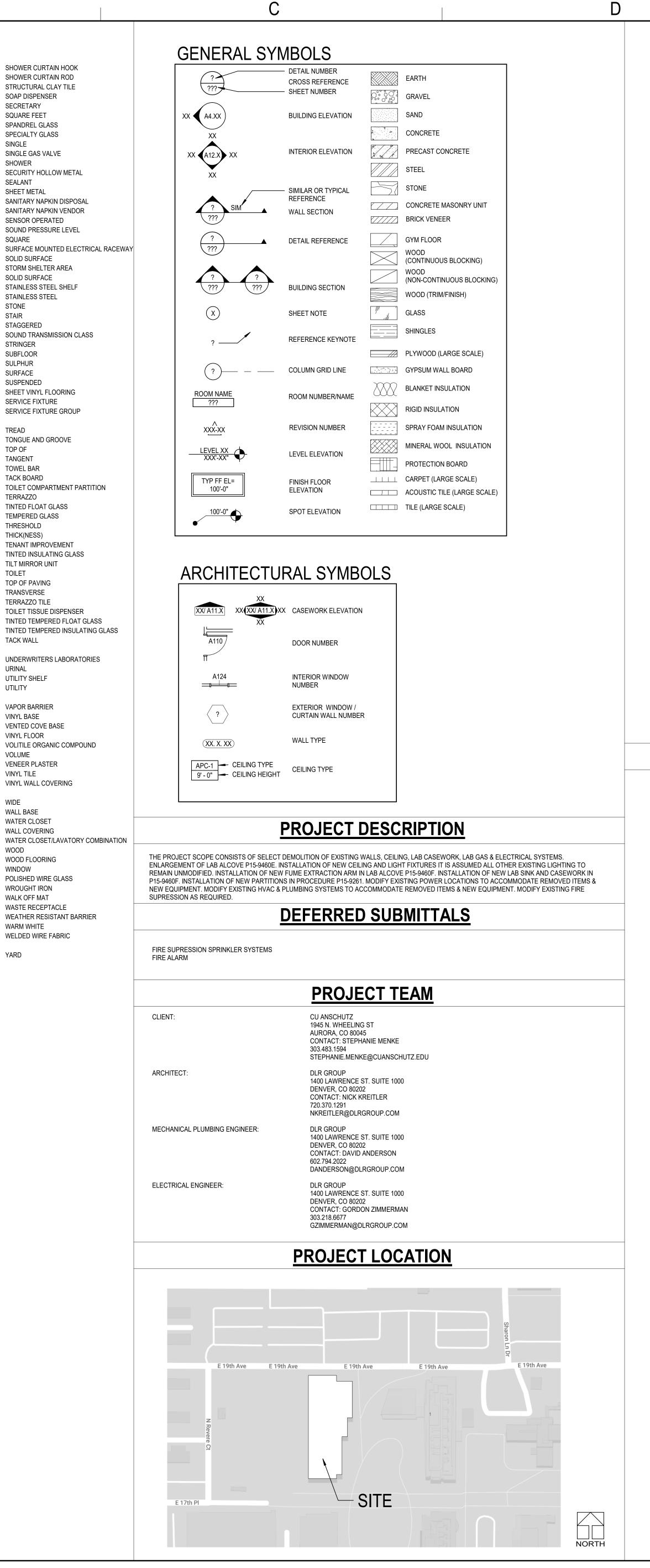
		GFA	GROSS FLOOR AREA	
A/E	ARCHITECT/ENGINEER	GFA GL GL	GLUE LAMINATED GLASS	
AB	AIR BARRIER ASBESTOS	GMP GR	GUARANTEED MAXIMUM PRICE GUARD RAIL	
ACC	ADA ACCESSIBLE ACRYLIC	GR GRS	GRