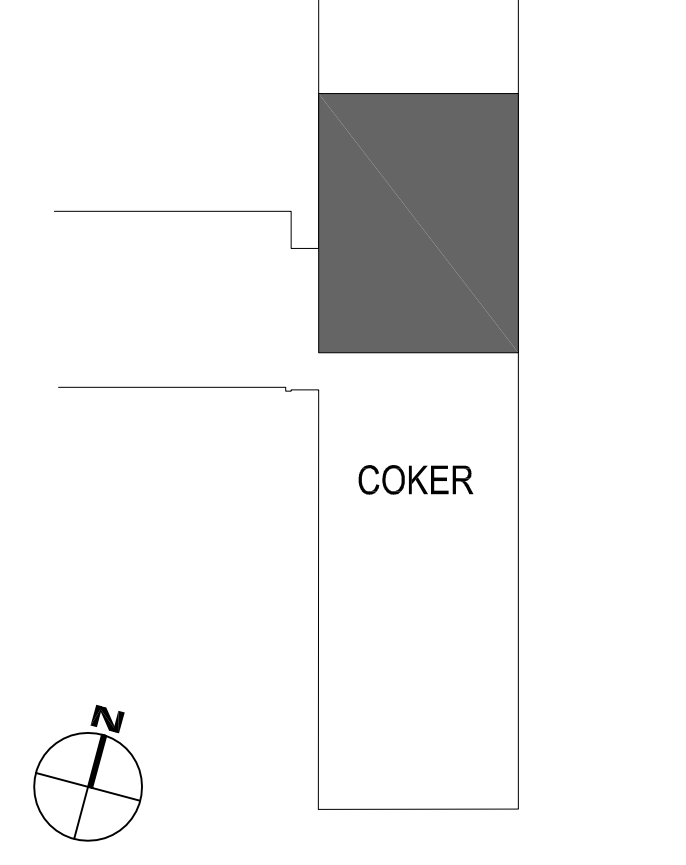
seals/signature

issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan



sheet title  
**PARTIAL SEVENTH FLOOR EQUIPMENT PLAN EQUIPMENT SCHEDULE**

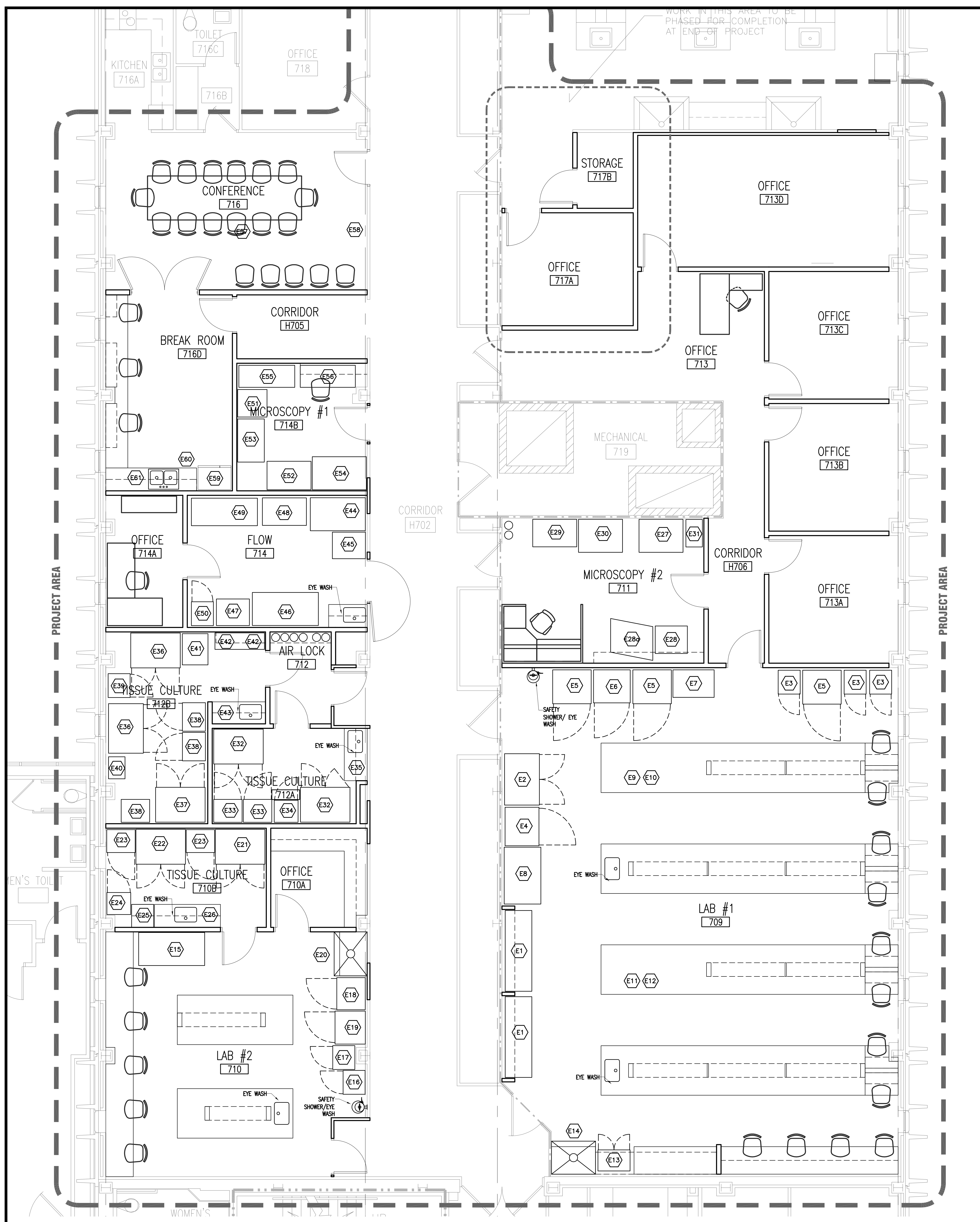
sheet number

**A11.7**






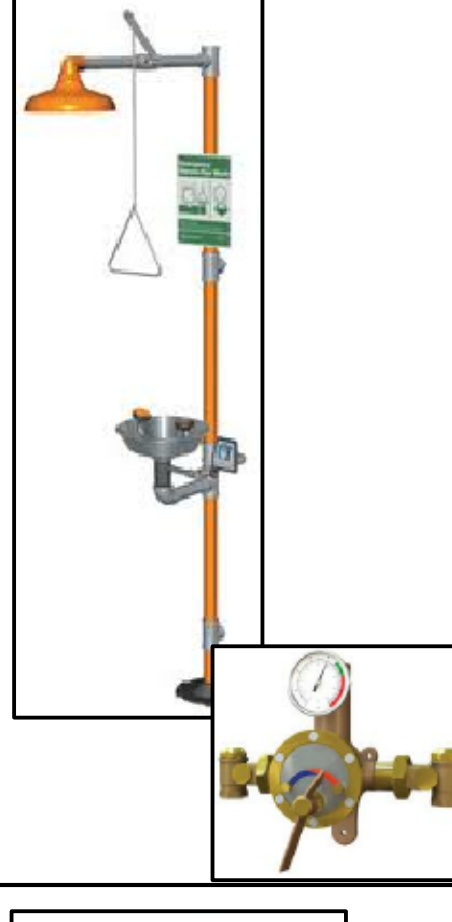


drawn by: **RTC**  
checked by:

MARK	QTY.	DESCRIPTION	NEW/EXIST	MFR./MODEL	LOCATION	SIZE (WxDxH)	SERVICES	NOTES
<b>LABORATORY #1 - ROOM 709</b>								
E1	2	-80C CHEST FREEZER	EX		FLOOR	88x29x	E	115V-16A, EMERGENCY
E2	1	GLASS DOOR 4C	EX		FLOOR	56x38x	E	115V-11A
E3	3	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A
E4	1	-80C UPRIGHT FREEZER	EX	REVCO / ULT2188-8	FLOOR	42x37x	E	208V-10A, EMERGENCY
E5	3	-80C UPRIGHT FREEZER	EX		FLOOR	42x37x	E	115V-16A, EMERGENCY
E6	1	-20C FREEZER	EX		FLOOR	49x39x	E	115V-13.5A, EMERGENCY
E7	1	BACTERIAL SHAKER	EX		FLOOR	45x29x	E	120V-5A
E8	1	PCR HOOD	EX		BENCH	62x40x	E, V	115V-12A
E9	1	qPCR MACHINE	EX		BENCH	-	E	220V-15A, EMERGENCY
E10	1	PLATE READER	EX	FLUOSTAR / OPTIMA	BENCH	-	E	115V-2A
E11	1	MANDROPP	EX		BENCH	-	E	110V-0.5A
E12	1	IMAGING STATION	EX	BIORAD / VERSADOC	BENCH	-	E	110V-2A
E13	1	FLAMMABLE LIQUIDS CABINET	EX		FLOOR	35x23x35	E	
E14	1	FUME HOOD	NEW	HAMILTON CONCEPT / HIGH-LINE	BENCH	48x43x76	E, V, W, A, CO2	120V
<b>LABORATORY #2- ROOM 710</b>								
E15	1	-80C CHEST FREEZER	EX	REVCO	FLOOR	74x29x	E	115V-16A, EMERGENCY
E16	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A
E17	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A, EMERGENCY
E18	1	-20C FREEZER	EX	AMANA	FLOOR	35x31x	E	115V-13.5A, EMERGENCY
E19	1	-80C UPRIGHT FREEZER	EX	FORMA SCI	FLOOR	36x33x	E	115V-16A, EMERGENCY
E20	1	FUME HOOD	NEW	HAMILTON CONCEPT / HIGH-LINE	BENCH	48x43x76	E, V, W, A, CO2	120V
<b>TISSUE CULTURE- ROOM 710B</b>								
E21	1	BIO SAFETY CABINET	EX	LABCONCO	FLOOR	56x38x	E, V	115V-12A, EMERGENCY
E22	1	BIO SAFETY CABINET	EX	THERMO	FLOOR	56x38x	E, V	120V-8A, EMERGENCY
E23	2	INCUBATOR - 2 STACK	EX		FLOOR	25x31x	E, CO2	120V-5.2A, EMERGENCY
E24	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A
E25	1	T.C. MICROSCOPE	EX		BENCH	-	E	
E26	1	CENTRIFUGE	EX		CNTR.	-	E	
<b>MICROSCOPY #2- ROOM 711</b>								
E27	1	AIR TABLE	EX	LEICA / DM IRE2	FLOOR	48x36x	E, V (50 psi min)	110V-12A, 1300 W (max)
E28	1	AIR TABLE	EX	LEICA / ASMDW	FLOOR	35x30x	E, V (50 psi min)	110V-16A, 1800 W (max), EMERGENCY
E28a	1	MOW WORKSTATION	EX		FLOOR	46x46x	E, V	110V, EMERGENCY
E29	1	AIR TABLE	EX	LEICA / AXIOVERT 20	FLOOR	48x30x	E, V (50 psi min)	110V-8A, 1000 W (max)
E30	1	STEEL TABLE	EX		FLOOR	47x36x	E	110V-8A, 1000 W (max)
E31	1	FILE CABINET	EX		FLOOR	-	E	
<b>TISSUE CULTURE- ROOM 712A</b>								
E32	2	BIO SAFETY CABINET	EX		FLOOR	56x40x	E, V	115V-12A, EMERGENCY
E33	2	INCUBATOR - 3 STACK	EX		FLOOR	25x31x	E	115V-3.6A, EMERGENCY
E34	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A, EMERGENCY
E35	1	CENTRIFUGE	EX		CNTR.	-	E	
<b>TISSUE CULTURE- ROOM 712B</b>								
E36	2	BIO SAFETY CABINET	EX		FLOOR	56x38x	E, V	115V-12A, EMERGENCY
E37	1	BIO SAFETY CABINET	EX		FLOOR	56x38x	E, V	115V-17.8A, EMERGENCY
E38	3	INCUBATOR - 2 STACK	EX		FLOOR	25x31x	E, CO2	115V-3.6A, EMERGENCY
E39	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A, EMERGENCY
E40	1	CELL COUNTER	EX		BENCH	24x18x	E	120V-1 A
E41	1	CENTRIFUGE	EX	AVANTI / J-30XP	FLOOR	28x34x	E	240V-24A
E42	2	T.C. MICROSCOPE	EX		BENCH	-	E	
E43	1	CENTRIFUGE	EX		CNTR.	-	E	
<b>FLOW-ROOM 714</b>								
E44	1	FC500 (ON TABLE)	EX		FLOOR	60x36x	E	115V-20A
E45	1	COMPUTER FOR FC500	EX		FLOOR	36x30x	E	115V
E46	1	LSR II (ON TABLE)	EX		FLOOR	60x36x	E	120V-15A
E47	1	COMPUTER FOR LSR II	EX		FLOOR	36x30x	E	120V
E48	1	ARIA (ON TABLE)	EX		FLOOR	48x30x	E	115V, 1500 W (max)
E49	1	COMPUTER FOR ARIA	EX		FLOOR	36x30x	E	115V
E50	1	REFRIGERATOR/FREEZER	EX		FLOOR	24x26x	E	115V-1.1A, EMERGENCY
<b>MICROSCOPY #1- ROOM 714A</b>								
E51	1	MICROSCOPE (ON AIR TABLE)	EX	OLYMPUS / IX81	FLOOR	32x30x	E, V (50 psi min)	110V-16A
E52	1	CONFOCAL MICROSCOPE (ON AIR TABLE)	EX	ZEISS / LSM700	FLOOR	48x31x	E, V (50 psi min)	110V-16A, EMERGENCY
E53	1	CONFOCAL WORKSTATION	EX		FLOOR	47x29x	E	110V, EMERGENCY
E54	1	MICROSCOPE (ON AIR TABLE)	EX	LEICA / DM IRE2	FLOOR	50x24x	E, V (50 psi min)	110V-8A, 1000 W (max)
E55	1	TABLE	EX		FLOOR	61x24x	E	
E56	1	DESK	EX		FLOOR	60x24x	E	
<b>CONFERENCE- ROOM 716</b>								
E57	1	PROJECTOR	EX	OLYMPUS / IX81	CEILING	-	E, DATA	
E58	1	PROJECTION SCREEN	EX	ZEISS / LSM700	WALL	-	E, ??	
<b>BREAK ROOM 716D</b>								
E59	1	DOUBLE DOOR REFRIGERATOR	NEW		FLOOR	-	E, W	120V
E60	1	MICROWAVE	NEW		CABT.	-	E	120V
E61	1	COFFEE MAKER	NEW		CNTR.	-	E	120V

**LEGEND**  
A COMPRESSED AIR  
CO2 CARBON DIOXIDE  
D DATA CONNECTION  
E ELECTRIC POWER  
V VACUUM  
W WATER (HOT & COLD)



## PLUMBING FIXTURE SCHEDULE

<b>SK-1: LABORATORY SINK UNDERMOUNT CHEMICAL RESISTANT FAUCET (ADA)</b> 1. TYPE A. UNDERMOUNT EPOXY RESIN 24"x18"x12" 2. FAUCETS A. CHICAGO FAUCET 786-GN8BV7CP TWO HANDLE MIXING LAB FAUCET, VACUUM BREAKER, AERATOR B. CHICAGO FAUCET 989-217LHCT SINGLE HANDLE, VACUUM BREAKER SERRATED TIP. (DW) 3. CONNECTION A. 1/2" CW & HW, 1/2" DW 1-1/2" ACID WASTE 4. MOUNTING A. COUNTER UNDERMOUNT AS SHOWN ON ARCH DRAWINGS. 5. SUPPLIES A. MCGUIRE 165LK WITH LOOSE KEY STOPS. AERATOR TIP B. WRIST BLADE HANDLES 6. DRAIN A. CHARLOTTE PIPE AW-1A ACID WASTE. 7. TRAP A. ACID WASTE.	
<b>SK-2: UTILITY SINK / ADA (TWO COMPARTMENT UNDERMOUNT COUNTER)</b> 1. TYPE A. ELKAY CR322 20 GA. STAINLESS STEEL (3 HOLES) 2. SIZE A. 30-3/4"x18-1/2"x5-1/2" OVERALL. 13-1/2"x16"x5-1/2" INSIDE BOWL 3. CONNECTION A. 1-1/2" WASTE, 1/2" CW, 1/2" HW. 4. MOUNTING A. COUNTER AS SHOWN ON ARCH DRAWINGS. MIN CABINET SIZE 30" 5. FITTING A. DELTA 4380-SS-OST GOOSENECK SPOUT WITH SINGLE HANDLE FAUCET WITH HOSE SPRAY. 6. SUPPLIES A. MCGUIRE 165LK WITH LOOSE KEY STOPS. 7. DRAIN A. TWO (2) MCGUIRE 152 3-1/2" BASKET STRAINER AND TWO 1-1/2" OFFSET TAILPIECE. 8. TRAP A. TWO (2) MCGUIRE 8912 1-1/2" P-TRAP WITH C.O. PLUG.	
<b>E-1: LABORATORY DECK MOUNT DOUBLE GAS VALVE</b> 1. TYPE A. WATERSAVER L4200-1329WA. 180° DOUBLE D. FORGED BRASS VALVE BODY E. CHROME PLATED BRASS BALL WITH MOLDED TEFLON SEALS F. CHROME FINISH 2. CONNECTION A. 3/8" IPS 3. MOUNTING A. DECK MOUNTED, SEE ARCH DWGS. FOR CONTINUATION	
<b>E-2: LABORATORY WALL MOUNT SINGLE GAS VALVE</b> 1. TYPE A. WATERSAVER L4200-141WS. D. FORGED BRASS VALVE BODY E. CHROME PLATED BRASS BALL WITH MOLDED TEFLON SEALS F. CHROME FINISH 2. CONNECTION A. 3/8" IPS 3. MOUNTING A. WALL MOUNTED, SEE ARCH DWGS FOR CONTINUATION	
<b>EW-1, EW-2: EMERGENCY EYE/FACE WASH</b> 1. TYPE A. WATERSAVER EW806 DECK MOUNTED SHWEL EYEWASH WITH DUAL SPRAY-HEADS. 2. CONNECTION A. 1/2" TEMPERED WATER 3. HEADS A. ABS PLASTIC PROTECTIVE COVERED EYEWASH HEADS. 4. VALVE A. CHROME PLATED BRASS STAY-OPEN BALL VALVE WITH EXTENDED HANDLE 5. SIGN A. ALUMINUM DESIGNED FOR WALL MOUNTING LABELED "EMERGENCY EYEWASH FOUNTAIN". 6. VACUUM BREAKER A. WATERSAVER IN-LINE VACUUM BREAKER BETWEEN VALVE AND SPRAY HEADS 7. MIXING VALVE, EMW-1 A. WATERSAVER AF3602 EMERGENCY THERMOSTATIC MIXING VALVE B. VALVE BOX A. SURFACE MOUNTED STAINLESS STEEL	
<b>EW-2, EMW-2: EMERGENCY SHOWER AND EYEWASH</b> 1. TYPE A. WATERSAVER S8950 SAFETY STATION WITH EYE/FACE WASH 2. CONNECTION A. 1-1/4" TEPID WATER 3. SHOWER HEAD AND BOWL A. 10" DIAMETER ABS PLASTIC SHOWER HEAD B. 11.5" DIAMETER STAINLESS STEEL EYE/FACE BOWL 4. SHOWER VALVE A. CHROME PLATED BRASS 1" IPS STAY-OPEN BALL VALVE WITH STAINLESS STEEL PULL ROD AND TRIANGULAR HANDLE 5. EYEWASH HEADS A. CHROME PLATED BRASS YOKE WITH TWIN, AERATED, EYEWASH HEADS 6. VALVE A. CHROME PLATED STAY-OPEN BALL VALVE WITH PUSH FLAG HANDLE 7. SIGN A. UNIVERSAL IDENTIFICATION AND INSPECTION TAG. 8. MIXING VALVE EMW-2 A. WATERSAVER AF3602 THERMOSTATIC MIXING VALVE B. LOCATE ABOVE CEILING	
<b>WB-1: REFRIGERATOR WATER BOX WITH CW FITTINGS.</b> SEE ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT BELOW COUNTER TOP. 1. TYPE A. SIMILAR TO QUAY MODEL AB9201 2. CONNECTION A. 1/2" CW CONNECTION FTGS. BY PC. (PC SHALL CONNECT CW LINES TO REFRIGERATOR AS PER MANUFACTURER'S RECOMMENDATIONS.) 3. CW SUPPLY FITTING A. 1/4" OD COMPRESSION ANGLE VALVE FOR OUTLET FURNISHED AND INSTALLED IN BOX BY PC. (PC TO PROVIDE A TEE FITTING TO CONNECT REFRIGERATOR & COFFEE MAKER LINES TO ONE WB-1.) 4. INSTALLATION A. SEE NOTES ON PLAN.	
<b>ED-1: FLOOR DRAIN (MED TRAFFIC ROUND TOP)</b> 1. TYPE A. CHARLOTTE PIPE AW-160MS 2. TOP A. 6" STAINLESS STEEL 3. CONNECTION A. 3" ACID WASTE 4. TRAP A. ACID WASTE DEEP SEAL.	

## PLUMBING LEGEND

SYMBOL	DESCRIPTION	SYMBOL	UNION
	COLD WATER LINE - (CW)		STRAINER
	HOT WATER LINE - (HW)		WALL BOX
	HOT WATER RECIRCULATING LINE - (HWR)		FLOOR CLEANOUT
	ACID WASTE LINE (AW)		INLINE CLEANOUT
	ACID WASTE VENT LINE (AV)		WALL CLEANOUT
	NATURAL GAS LINE (G)		FLOOR DRAIN
	COMPRESSED AIR LINE (CA)		BALL VALVE
	CARBON DIOXIDE LINE (CA)		GAS COCK
	DEIONIZED WATER LINE (DW)		PRV
	VACUUM LINE OUTLET		PUMP
	COMPRESSED AIR OUTLET		BALANCING VALVE
	COMPRESSED CARBON DIOXIDE OUTLET		CHECK VALVE
	NATURAL GAS OUTLET		DUAL CHECK VALVE
	END CAP		DOUBLE CHECK VALVE
	PIPE DOWN OR DROP (DN OR DROP)		CHECK VALVE
	PIPE UP		POINT OF CONNECTION - NEW TO EXISTING
	PIPE BREAK OR CONTINUATION		AREA TO BE DEMOLISHED
	P-TRAP		

## FIXTURE SIZE SCHEDULE

MARK	WASTE	VENT	CW	HW
WC	4"	2"	1"	---
L	2"	1 1/2"	1/2"	1/2"
U	2"	1 1/2"	3/4"	---
SK	2"	1 1/2"	1/2"	1/2"
MSB	3"	1 1/2"	3/4"	3/4"
SH	2"	1 1/2"	1/2"	1/2"
EW	2"	1 1/2"	1/2"	---

NOTE: USE THESE SIZES FOR FIXTURE CONNECTIONS UNLESS OTHERWISE NOTED

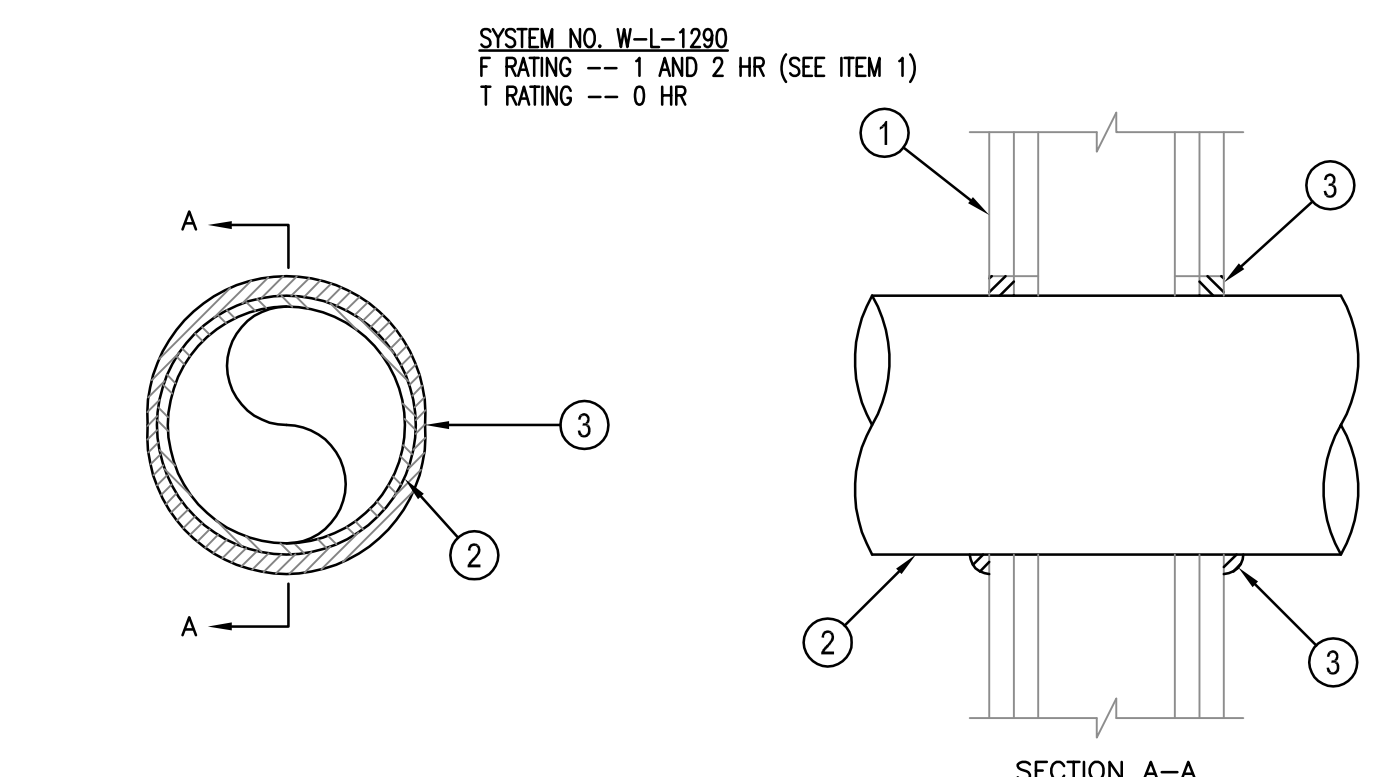
## ABBREVIATIONS \*

ABV	Above	NC	Normally Closed
AD	Access Door	NIC	Not in Contract
AFF	Above Finished Floor	NO	Normally Open
BFP	Backflow Preventer	NPT	National Pipe Thread
CI	Cast Iron	NTS	Not to Scale
COL	Column Line	OFST	Over Flow Storm Drain
COINN	Connection	OK	Oxygen
CW	Cold Water	PC	Plumbing Contractor
DI	Deionized Water	P-#	Pump - No.
DN	Down	PRV	Pressure Reducing Valve
EC	Electrical Contractor	PS	Pounds Per Square Inch
ELEV	Elevation	RD	Roof Drain
ET	Expansion Tank	SA	Shock Absorber
EW-C-#	Electric Water Cooler	SH-#	Shower
FD	Floor Drain	SH-#	Sink
FL	Floor	SS	Stainless Steel
FT	Feet	STD	Standard
GC	General Contractor	ST	Storm Drain
GPH	Gallons Per Hour	TEMP	Temperature
GPM	Gallons Per Minute	TOS	Top of Steel
HW	Hot Water	TYP	Typical
HWR	Hot Water Return	U-#	Urinal
IE	Invert Elevation	VAC	Vacuum
L-#	Lavatory	VB	Vacuum Breaker
MA	Medical Air	V	Vent
MAX	Maximum	VTR	Vent Thru Roof
MC	Mechanical Contractor	W	Sanitary Waste
MIN	Minimum	WB-#	Water Box
MPT	Male Pipe Thread	WC-#	Water Closet
MSB-#	Map Sink Basin	WTS	Water Tight Sleeve
N/A	Not Applicable		

\* Not All Abbreviations Used

## PLUMBING GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL PLUMBING FIXTURES IN OR ATTACHED TO CASEWORK WITH THE ARCHITECT AND THE MILLWORK SHOP DRAWINGS. COORDINATE PRIOR TO INSTALLATION.
2. CONFIRM OR VERIFY EXACT LOCATION AND ACTUAL INVERT OF ACID WASTE LINES PRIOR TO INSTALLATION.
3. DUE TO THE LARGE QUANTITY OF PIPING, DUCTWORK, CONDUIT, ETC. ABOVE THE CEILING COORDINATION WITH OTHER DISCIPLINES IS MANDATORY.
4. LOCATE SHUT-OFF VALVE ABOVE CEILING AND IN LOCATIONS ACCESSIBLE FOR SERVICE. LOCATION SHALL COMPLY WITH THE REQUIREMENTS OF ALL CODES REFERENCED HEREIN.
5. ALL SANITARY/ACID DRAINAGE PIPING 3" AND LARGER SHALL SLOPE 1/8" PER FOOT UNLESS NOTED OTHERWISE. ALL SANITARY/ACID DRAINAGE PIPING 2" AND SMALLER SHALL SLOPE 1/4" PER FOOT UNLESS NOTED OTHERWISE.
6. CONTRACTOR SHALL REFERENCE DIVISION 15 OF THE SPECIFICATIONS AND EQUIPMENT SCHEDULE ON DRAWING P.0.0 FOR PLUMBING FIXTURES, EQUIPMENT, MATERIALS, PIPING, INSULATION, HANGERS, AND SUPPORTS.
7. REFERENCE PLUMBING FIXTURE CONNECTION SCHEDULE ON DRAWING P.0.0 FOR LINE SIZES NOT SHOWN TO FIXTURES/EQUIPMENT.
8. ALL FLOOR DRAINS SHALL BE INSTALLED PLUMB AND LEVEL WITH FINISHED FLOOR ELEVATION FOR SLAB INSTALLATION.
9. CONTRACTOR SHALL PROVIDE HANGERS AND SUPPORTS FOR SEISMIC RESTRAINT PER THE 12007 INTERNATIONAL BUILDING CODE.
10. ALL DRAINAGE PIPING AND PRESSURE SYSTEM PIPING SHALL BE RUN AS HIGH AS POSSIBLE TO BOTTOM OF STRUCTURE, UNLESS NOTED OTHERWISE. COORDINATE PIPE ROUTING WITH ALL OTHER TRADES.
11. THE FOLLOWING PLUMBING SYSTEMS SHALL BE INSULATED: COLD WATER, HOT WATER, HOT WATER RECIRCULATION, P-TRAPS AND HORIZONTAL PIPING RECEIVING CONDENSATE ABOVE CEILINGS, HORIZONTAL ROOF DRAIN LEADERS (REFERENCE DIVISION 15 OF THE SPECIFICATIONS).
12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT ITEMS TO BE FURNISHED FIT THE SPACE AVAILABLE.
13. ALL WALL HANG FIXTURES SHALL BE SEALED BETWEEN WALL AND FIXTURES WITH WHITE SILICONE CAULKING.
14. ALL COUNTER MOUNTED FIXTURE RIMS SHALL BE SEALED WITH SILICONE CAULKING.
15. LOCATE FLOOR CLEANOUTS PAST LIMITS OF THE CASEWORK.
16. CONTRACTOR SHALL MAKE PROVISIONS FOR EXPANSION LOOPS WHERE NECESSARY WHETHER OR NOT SHOWN ON DRAWINGS.
17. OFFSET PLUMBING VENTS, WATER PIPING AS NECESSARY TO AVOID CONFLICTS WITH DUCTWORK. SEE HVAC PLANS.
18. IT IS THE INTENT AND MEANING OF THE DRAWINGS TO PROVIDE COMPLETE AND OPERABLE PLUMBING AND DRAINAGE SYSTEMS.
19. CONTRACTOR SHALL BE BOUND BY THE REQUIREMENTS OF THE UNDERGROUND UTILITIES DAMAGE PREVENTION ACT, STATUTE 58-35-10.
20. ALL PLUMBING LINE SIZE REDUCTIONS SHALL BE MADE WITH REDUCERS AND/OR REDUCING FITTINGS.
21. PLUMBING CONTRACTOR SHALL TEST EACH REDUCED PRESSURE BACKFLOW PREVENTER AND DOUBLE CHECK VALVE INSTALLED USING A CERTIFIED TESTER IN ACCORDANCE WITH SOUTH CAROLINA PRIMARY DRAINING WATER REGULATIONS.
22. ALL GAS PIPING IN PARTITION WALLS SHALL BE ANNEALED COPPER WITH BRAZED JOINTS. A STEEL STRIKER BARRIER NOT LESS THAN 0.0508 INCH THICK SHALL BE INSTALLED BETWEEN THE PIPING AND THE FINISHED WALL EXTENDING AT LEAST 4 INCHES BEYOND CONCEALED PENETRATIONS OF PLATES, STOPS, WALL STUDS, ETC... GAS PIPING SHALL NOT BE INSTALLED IN CMU OR SOLID WALLS.
23. PLUMBING CONTRACTOR TO MAKE FINAL CONNECTIONS ON ALL LAB FIXTURES.
24. PROVIDE WATTS #70 BACKFLOW PREVENTER AND DOWN STREAM OF DUAL OUTLET SHUT OFF VALVE FOR DISHWASHER.
25. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EXACT LOCATIONS OF FIXTURES AND EQUIPMENT. ALL OFFSETS AND FITTINGS FOR COMPLETE INSTALLATION MAY NOT BE IDENTICAL TO THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT DIMENSIONS AT THE BUILDING AND ANY NECESSARY CHANGES MADE IN ACCORDANCE WITH STRUCTURAL CONDITIONS. EQUIPMENT TO BE INSTALLED AND COORDINATION WITH OTHER SYSTEMS. IF CONFLICTS CANNOT BE RESOLVED THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER.
26. CONTRACTOR SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS INsofar AS THEY APPLY: NFPA 54, 2006 INTERNATIONAL BUILDING, GAS AND PLUMBING CODES.
27. CONTRACTOR SHALL SECURE ALL PERMITS, INSPECTIONS, LICENSES AND TESTS REQUIRED FOR THIS WORK AND PAY ALL FEES IN CONNECTION THEREWITH.
28. ALL MATERIALS SHALL BEAR THE MANUFACTURER'S NAME, TRADE NAME AND BE U.L. LABELED IF REQUIRED. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER. ALL EQUIPMENT OF A SIMILAR TYPE SHALL BE OF THE SAME MANUFACTURER'S.
29. CONTRACTOR SHALL LOCATE AND SIZE ALL OPENINGS REQUIRED FOR PLUMBING EQUIPMENT AND PIPING, AND PROVIDE THIS INFORMATION TO THE GENERAL CONTRACTOR IN TIME NOT TO DELAY BUILDING CONSTRUCTION.
30. CONTRACTOR SHALL PROVIDE AND LOCATE SLEEVES AND INSERTS REQUIRED BEFORE THE FLOOR AND WALLS ARE BUILT OR SHALL BE RESPONSIBLE FOR THE COST OF CUTTING AND PATCHING REQUIRED FOR PIPES WHERE SLEEVES AND INSERTS WERE NOT INSTALLED OR WHERE THEY WERE INCORRECTLY LOCATED.
31. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SPECIFIED BY THE CONTRACTOR OR OF THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL TO THE WORK OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR TO PERFORM THE CONSTRUCTION WORK IN ACCORDANCE WITH THE DRAWINGS.



1. WALL ASSEMBLY --- THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:  
 A. STUDS --- REFER TO ARCH DETAILS FOR TYPE & CONSTRUCTION.  
 B. GYPSUM BOARD--- REFER TO ARCH DETAILS FOR TYPE & CONSTRUCTION. MAX DIAM OF OPENING IS 5 IN. (THE HOURLY F & T RATINGS OF THE FIRESTOP SYSTEM ARE EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.)  
 2. THROUGH PENETRANT --- ONE METALLIC PIPE OR TUBING INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE, OR TUBING MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 DEGREES FROM PERPENDICULAR. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE ANNULAR SPACE BETWEEN THE PIPE OR TUBE & PERIPHERY OF THE OPENING SHALL BE MIN 0 IN (POINT CONTACT) TO MAX 1/2 IN. THE FOLLOWING TYPES & SIZES OF METALLIC PIPES MAY BE USED:  
 A. IRON PIPE --- NOM 4 IN. DIA (OR SMALLER) CAST OR DUCTILE IRON PIPE.  
 B. COPPER PIPE --- SHALL FOLLOW WL-1243 SYSTEM.  
 3. FILL, VOID OR CAVITY MATERIAL---SEALANT --- MIN 5/8 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE & WALL, A MIN 3/8 IN. DIA BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE/WALL INTERFACE.  
 \*BEARING THE UL CLASSIFICATION MARK

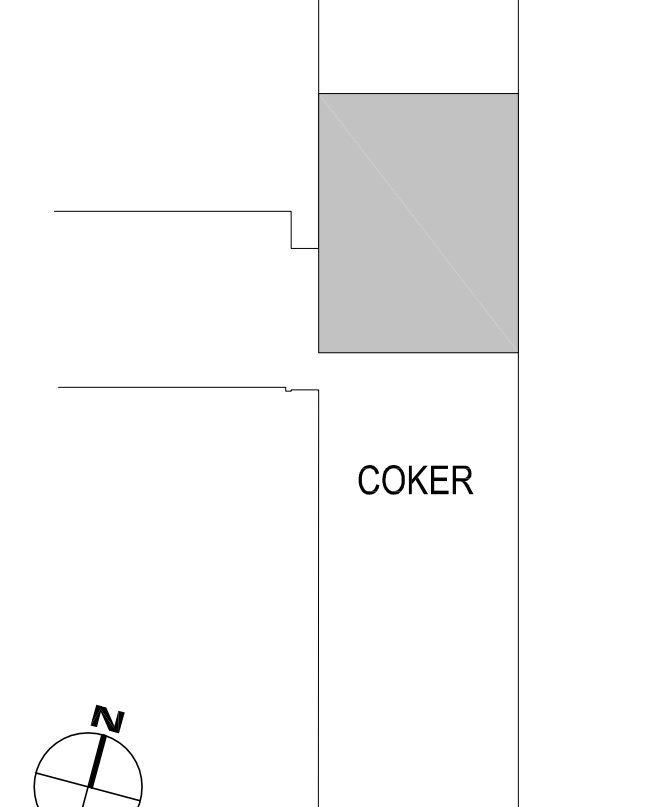
**1 FIRE STOPPING DETAIL**  
NTS

## PIPE IDENTIFICATION SCHEDULE

SERVICE TYPE	DECAL IDENTIFICATION	TAPE COLOR
COLD WATER SERVICE	COLD WATER SUPPLY	GREEN
HOT WATER	DOMESTIC HOT WATER	YELLOW
VACUUM	VACUUM	WHITE
NATURAL GAS	GAS	GREEN
COMPRESSED AIR	COMP AIR	YELLOW
DE-IONIZED WATER	DI WATER	GREEN

1. PIPE SIZES 1-1/4" TO 6", USE 2-1/4" LETTERING.  
 2. PIPE SIZES 1" OR LESS, USE 1-1/4" LETTERING.

number	item	date





project name  
**COKER - 7th FLOOR  
PHARMACY RENOVATION**  
State project number  
**H27- 6101**  
project number  
**12023.01**

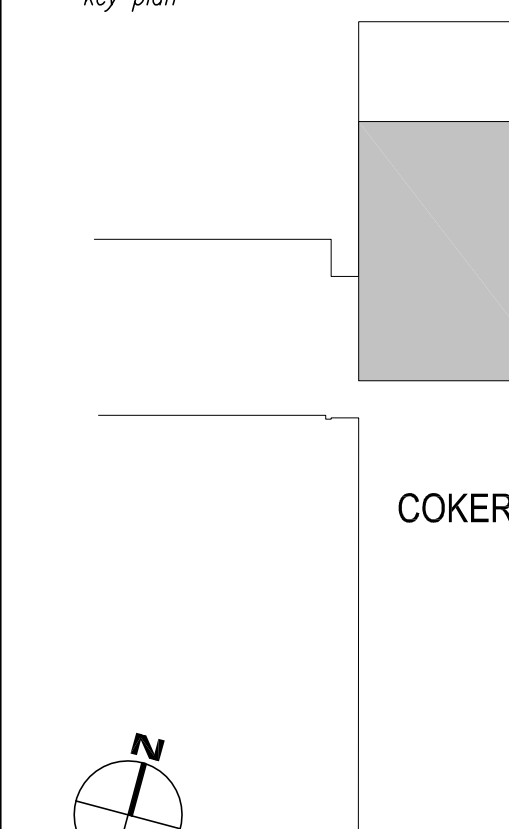
seals/signature

issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

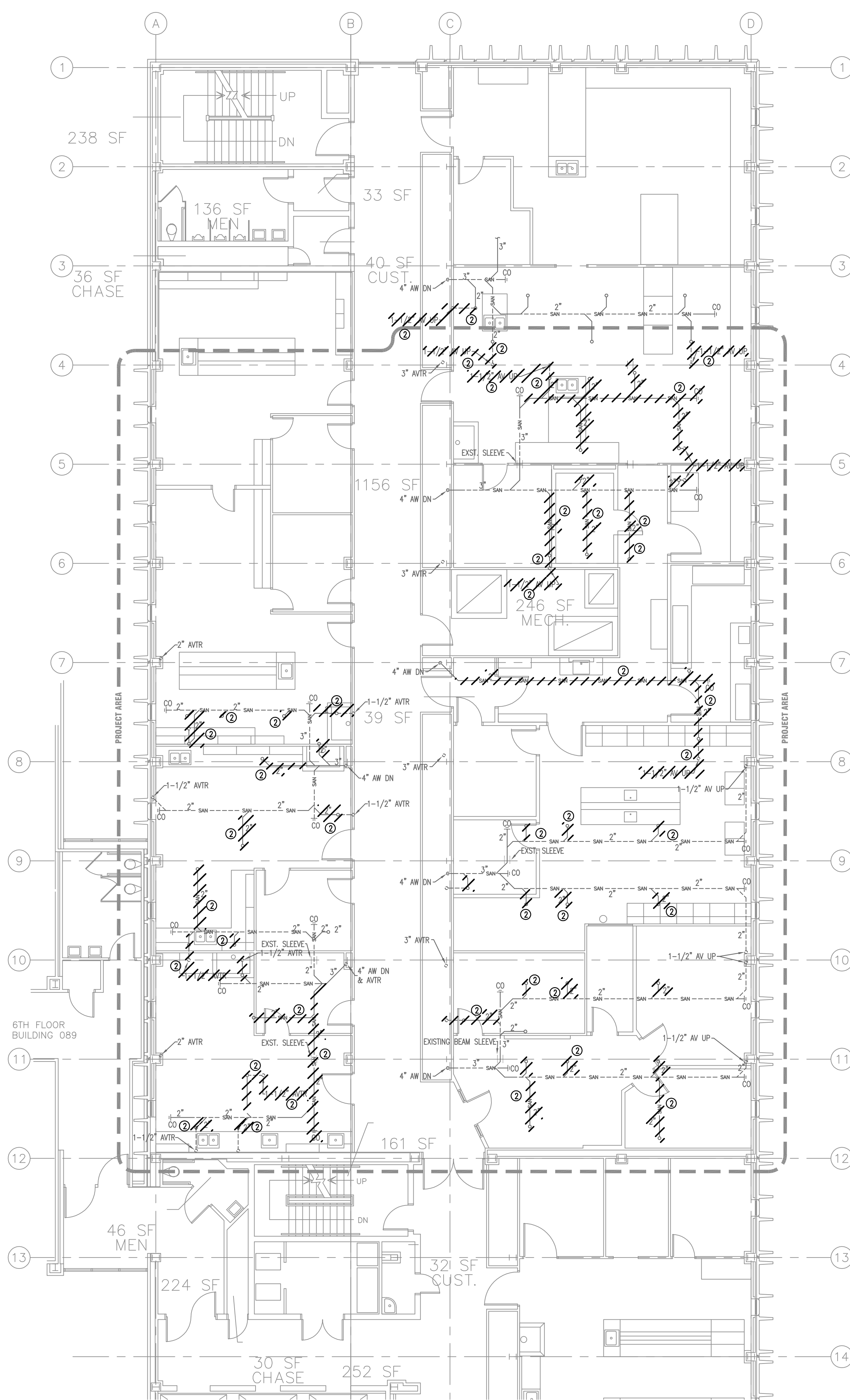


sheet title  
**PARTIAL SIXTH FLOOR PLAN  
PLUMBING DEMOLITION**

sheet number

**P1.6**

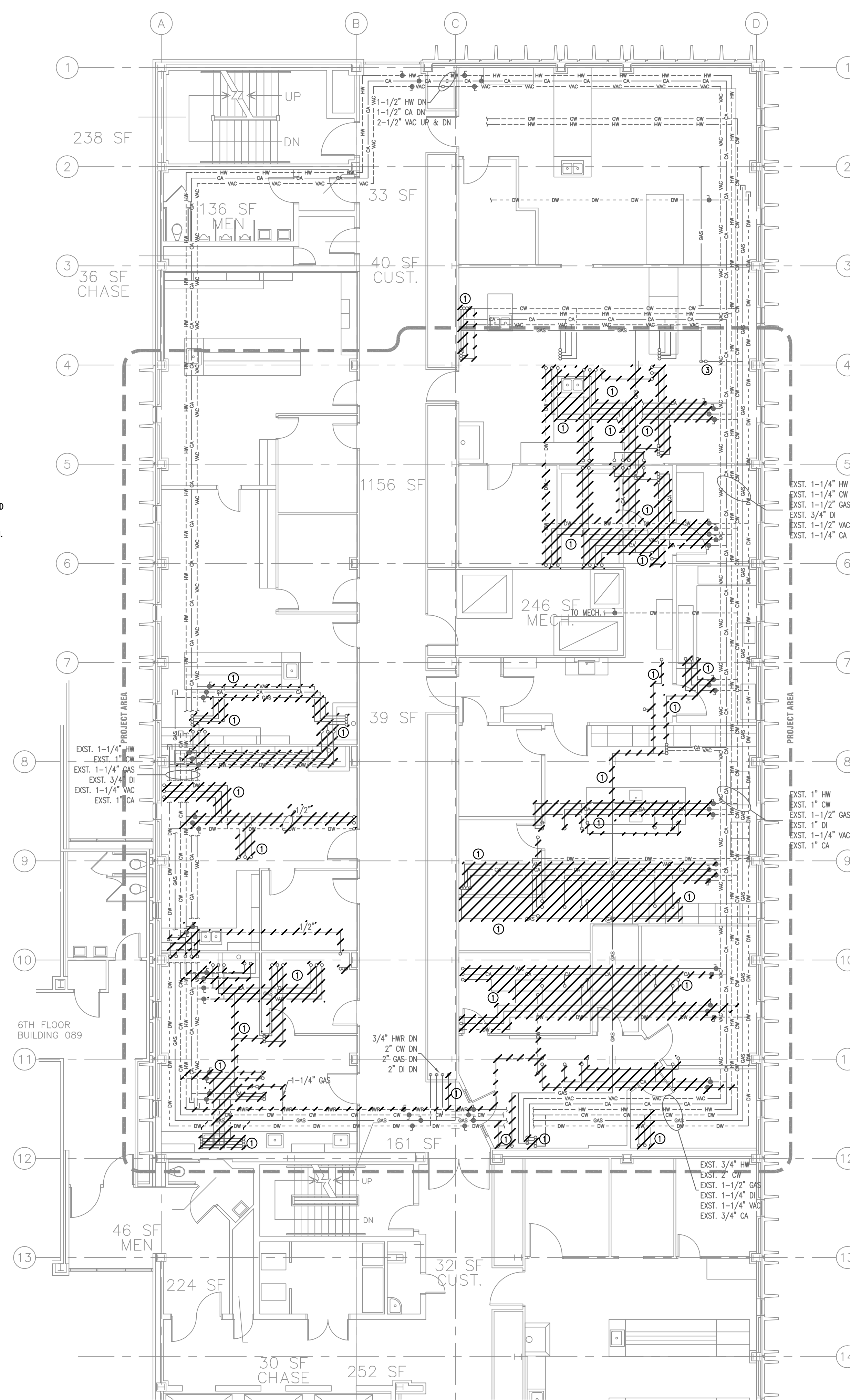
drawn by **JJR**  
checked by **JWB, RLW**



**1** PARTIAL SIXTH FLOOR PLAN – WASTE & VENT PIPING DEMOLITION  
1/8"=1'-0"

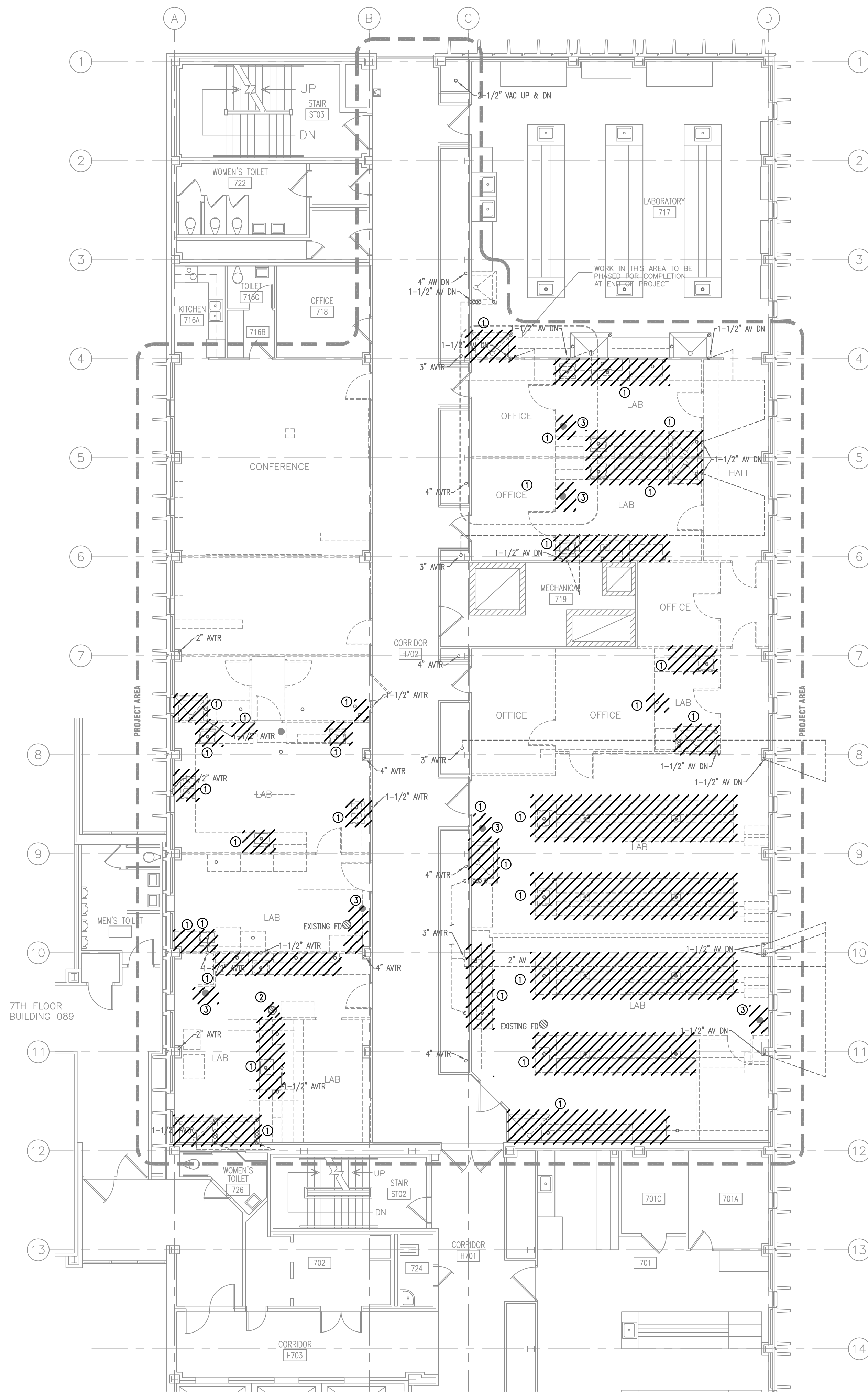
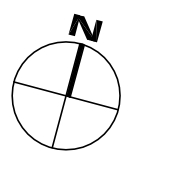
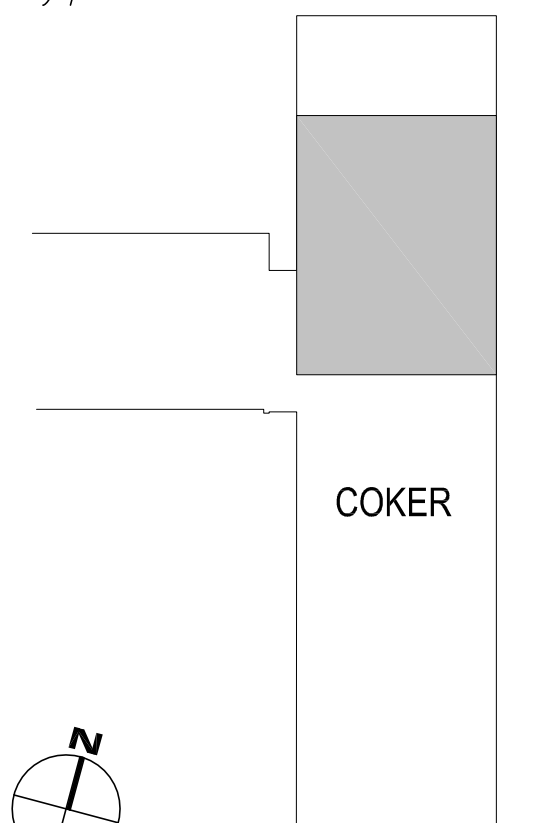
**DEMOLITION NOTES:**

- EXISTING FLUANG SUPPLY PIPING AND LAB GAS PIPING TO BE DEMOLISHED AS SHOWN. REMOVE EXISTING PIPING TO MAIN AND CAP.
- EXISTING ACID WASTE AND ACID VENT PIPING TO BE DEMOLISHED AS SHOWN. REMOVE EXISTING PIPING TO MAIN AND CAP.
- PROTECT EXISTING INSTRUCTOR'S GAS CUT-OFF VALVE AT THIS LOCATION. EXISTING VALVE TO REMAIN.



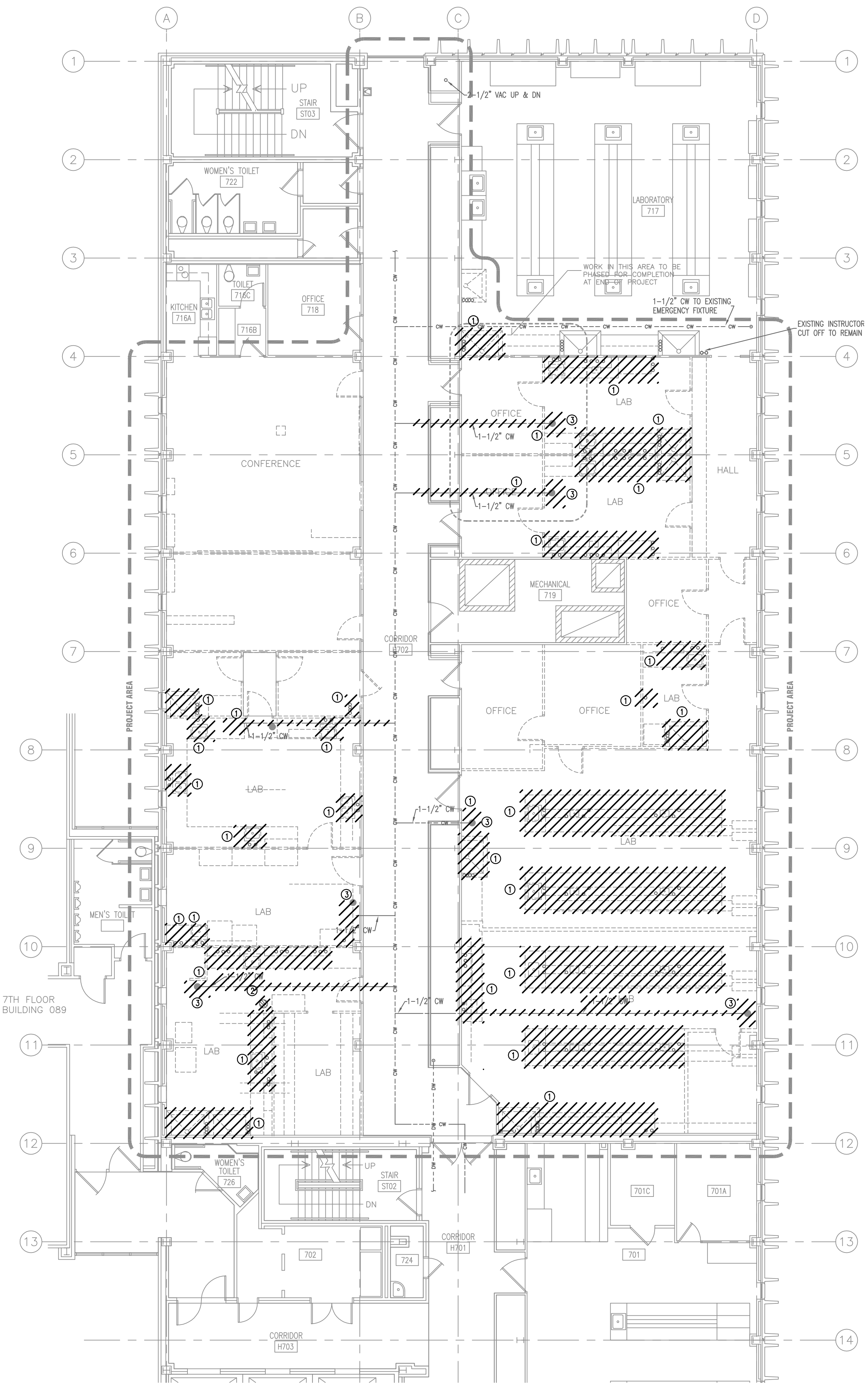
**2** PARTIAL SIXTH FLOOR PLAN – WATER & GAS PIPING DEMOLITION  
1/8"=1'-0"

number	item	date



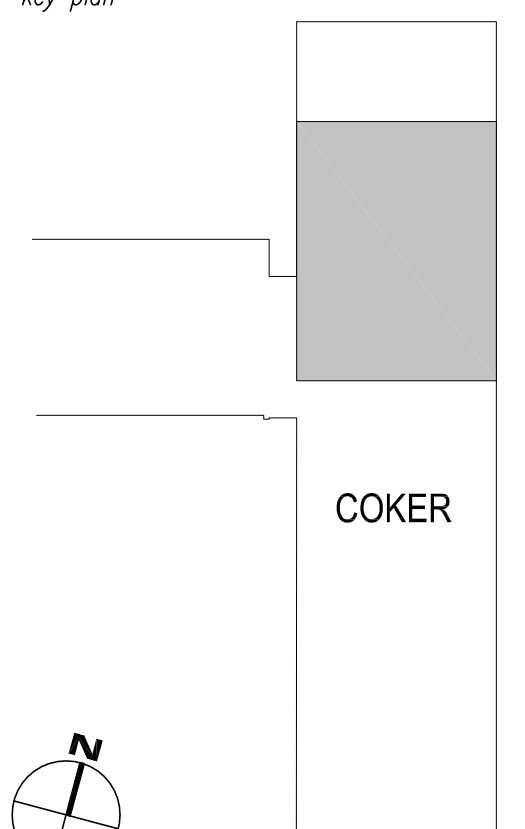
- DEMOLITION NOTES**
- DEMOLISH AND REMOVE EXISTING FLUING FIXTURES. DEMOLISH EXISTING WASTE AND SUPPLY PIPING BELOW FLOOR TO MAN AND CAP AS SHOWN. DEMOLISH EXISTING VENT PIPING ABOVE SIXTH FLOOR CEILING AND CAP AS SHOWN.
  - DEMOLISH AND REMOVE EXISTING FLOOR DRAIN BELOW FLOOR AND CAP AS SHOWN.
  - DEMOLISH AND REMOVE EXISTING EMERGENCY EYEWASH SAFETY SHOWER. CAP EXISTING SUPPLY PIPING ABOVE CEILING AS SHOWN.

1 PARTIAL SEVENTH FLOOR PLAN – WASTE & VENT PIPING DEMOLITION  
1/8"=1'-0"



2 PARTIAL SEVENTH FLOOR PLAN – WATER & GAS PIPING DEMOLITION  
1/8"=1'-0"

number	item	date



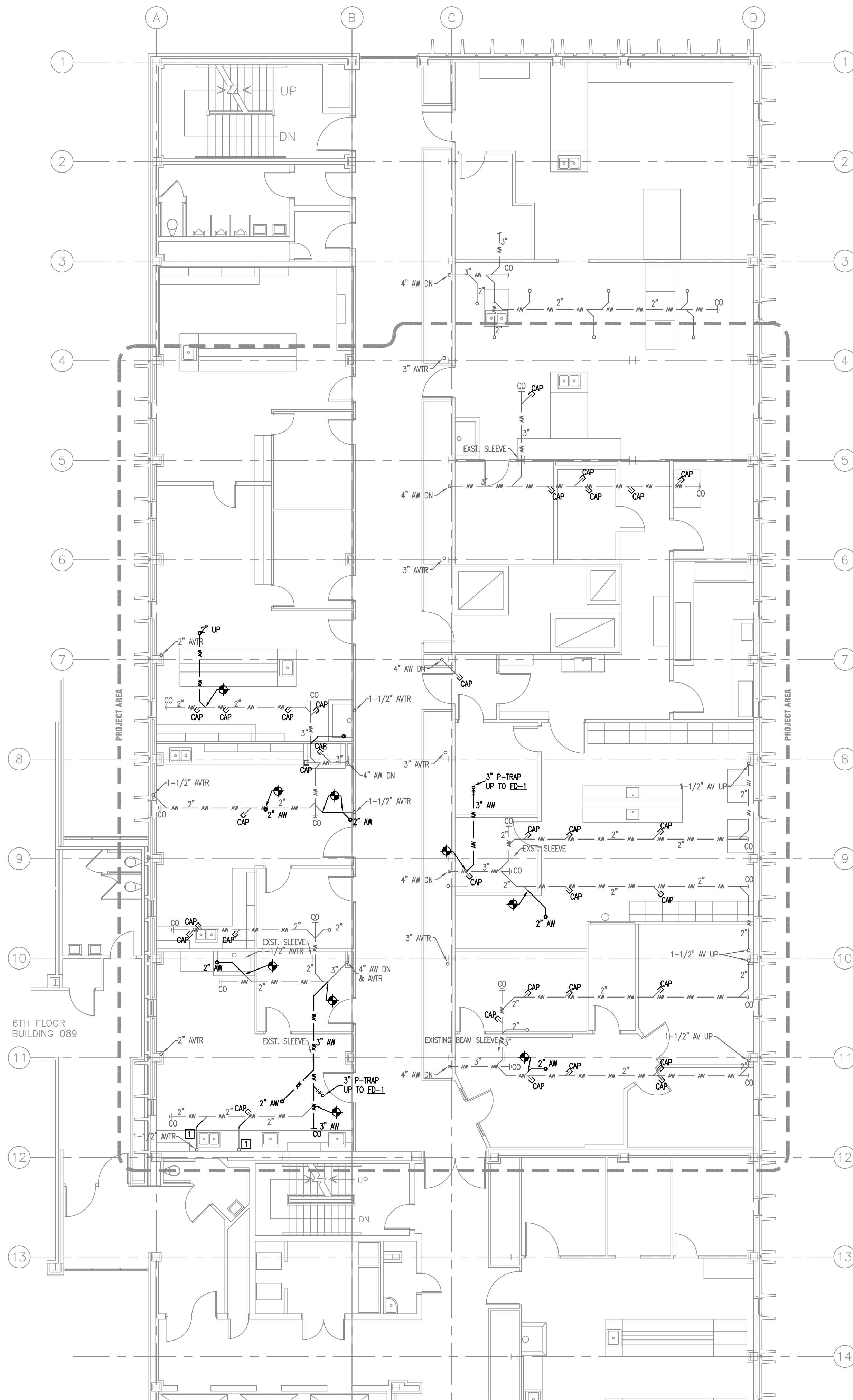
**WASTE PIPING NOTES:**

1 CONNECT TO EXISTING ACID VENT PIPE

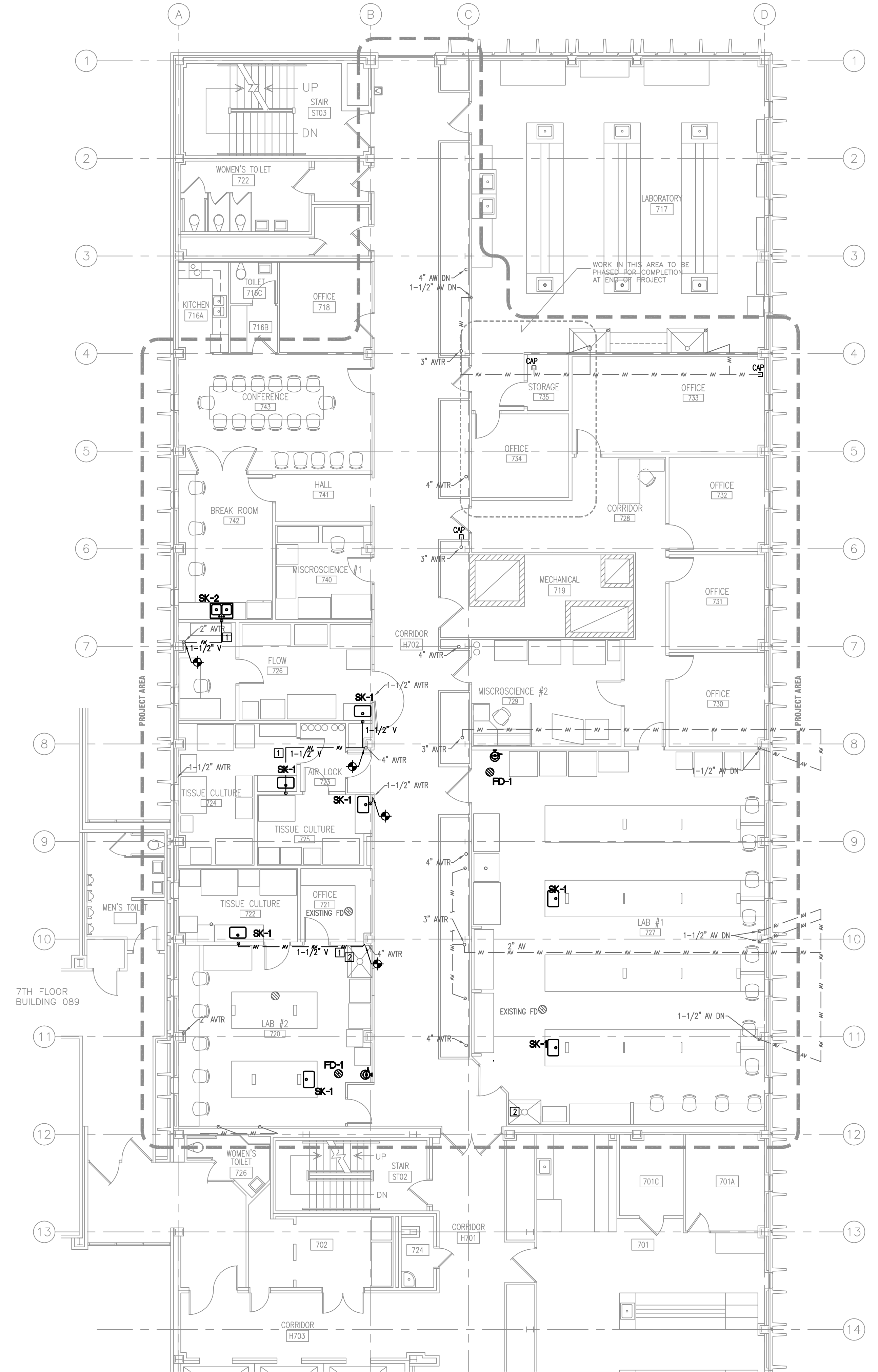
**KEYNOTES:**

1 COORDINATE VENT PIPE ROUTING WITH DUCTWORK.

2 STUB UP NEW 2" ACID WASTE LINE FOR NEW FUME HOOD. PC SHALL MAKE FINAL CONNECTION.



1 PARTIAL SIXTH FLOOR PLAN – WASTE & VENT PIPING  
1/8"=1'-0"



2 PARTIAL SEVENTH FLOOR PLAN – WASTE & VENT PIPING  
1/8"=1'-0"



Design/Planning/Construction  
1201 Main Street, Suite 2100  
Columbia, S.C. 29201  
tel. 803-256-0000  
fax 803-255-7243

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PROVIDED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OF THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner



project name  
**COKER - 7th FLOOR  
PHARMACY RENOVATION**  
State project number  
**H27- 6101**  
project number  
**12023.01**

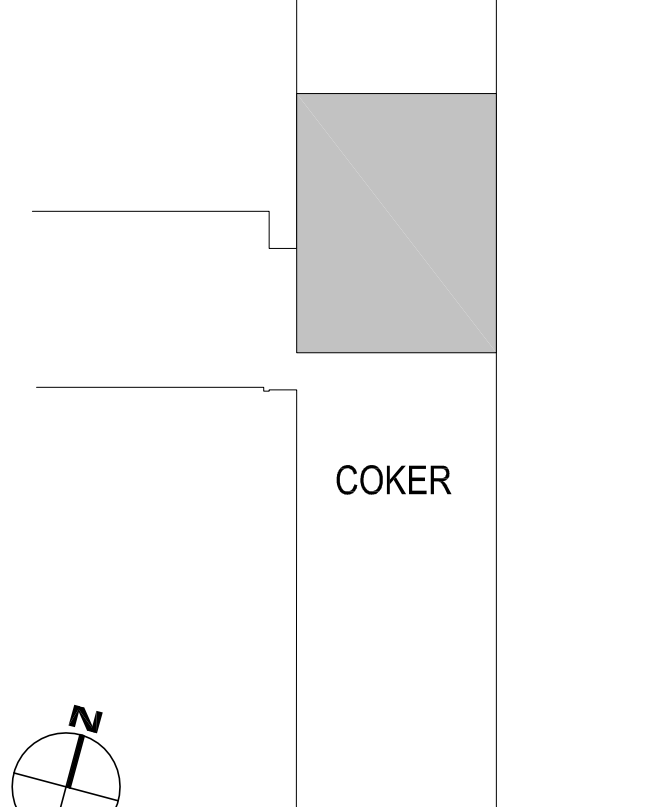
seals/signature

issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan



sheet title  
**PARTIAL SIXTH & SEVENTH FLOOR  
PLUMBING PIPING**

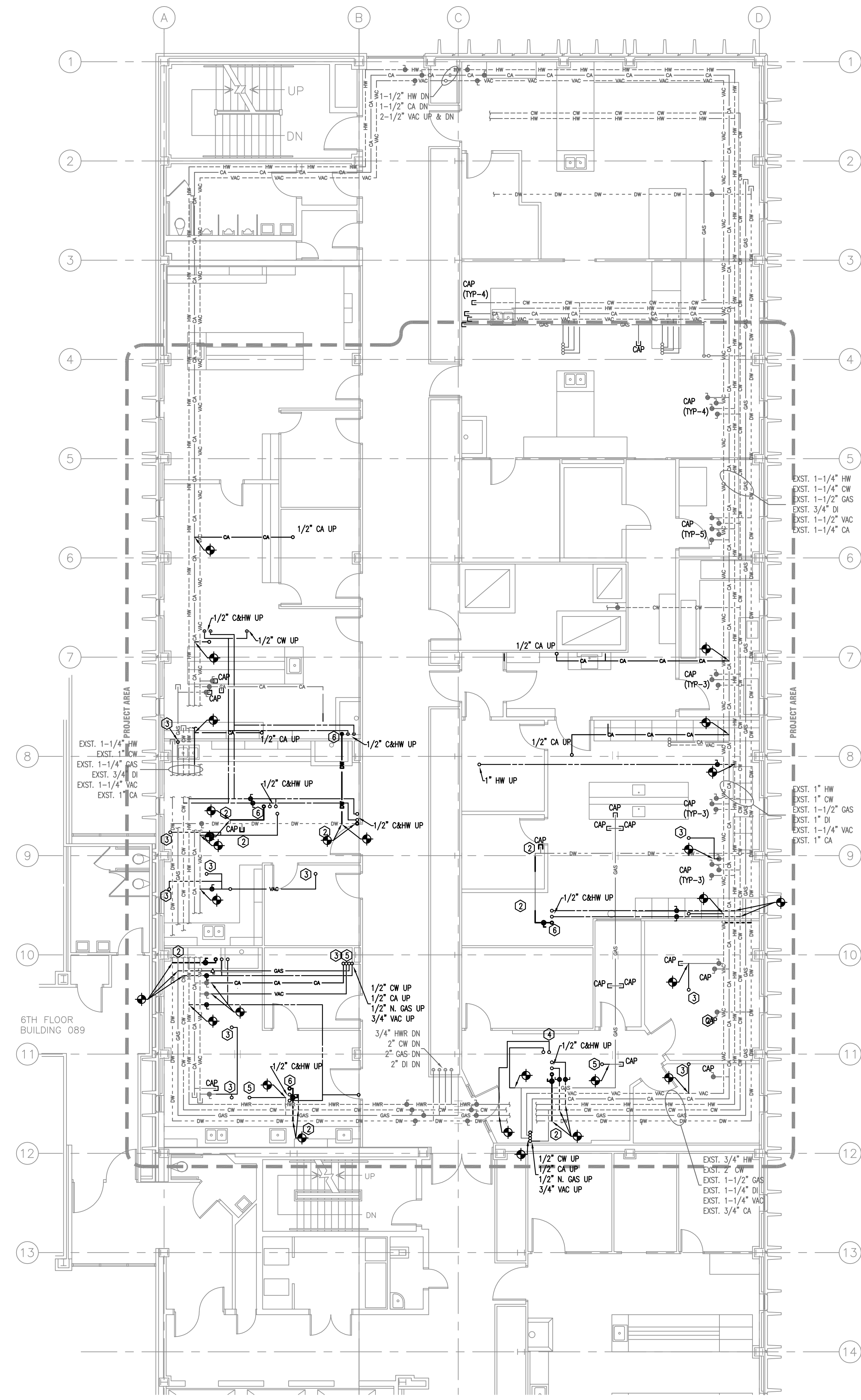
sheet number

**P3.7**

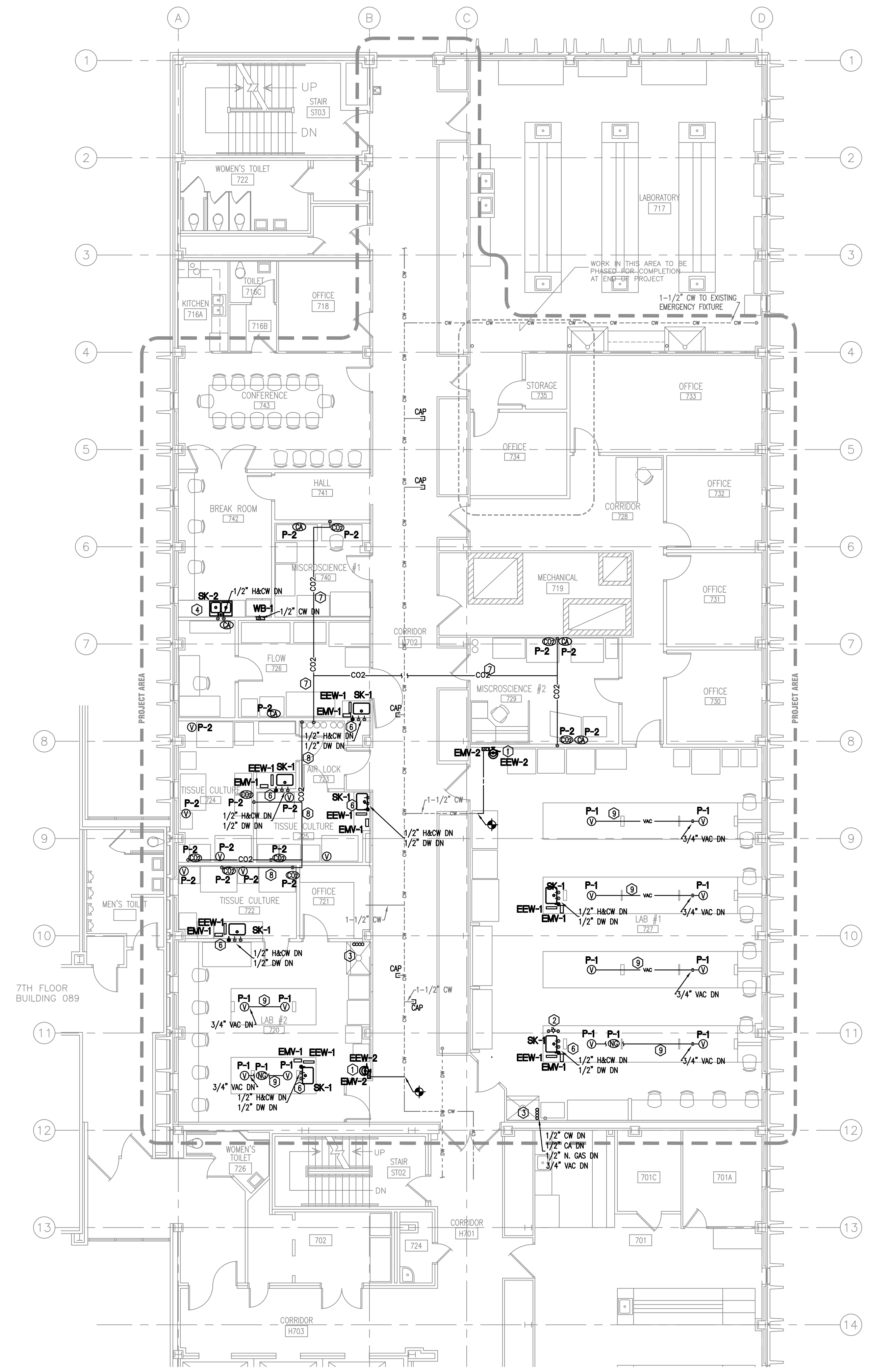
drawn by **JJR**  
checked by **JWB, RLW**

- KEYNOTES:**
- ① DM-2 LOCATED ABOVE CEILING, 1" HW FROM BELOW 7TH FLOOR.
  - ② NEW INSTRUCTOR'S GAS CUT OFF VALVE LOCATED IN CASE WORK. PROVIDE LEVER HANDLE BALL VALVE WITH LOCKING TABS. ROUTE PIPING AND LOCATE VALVE TO PROVIDE ACCESS. 1-1/4" GAS.
  - ③ STUB UP NEW 1/2" CW, CA, N. GAS AND 3/4" VAC FOR NEW FUME HOOD. PC SHALL MAKE FINAL CONNECTIONS. LEVER HANDLE BALL VALVES IN VERTICAL RISE ABOVE FLOOR.
  - ④ PC SHALL PROVIDE 1/4" COPPER FOR CW SUPPLY TO COFFEE MAKER. PC SHALL PROVIDE TEE CONNECTION AND TIE INTO CW SUPPLY FROM WB-1.
  - ⑤ PC PROVIDE GAS MANIFOLD FOR CO2 AND NITROGEN "C" TANKS. COMPRESSED GASES BY OTHERS.
  - ⑥ TRANSITION FROM TIN-LINED DEIONIZED WATER FAUCET TO ORION POLYPROPYLENE WHITELINE PIPE.
  - ⑦ PIPING FOR GAS MIX 5% CO2/95% AIR
  - ⑧ PIPING FOR GAS MIX 100% CO2
  - ⑨ 3/4" VAC PIPING ROUTED IN CASEWORK.

- WATER PIPING NOTES:**
- ① REMOVE TEMPORARY CAPS AND CONNECT NEW 3/4" CW & HW SUPPLY PIPING TO EXISTING PIPING BELOW FLOOR.
  - ② CONTRACTOR SHALL CONNECT TO EXISTING TIN-LINED COPPER DEIONIZED WATER PIPING WITH POLYPROPYLENE PIPE BY COMPRESSION TO FLANGED TRANSITION FITTINGS.
  - ③ 3/4" VAC RISER UP.
  - ④ 1-1/4" NATURAL GAS PIPING UP TO NEW GAS CUT-OFF VALVE.
  - ⑤ 1/2" NATURAL GAS PIPING UP.
  - ⑥ 1/2" DE-IONIZED WATER UP.



**1** PARTIAL SIXTH FLOOR PLAN - WATER & GAS PIPING  
1/8"=1'-0"

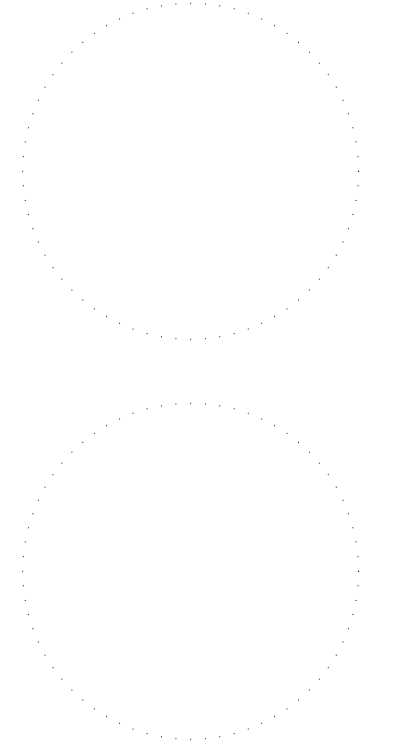


**2** PARTIAL SEVENTH FLOOR PLAN - WATER & GAS PIPING  
1/8"=1'-0"



project name  
**COKER - 7th FLOOR PHARMACY RENOVATION**  
State project number  
**H27- 6101**  
project number  
**12023.01**

seals/signature

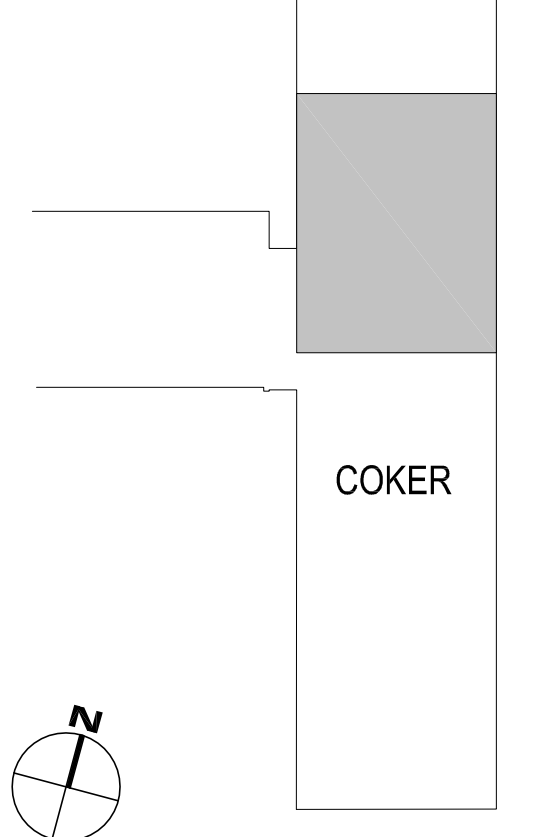


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

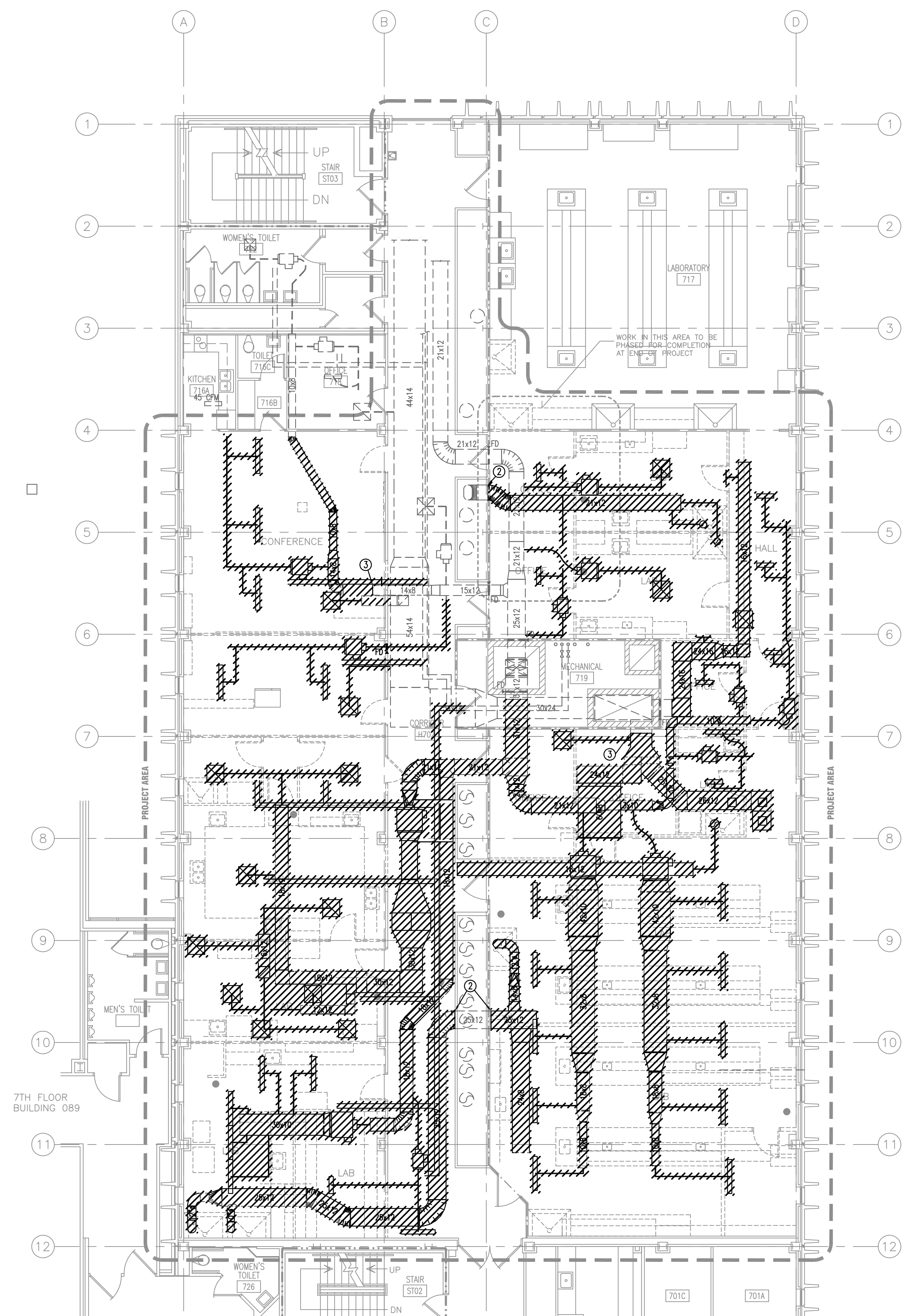


sheet title  
**PARTIAL SEVENTH FLOOR & ROOF PLAN - HVAC DEMOLITION**

sheet number

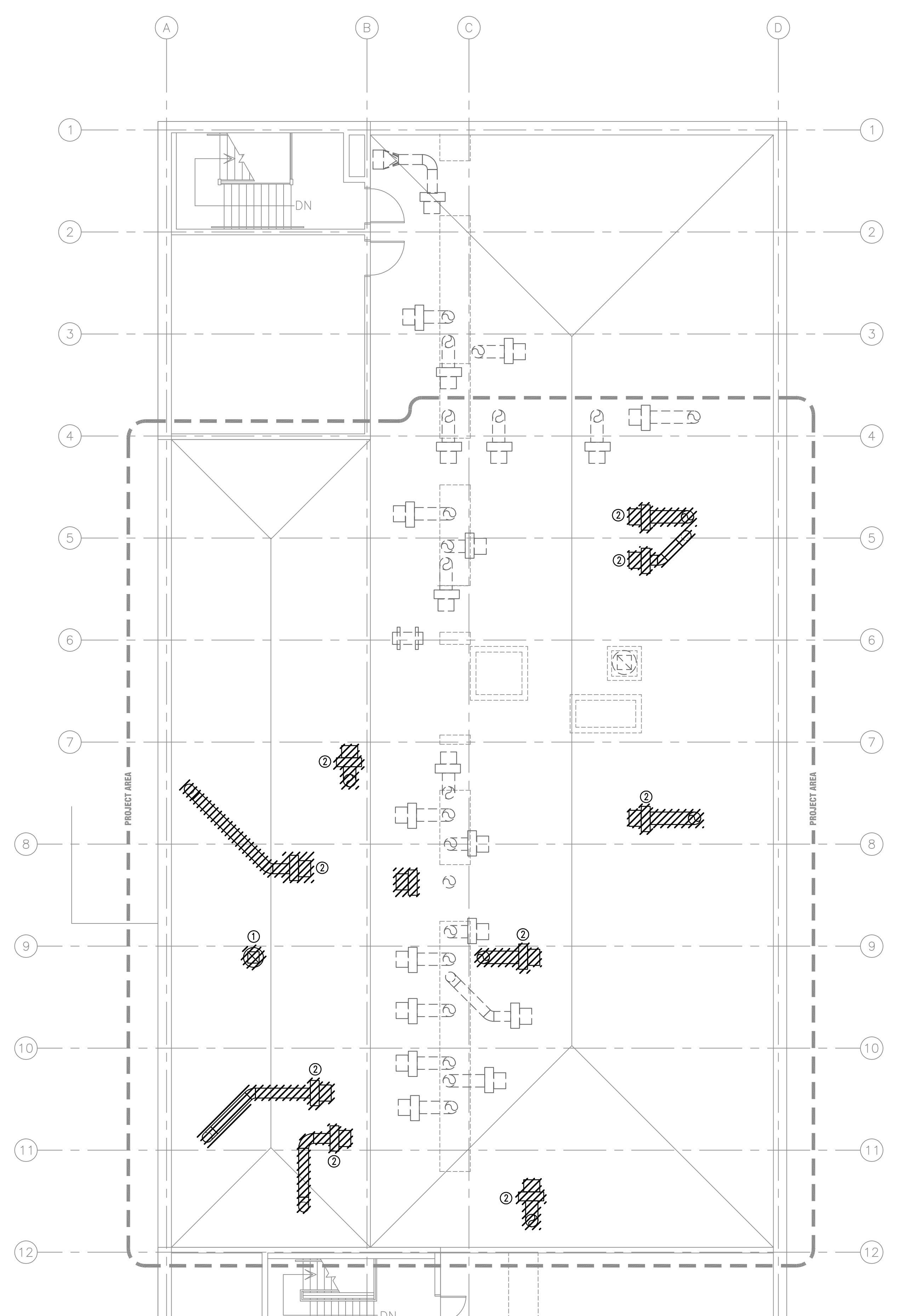
**M1.7**

drawn by **JDR**  
checked by **JDR**



- DEMOLITION NOTES:**
- ① REMOVE ALL DUCTWORK, GRILLES, CONTROLS, WIRING, TERMINAL BOXES, AND PIPING AS HATCHED ON PLAN.
  - ② REMOVE DUCT UP TO THIS POINT CAN CAP.
  - ③ REMOVE DUCT UP TO THIS POINT. SEE SHEET M2.7 FOR ADDITIONAL INFORMATION.

**① PARTIAL SEVENTH FLOOR PLAN - HVAC DEMOLITION**  
1/8"=1'-0"



- DEMOLITION NOTES:**
- ① REMOVE EXISTING EXHAUST FAN AND CAP EXISTING CURB.
  - ② REMOVE EXISTING EXHAUST FAN, DUCTWORK, SUPPORTS, ALL ASSOCIATED WIRING, CONTROL AND PATCH ROOF OPENING.

**② PARTIAL ROOF PLAN - HVAC DEMOLITION**  
1/8"=1'-0"

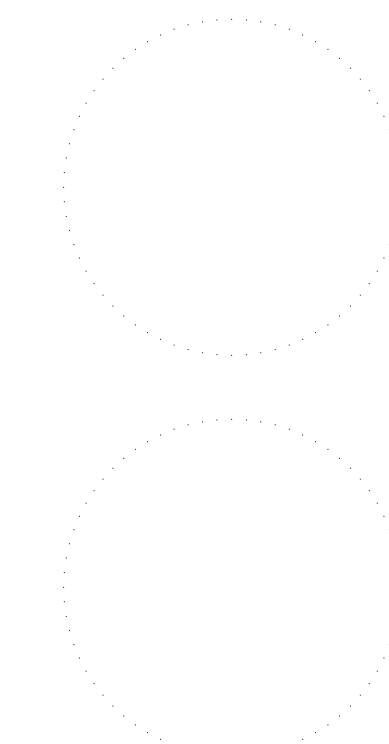
consultants

owner



project name  
**COKER - 7th FLOOR  
PHARMACY RENOVATION**  
State project number  
**H27- 6101**  
project number  
**12023.01**

seals/signature

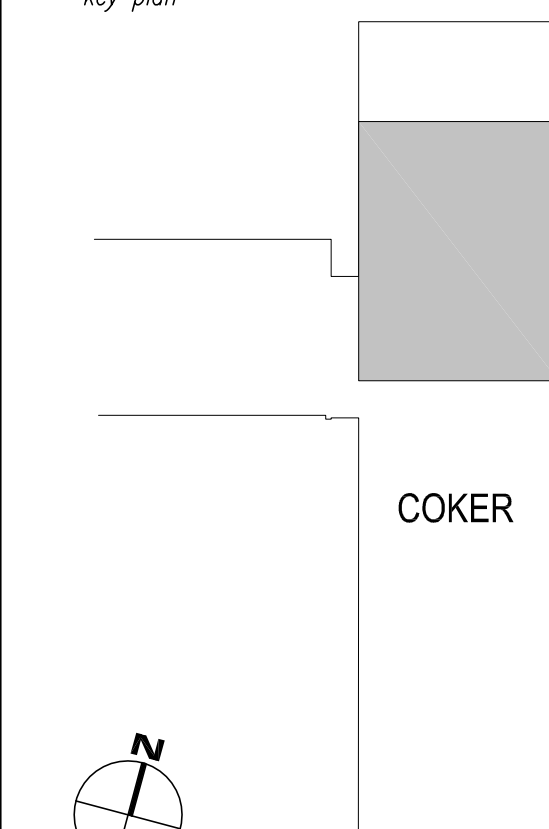


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

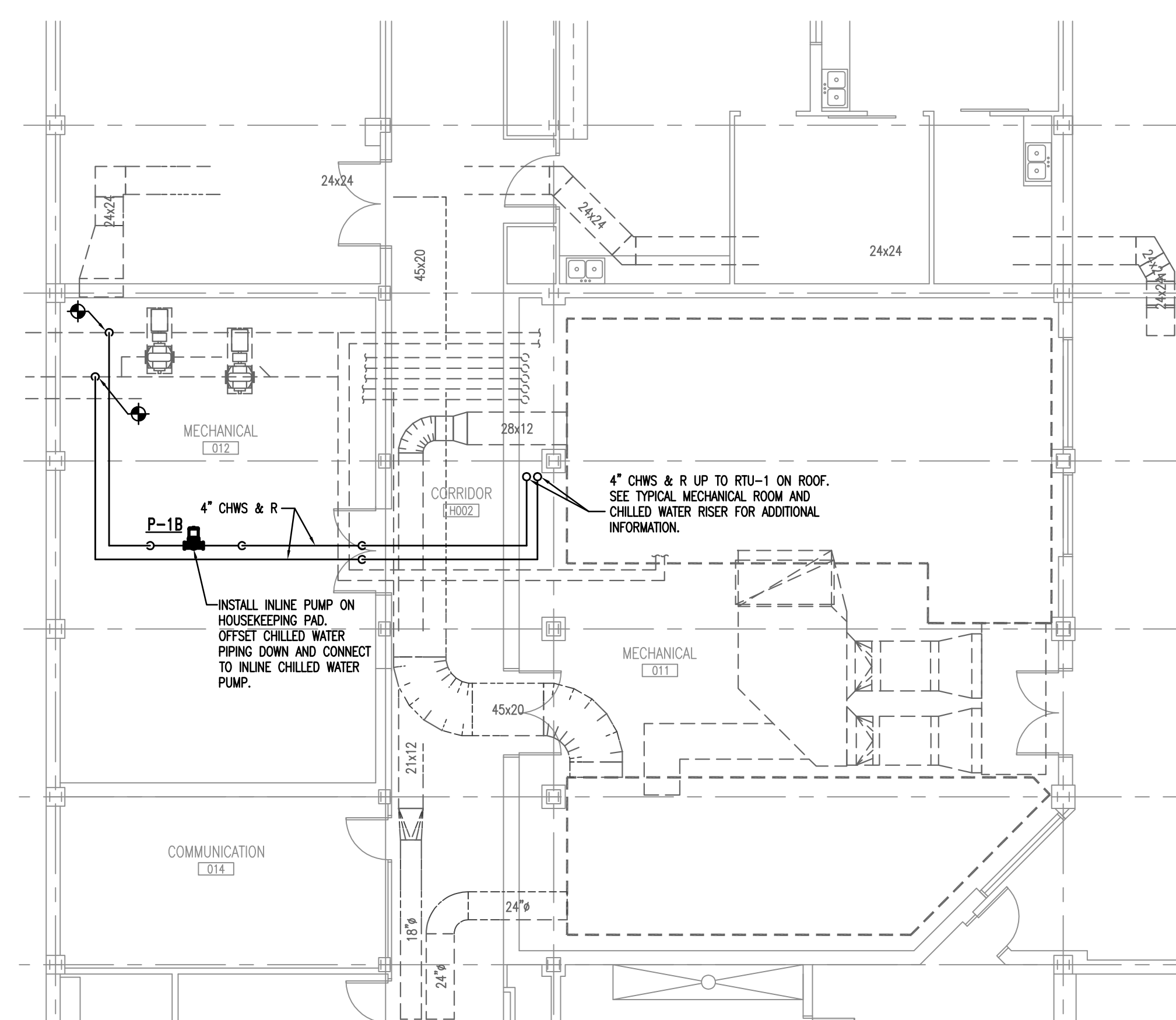


sheet title  
**PARTIAL BASEMENT FLOOR PLAN  
HVAC RENOVATIONS**

sheet number

**M2.0**

drawn by **JDR**  
checked by **JDR**



**1 PARTIAL BASEMENT FLOOR PLAN - HVAC RENOVATIONS**  
1/8"=1'-0"

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

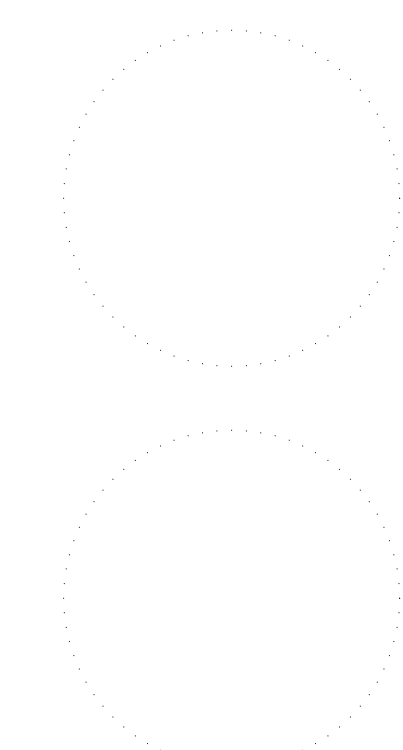


project name  
**COKER - 7th FLOOR PHARMACY RENOVATION**

State project number  
**H27- 6101**

project number  
**12023.01**

seals/signature

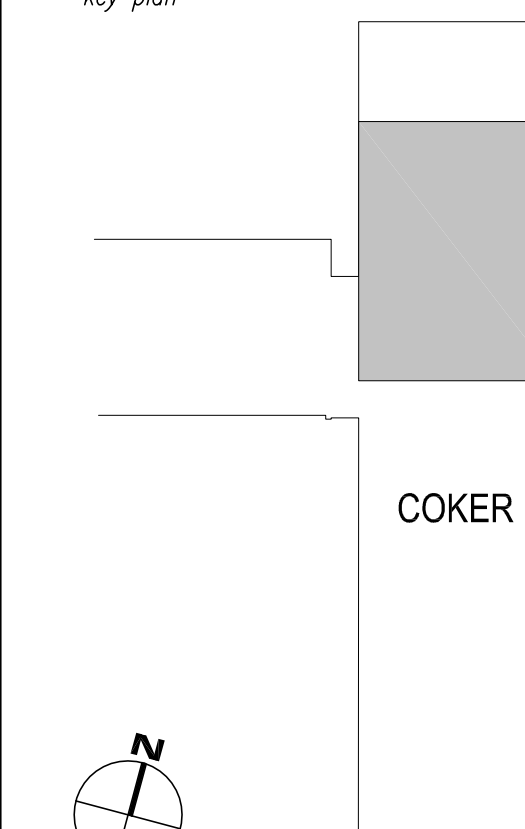


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

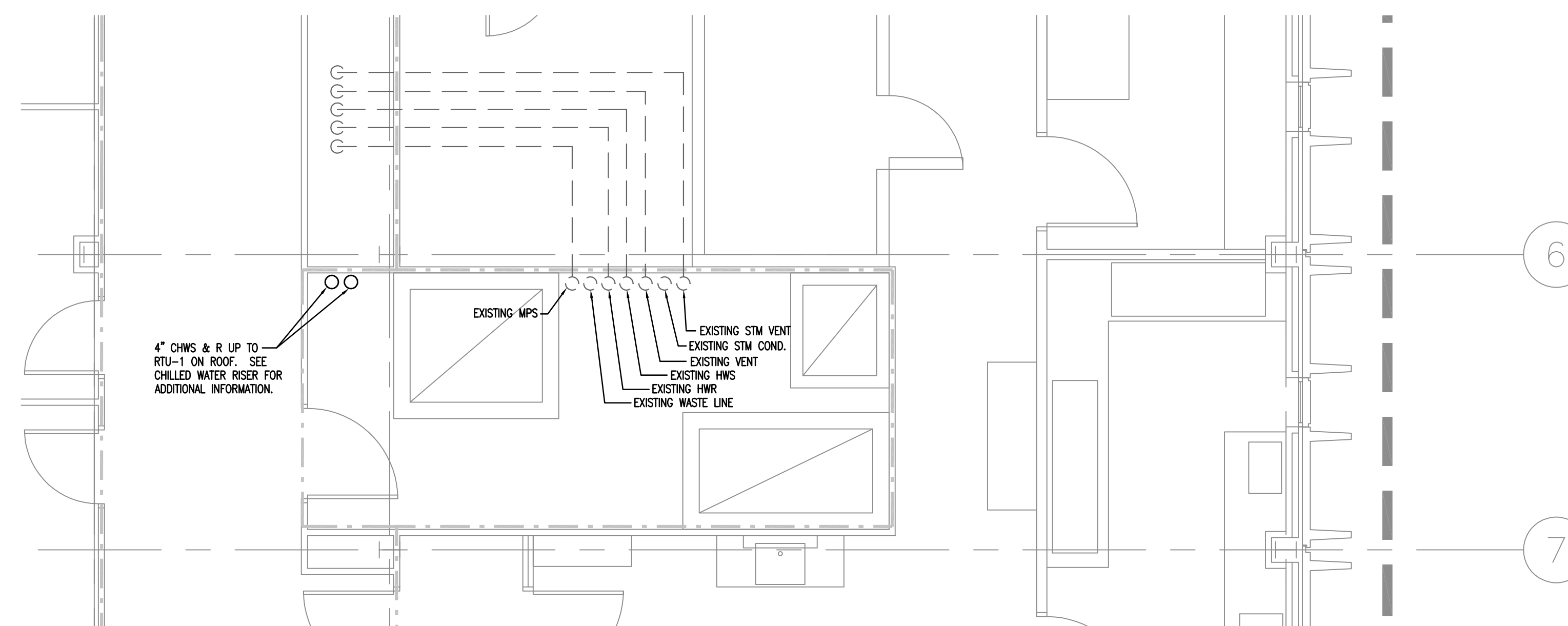


sheet title  
**PARTIAL FIRST, SECOND, THIRD, FOURTH, FIFTH, & SIXTH FLOOR PLAN - HVAC RENOVATIONS**

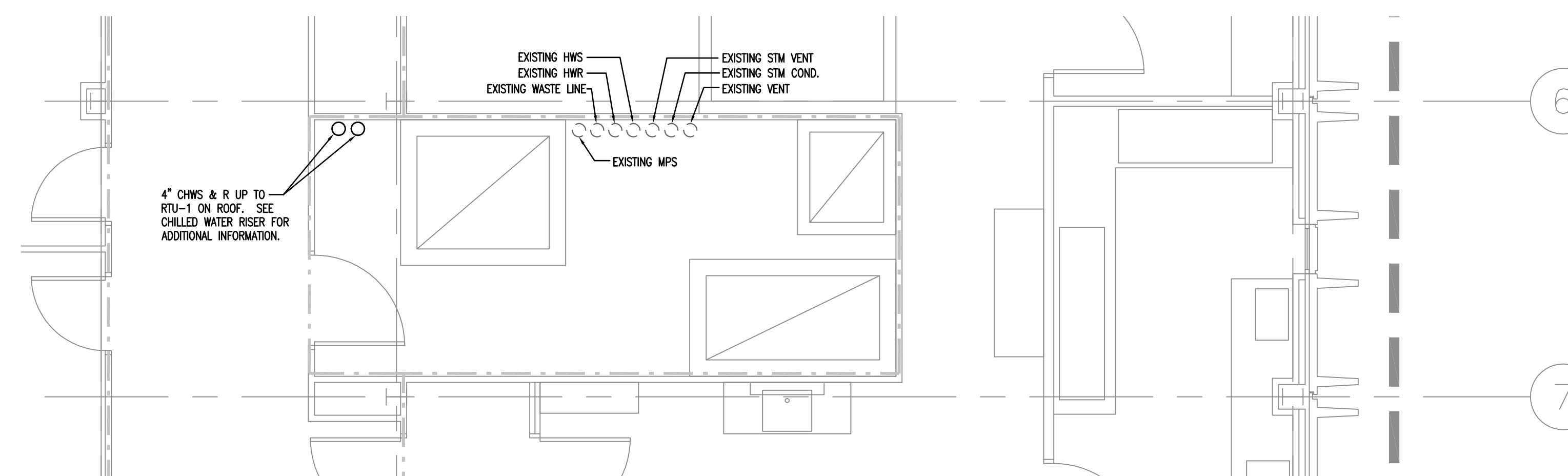
sheet number

**M2.1**

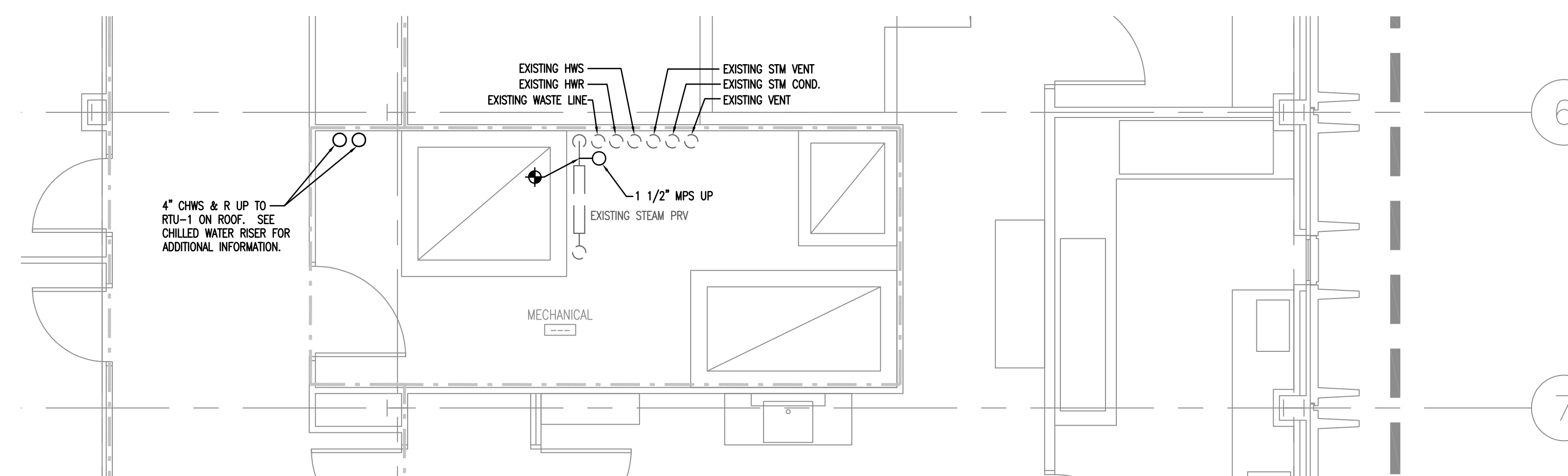
drawn by **JDR**  
checked by **JDR**



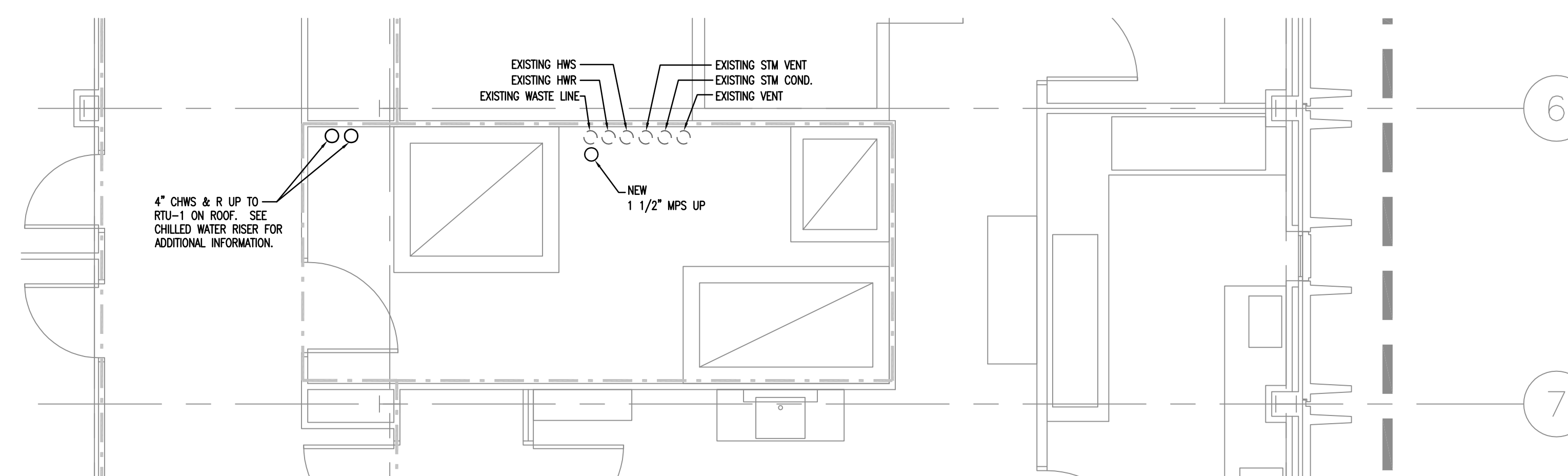
**① PARTIAL FIRST FLOOR PLAN – HVAC RENOVATIONS**  
1/4"=1'-0"



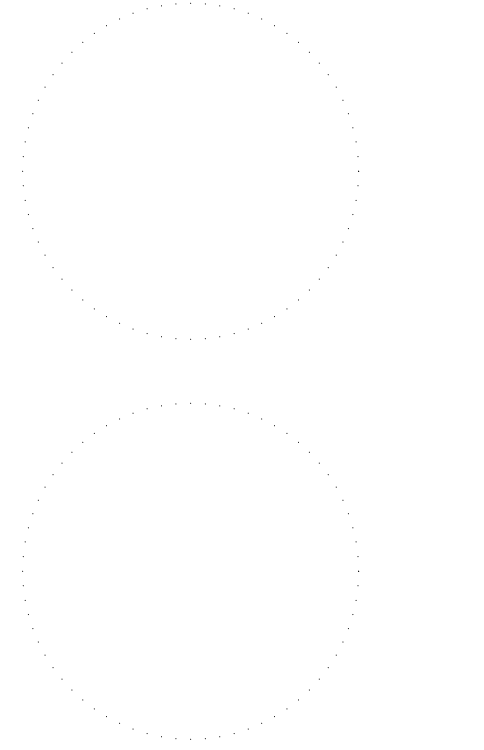
**② PARTIAL SECOND FLOOR PLAN – HVAC RENOVATIONS**  
1/4"=1'-0"



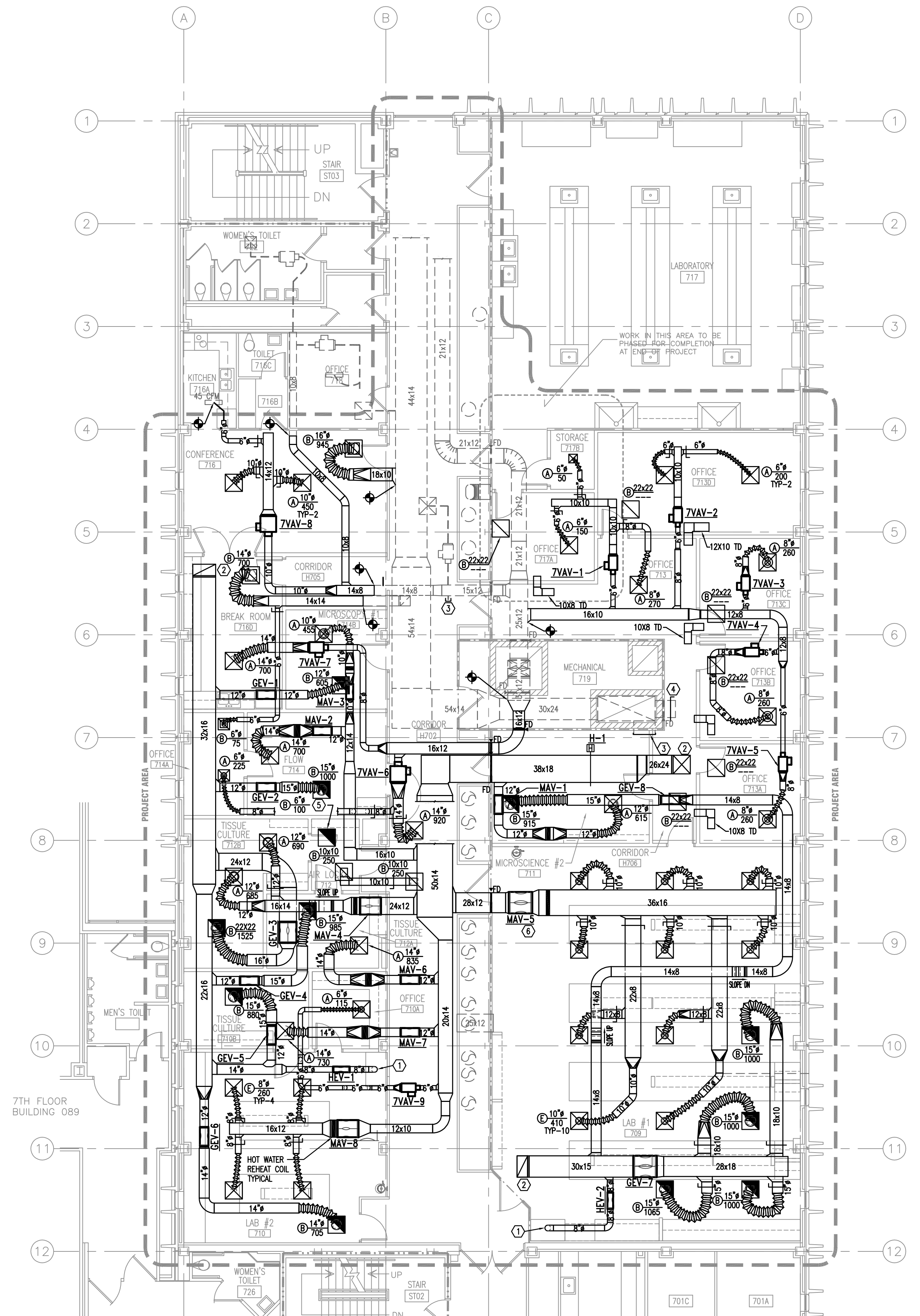
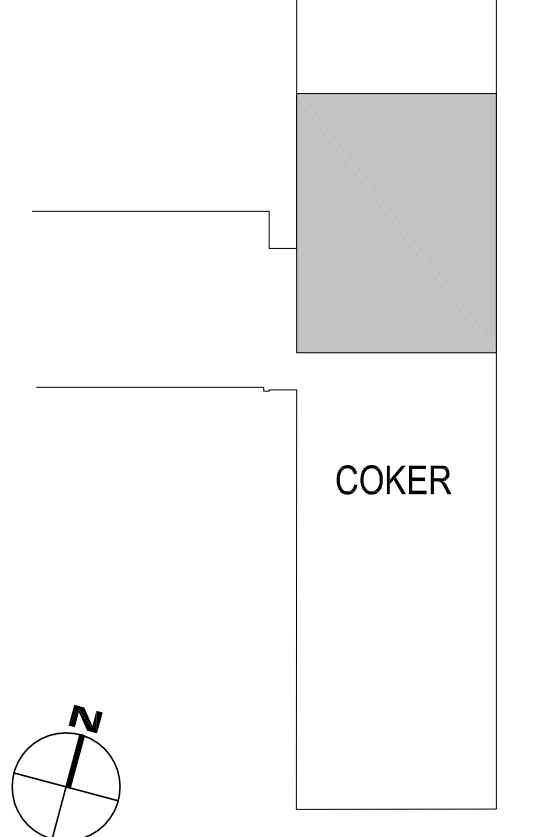
**③ PARTIAL THIRD FLOOR PLAN – HVAC RENOVATIONS**  
1/4"=1'-0"



**④ PARTIAL FOURTH THROUGH SIXTH FLOOR PLAN – HVAC RENOVATIONS**  
1/4"=1'-0"

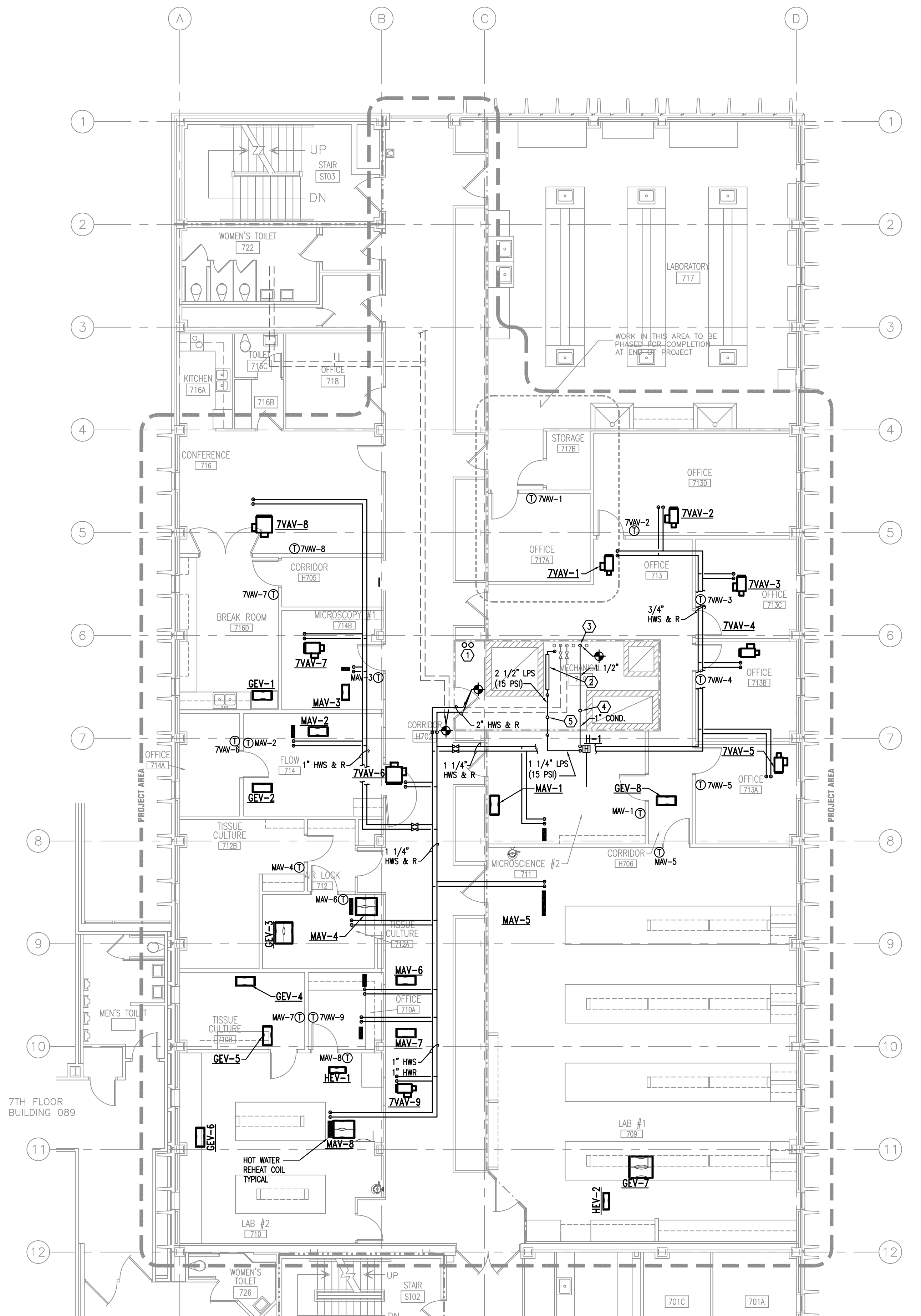


number	item	date



- NOTES:**
- ROUTE DUCT DOWN AND CONNECT TO FUME HOOD. TRANSITION DUCT AS REQUIRED TO FUME HOOD CONNECTION SIZE. COORDINATE SIZE AND LOCATION WITH FUME HOOD MANUFACTURER.
  - DUCT UP THROUGH ROOF. SEE SHEET M2.8 FOR CONTINUATION.
  - CAP AND REINSULATE EXISTING DUCT.
  - ADD NEW BALANCING DAMPER IN EXISTING RETURN DUCT AND BALANCE TO 1400 CFM.
  - 1 1/2" UP TO ET-1 ON ROOF AND DOWN TO 100". PROVIDE TRANSITION FROM 6" EXHAUST DUCT TO CONNECTION OF ET-1.
  - SEE VENTURI TYPE VALVE WITH REHEAT DETAIL FOR ADDITIONAL INFORMATION.

**1** PARTIAL SEVENTH FLOOR PLAN - HVAC DUCTWORK  
1/8"=1'-0"



- PIPING NOTES:**
- 4" CHWS & R UP TO ROOF. SEE ROOF PLAN FOR CONTINUATION.
  - NEW STEAM PRESSURE REDUCING STATION. SEE STEAM PRESSURE REDUCING STATION DETAIL ON SHEET M2.3 FOR ADDITIONAL INFORMATION.
  - 1 1/2" CONDENSATE DOWN. SEE PARTIAL MECHANICAL ROOM PLANS FOR CONTINUATION.
  - 1 1/2" CONDENSATE UP TO ROOF. SEE SHEET M2.8 FOR CONTINUATION.
  - 2" LPS (15 PS) UP TO ROOF. SEE SHEET M2.8 FOR CONTINUATION.

**2** PARTIAL SEVENTH FLOOR PLAN - HVAC PIPING  
1/8"=1'-0"

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

consultants

owner

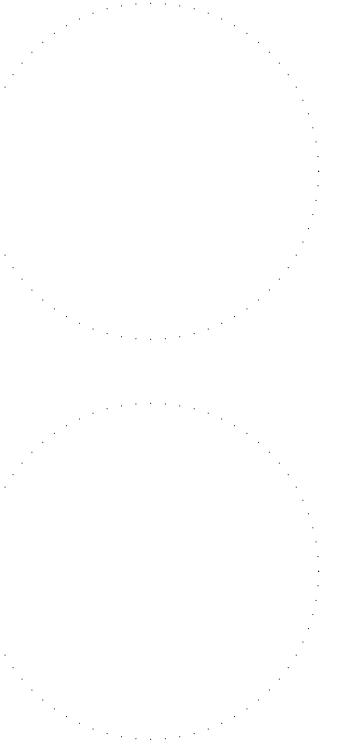


project name  
**COKER - 7th FLOOR  
PHARMACY RENOVATION**

State project number  
**H27- 6101**

project number  
**12023.01**

seals/signature

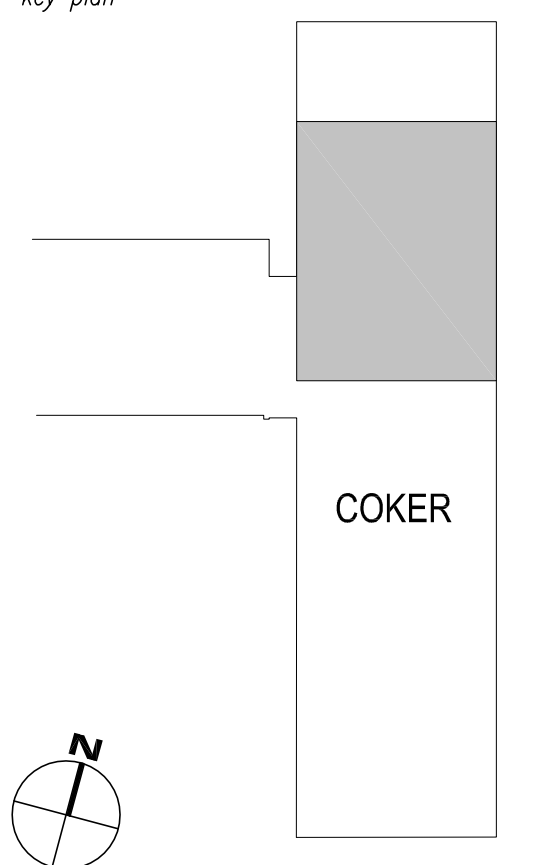


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

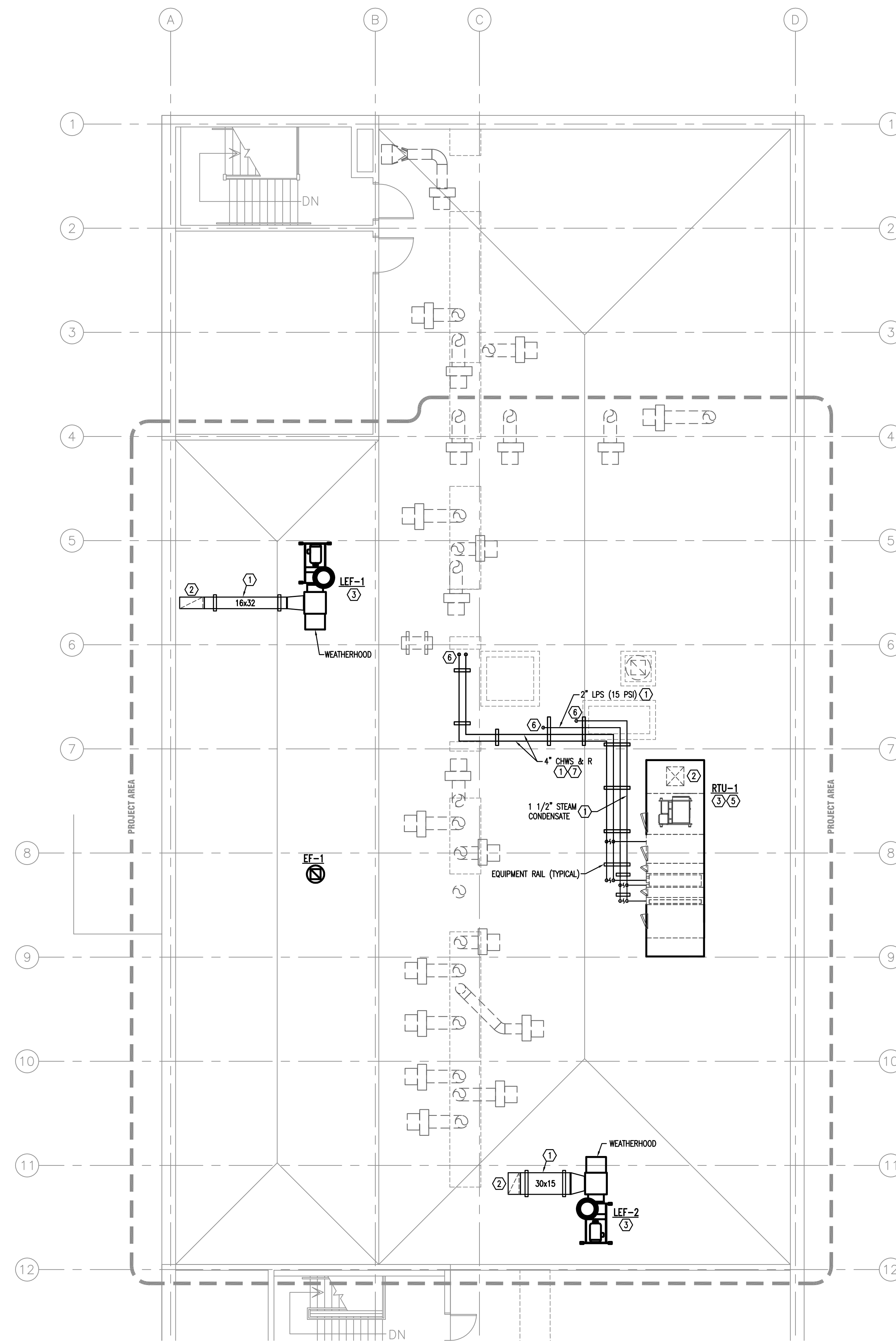


sheet title  
**PARTIAL ROOF PLAN -  
HVAC RENOVATIONS**

sheet number

**M2.8**

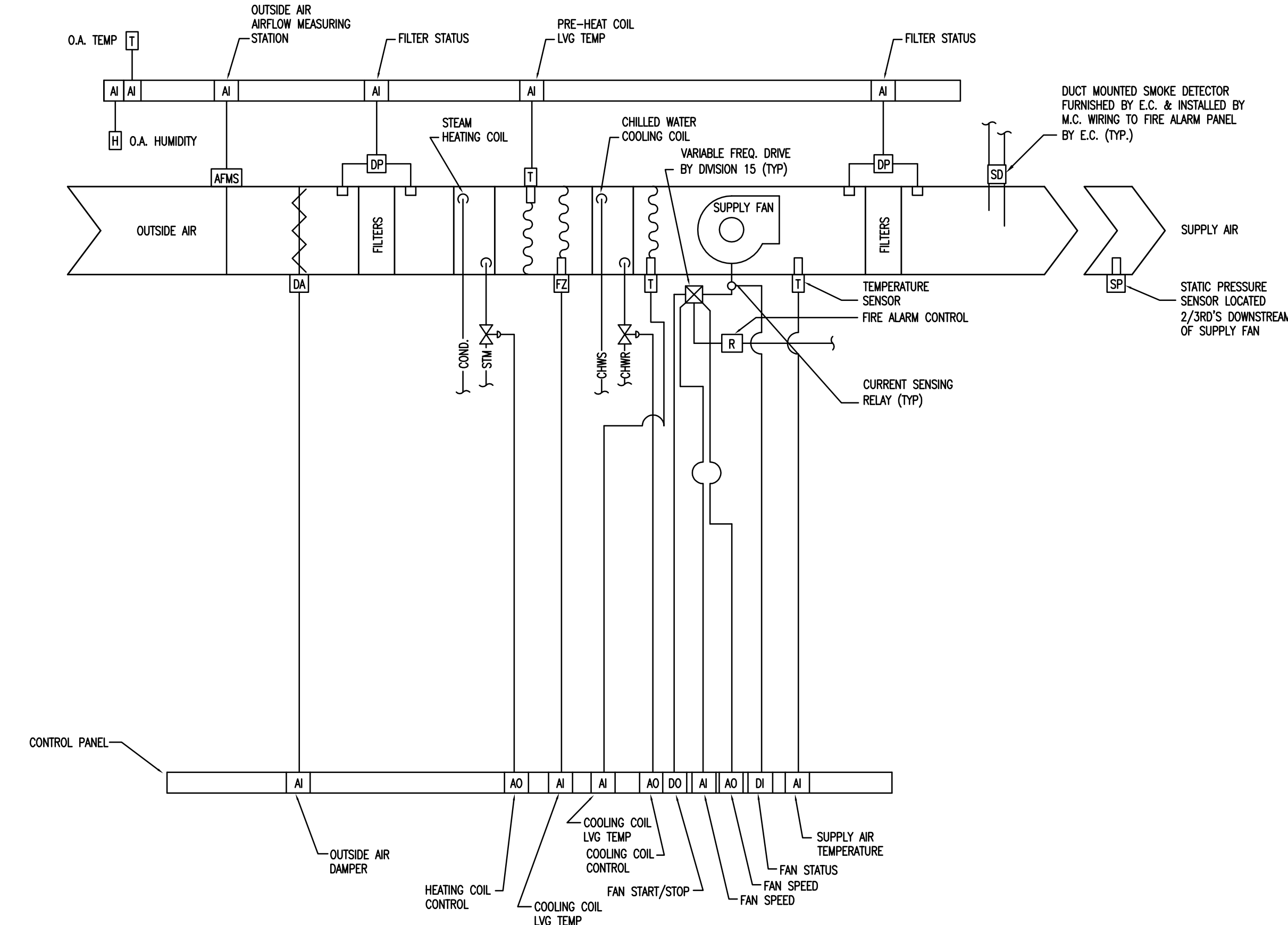
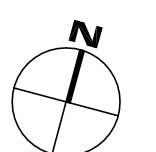
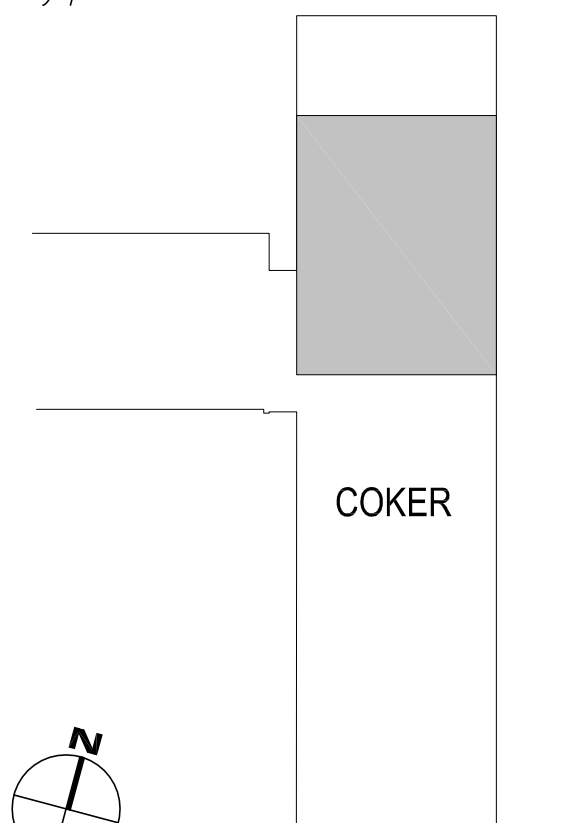
drawn by **JDR**  
checked by **JDR**



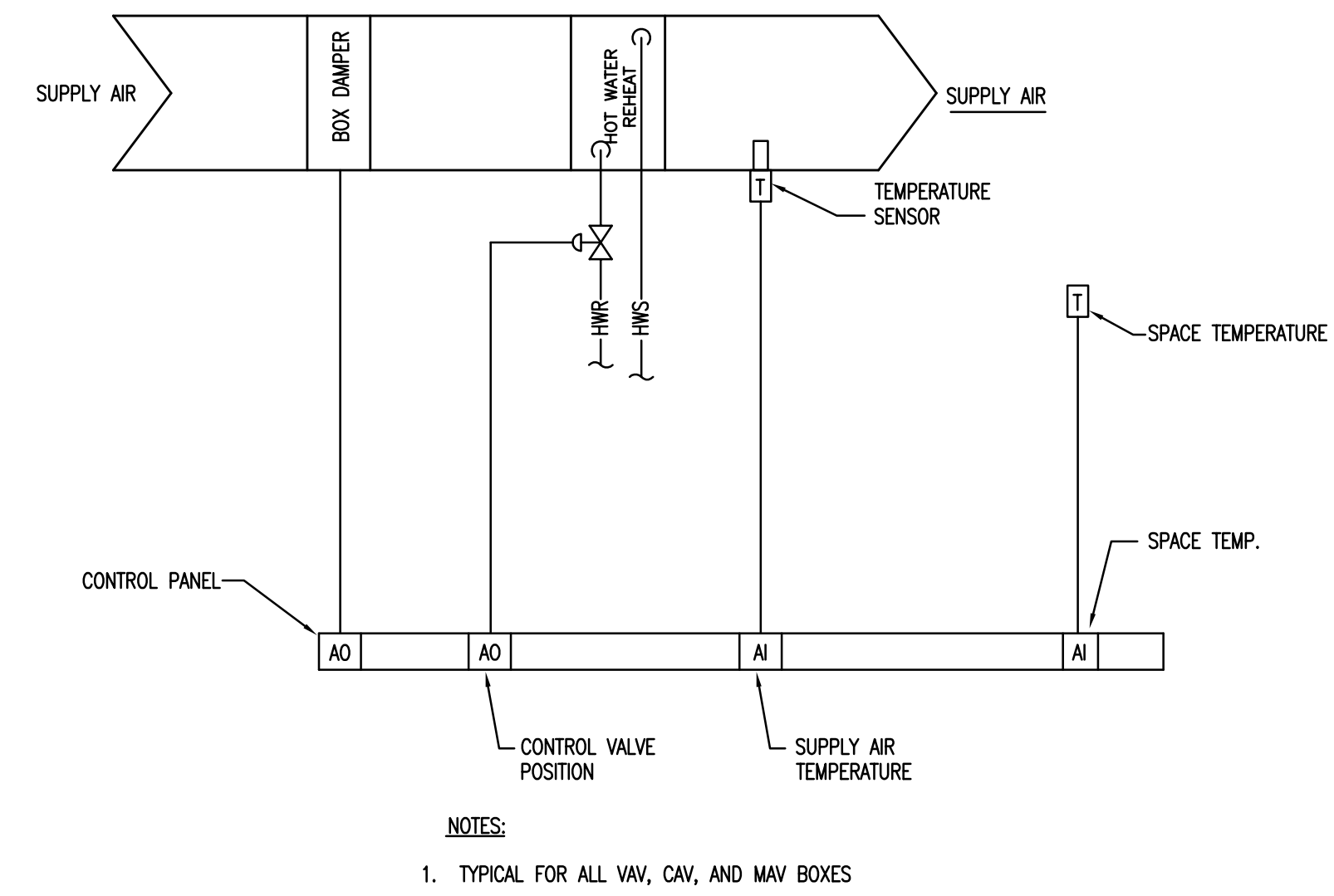
- NOTES:**
- ① INSTALL DUCTWORK AND PIPING ON EQUIPMENT RAILS. SEE EQUIPMENT RAIL DETAIL FOR ADDITIONAL INFORMATION.
  - ② DUCT DOWN THROUGH ROOF. SEE SHEET M2.7 FOR CONTINUATION. SEE ROOF FLASHING DETAILS FOR ADDITIONAL INFORMATION.
  - ③ INSTALL EXHAUST FAN ON STRUCTURAL SUPPORT. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE SUPPLEMENTAL SUPPORT TO SUPPORT FAN IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. SEE LAB EXHAUST FAN DETAIL FOR ADDITIONAL INFORMATION.
  - ④ INSTALL ROOFTOP UNIT ON STRUCTURAL SUPPORT. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
  - ⑤ PROVIDE DEEP SEAL P-TRAP FULL SIZE OF UNIT CONNECTION AND ROUTE CONDENSATE TO NEAREST ROOF DRAIN.
  - ⑥ PIPING THROUGH ROOF. SEE SHEET M2.7 FOR CONTINUATION. SEE ROOF FLASHING DETAILS FOR ADDITIONAL INFORMATION.
  - ⑦ PROVIDE HEAT TRACING ON CHILLED WATER PIPING. SEE DIVISION 16 DRAWINGS FOR CIRCUIT LOCATION. HEAT TRACING SHALL BE 5W/FT @ 120v/20A CIRCUIT.

**1 PARTIAL ROOF PLAN - HVAC RENOVATIONS**  
1/8"=1'-0"

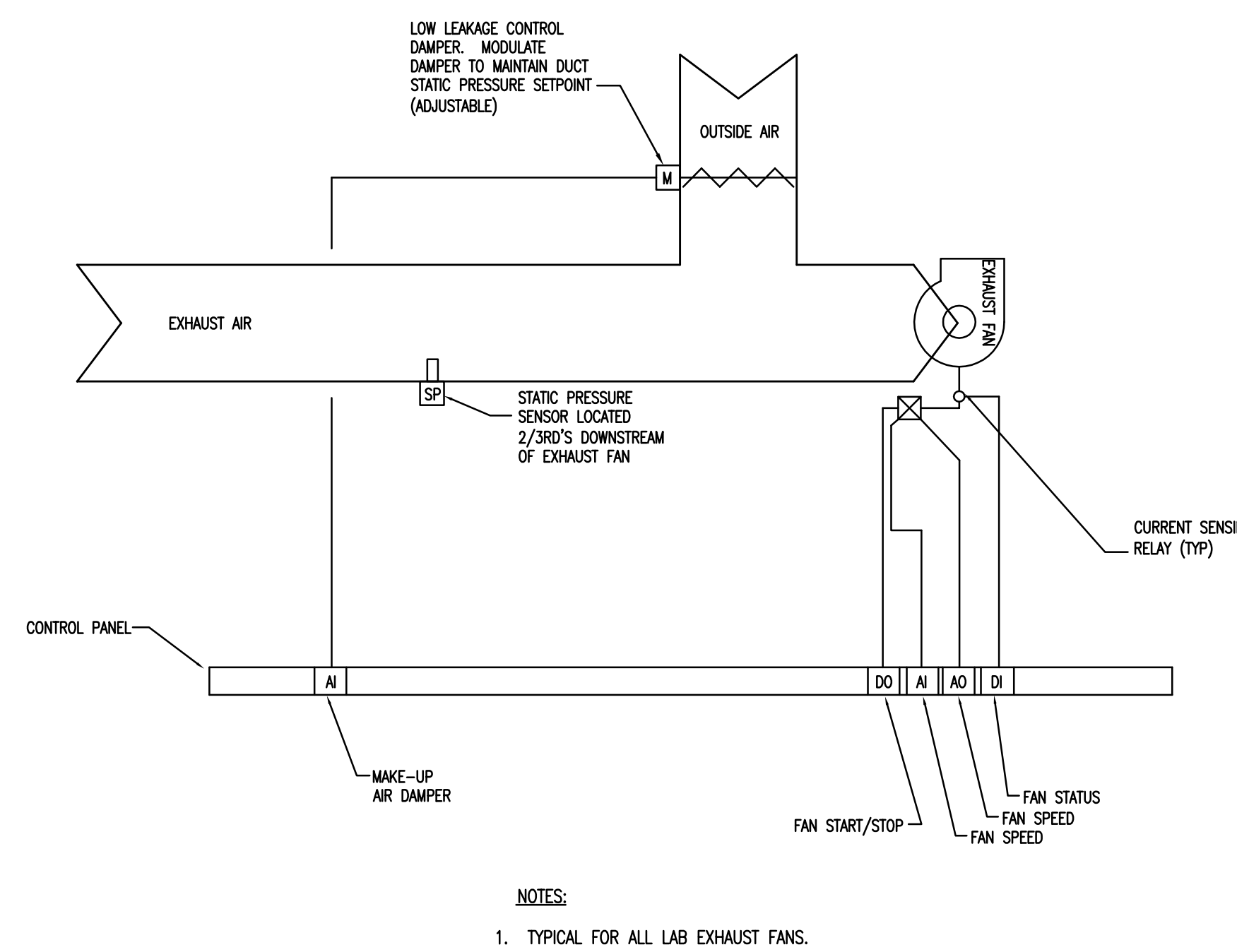
number	item	date



1 RTU-1 CONTROL DIAGRAM  
NTS



2 TERMINAL BOX CONTROL DIAGRAM  
NTS



3 LAB EXHAUST FAN CONTROL DIAGRAM  
NTS

ALL RIGHTS RESERVED. THIS DRAWING AND THE DESIGN SHOWN THEREON ARE COPYRIGHTED AS PRESCRIBED BY THE LAWS OF THE UNITED STATES AND ARE THE PROPERTY OF GMK ASSOCIATES ARCHITECTURAL DIVISION. ANYONE DUPLICATING, REPRODUCING OR CAUSING TO BE REPRODUCED THE WHOLE OR PART OF THESE DRAWINGS OR THE DESIGN THEREON WITHOUT PERMISSION OF THE ARCHITECT WILL BE SUBJECT TO LEGAL ACTION.

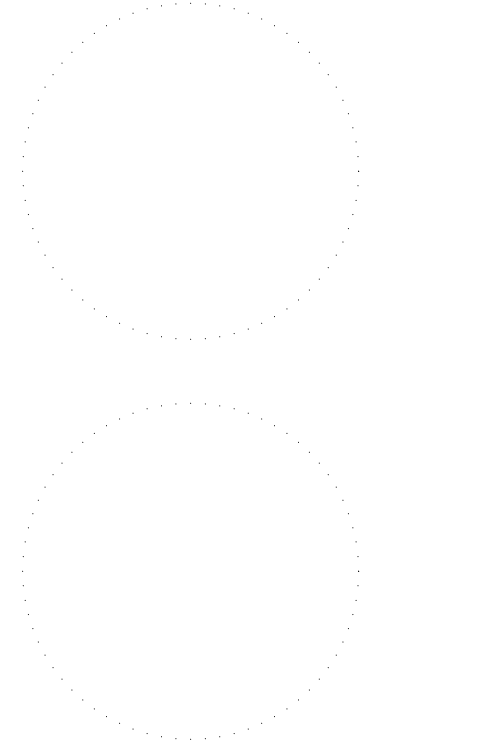
consultants

owner



project name  
**COKER - 7th FLOOR PHARMACY RENOVATION**  
State project number  
**H27- 6101**  
project number  
**12023.01**

seals/signature

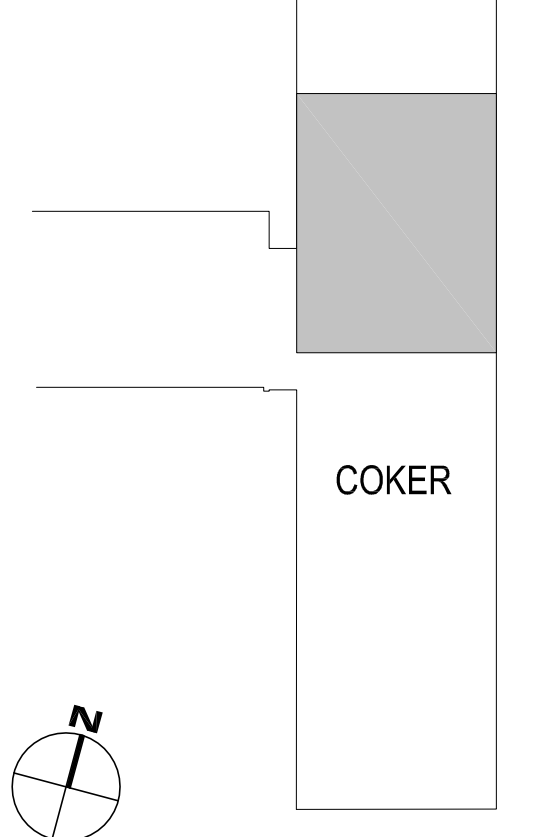


issued for  
**CONSTRUCTION**

date  
**APRIL 23, 2013**

number	item	date

key plan

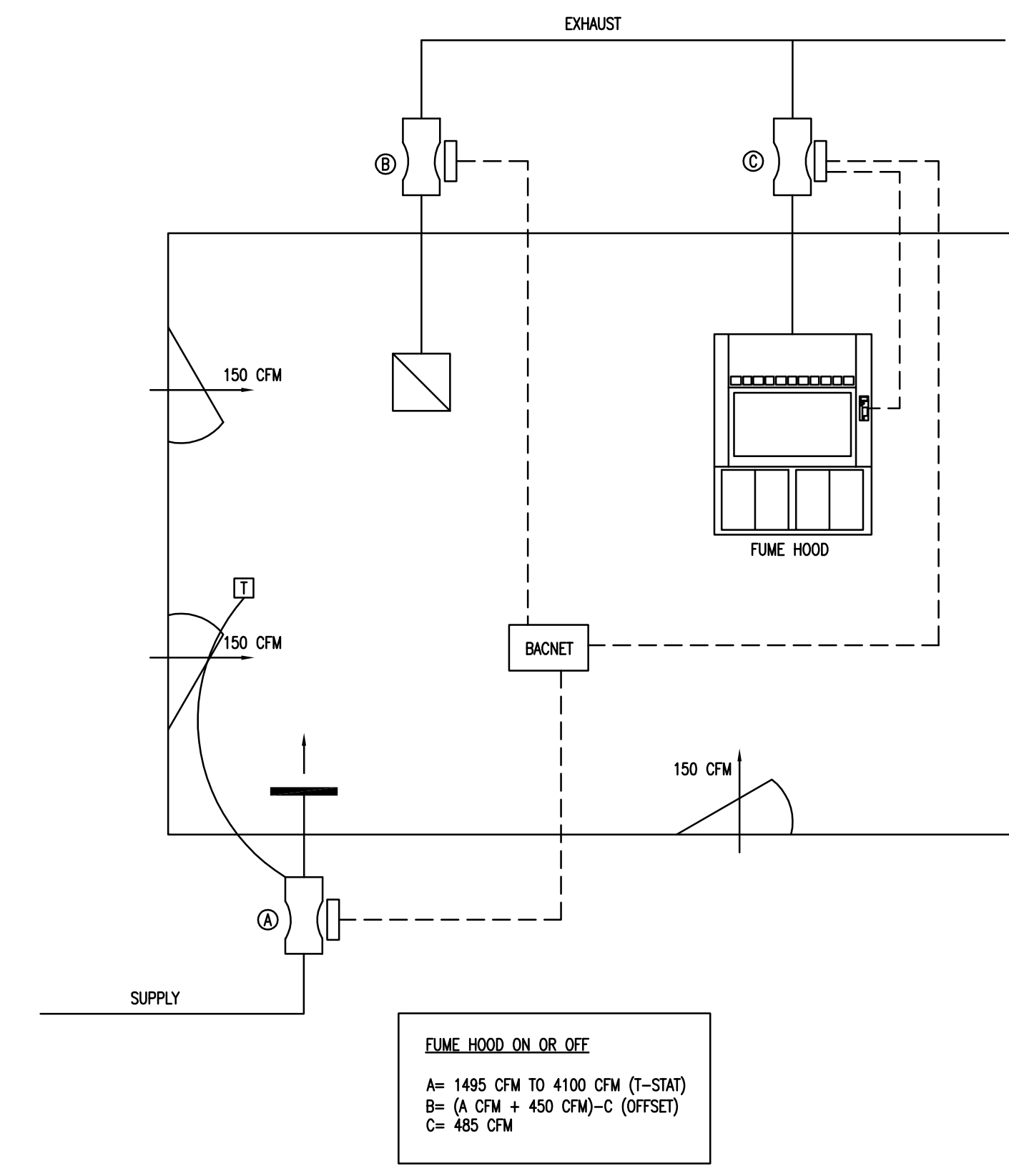


sheet title  
**HVAC CONTROL SCHEMATICS**

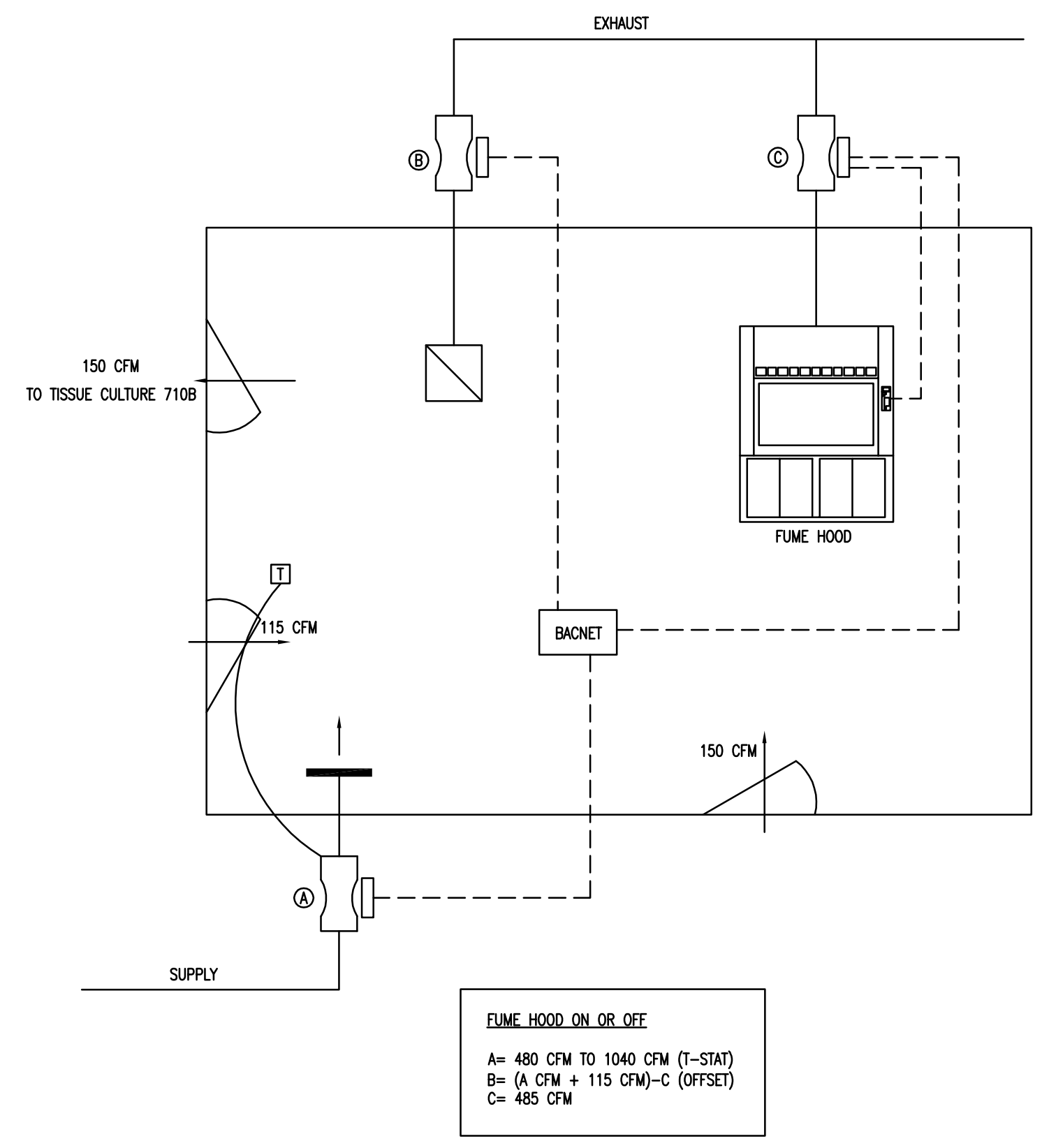
sheet number

**M5.2**

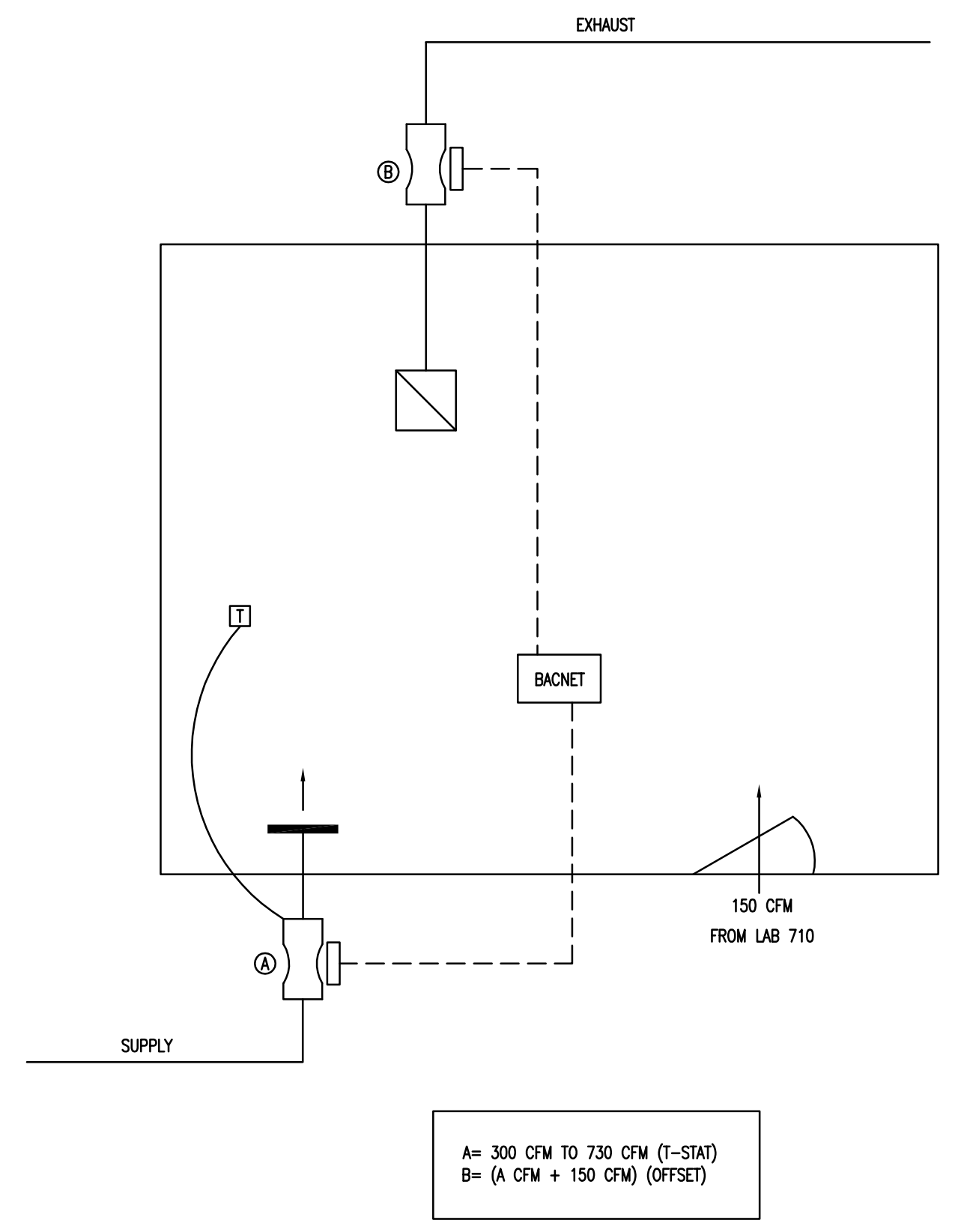
drawn by **JDR**  
checked by **JDR**



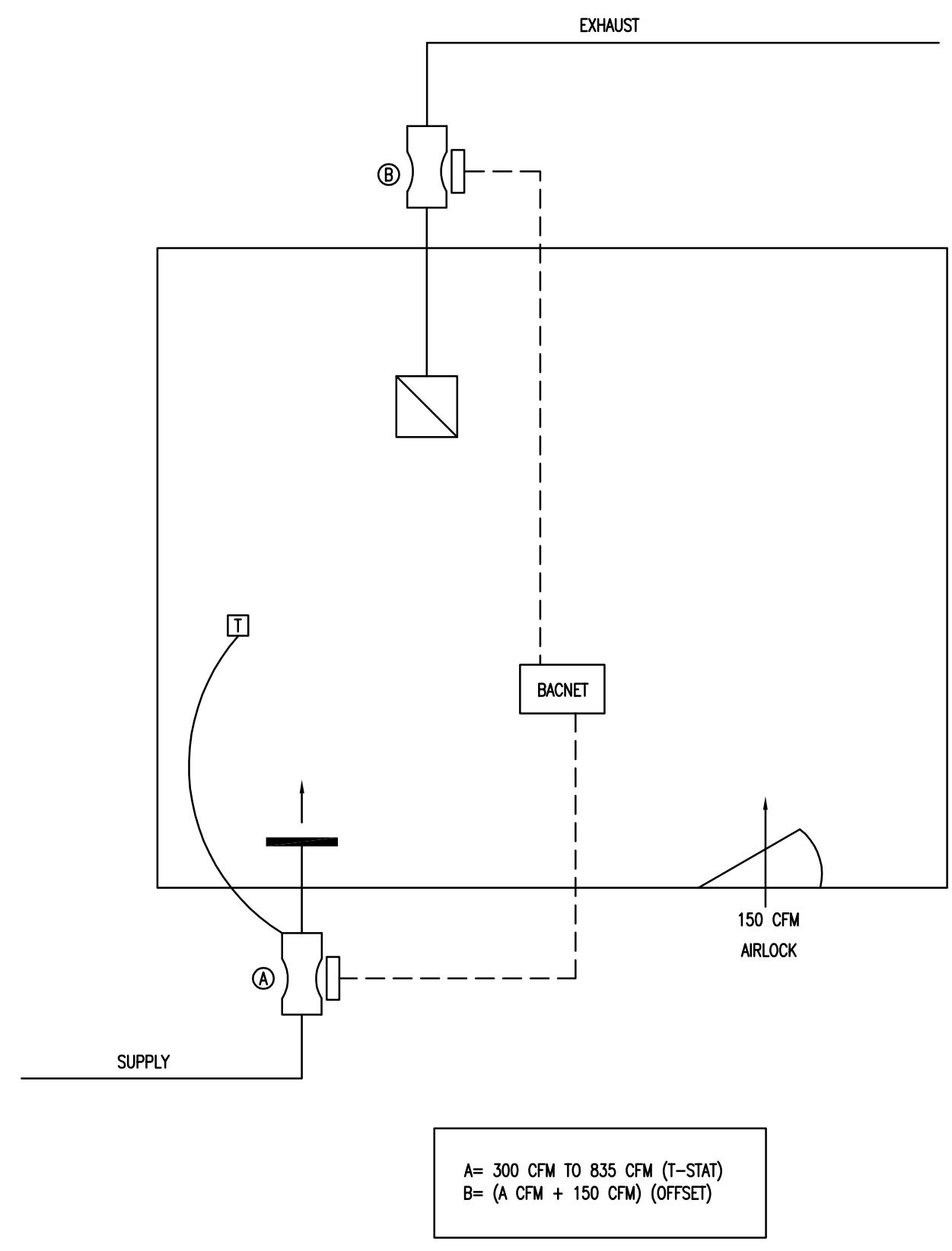
**1 LAB 709 CONTROL DIAGRAM**  
NTS



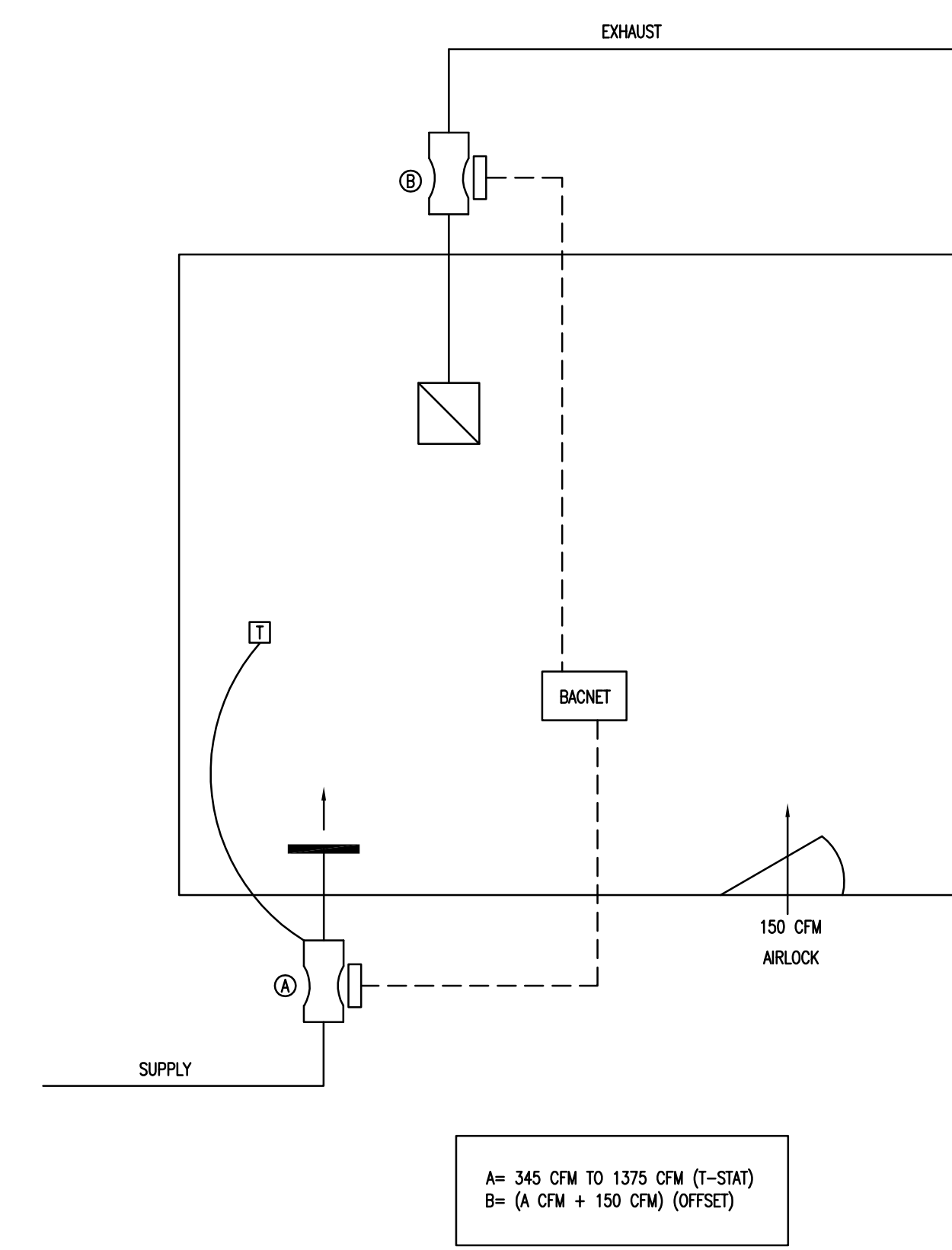
**2 LAB 710 CONTROL DIAGRAM**  
NTS



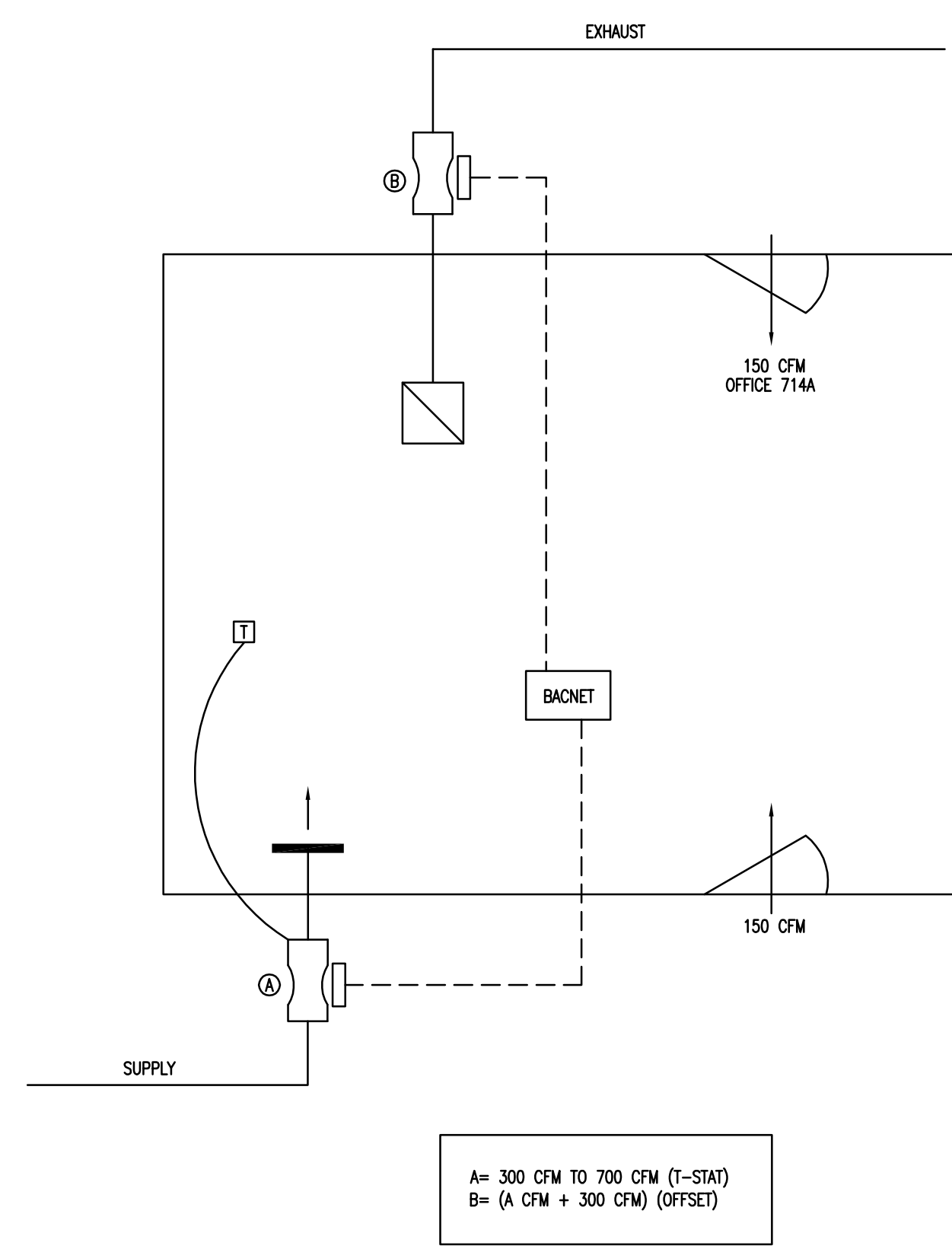
**3 TISSUE CULTURE 710B CONTROL DIAGRAM**  
NTS



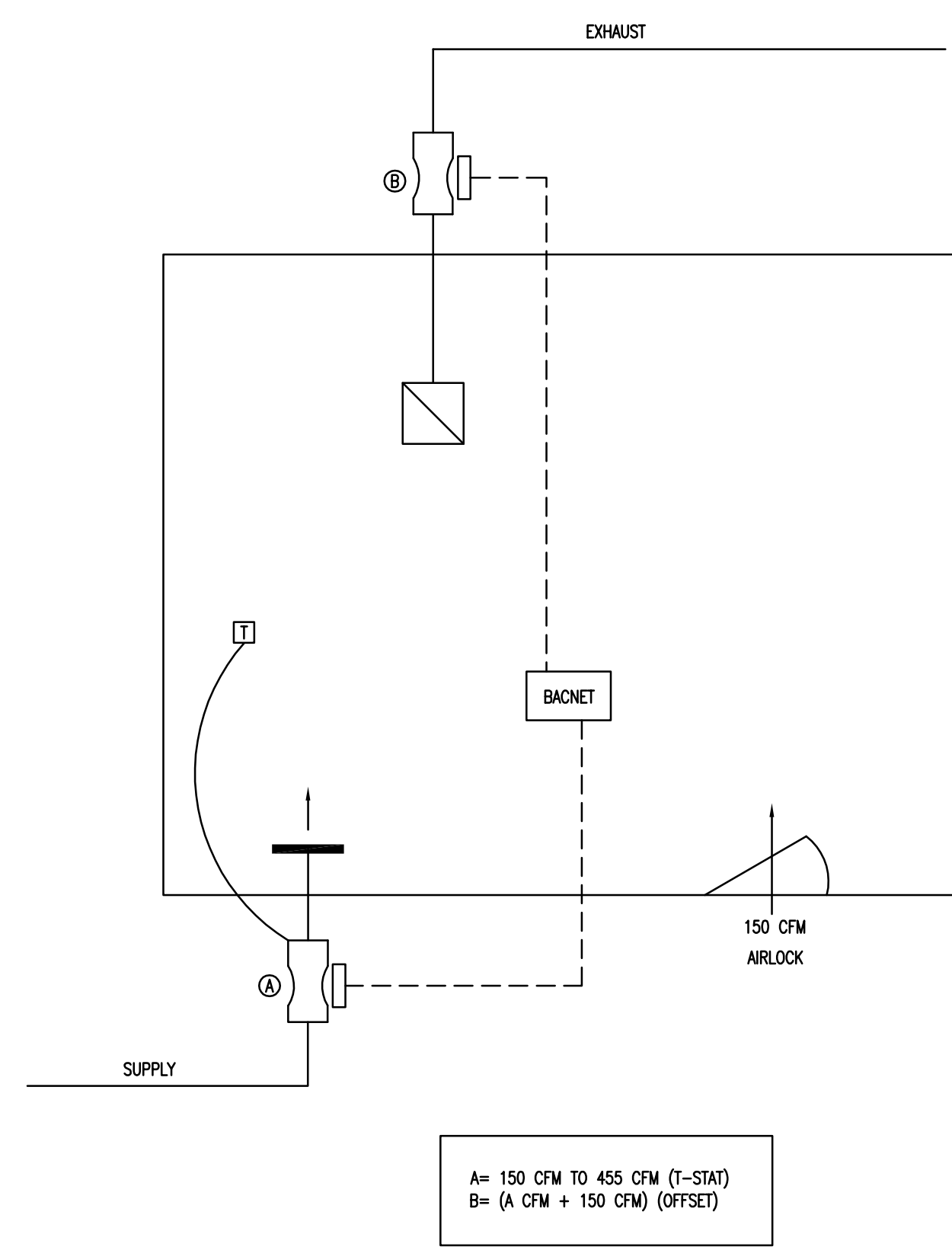
**4 TISSUE CULTURE 712A CONTROL DIAGRAM**  
NTS



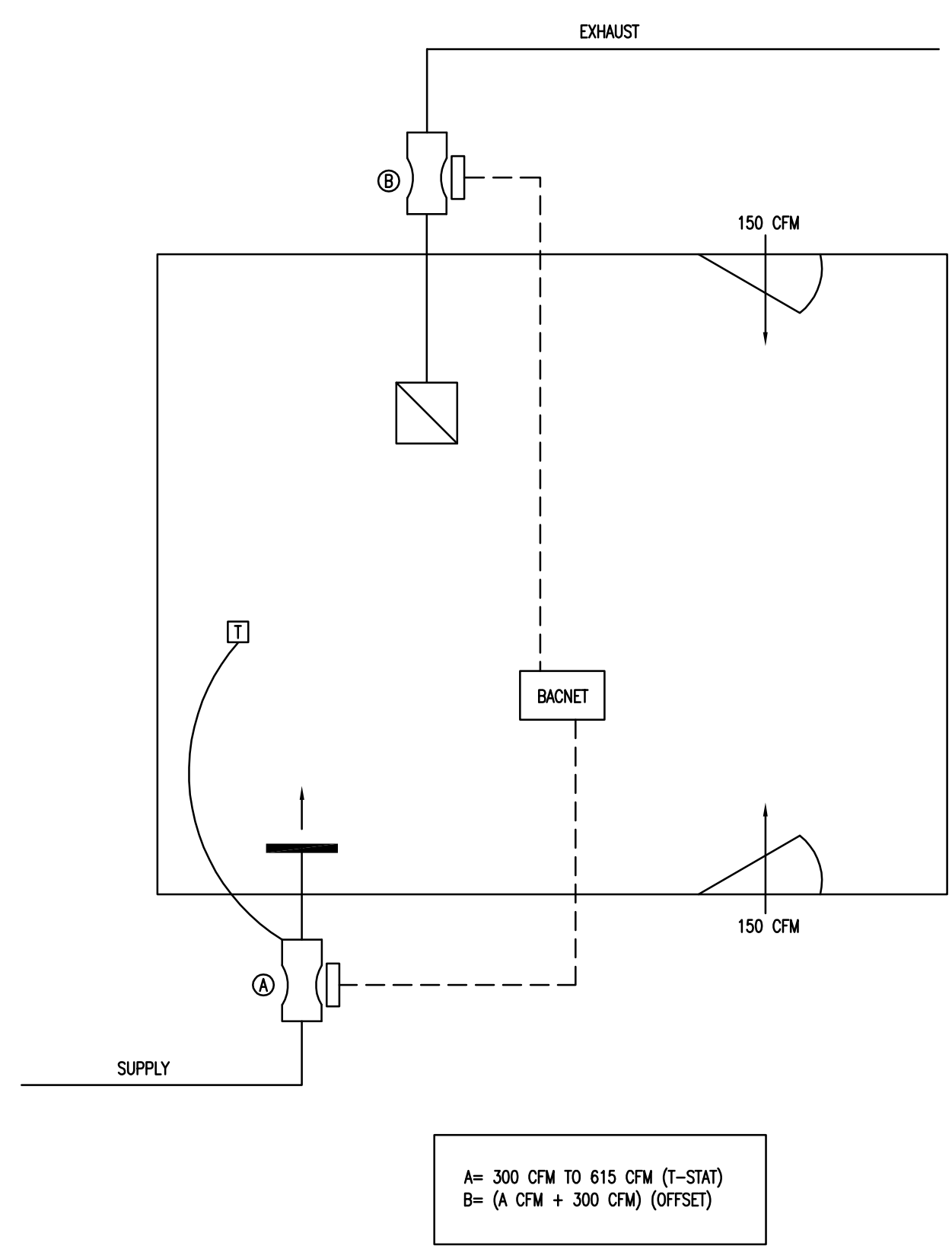
**5 TISSUE CULTURE 712B CONTROL DIAGRAM**  
NTS



**6 FLOW 714 CONTROL DIAGRAM**  
NTS



**7 MICROSCOPY 714B CONTROL DIAGRAM**  
NTS



**8 MICROSCOPY 711 CONTROL DIAGRAM**  
NTS

















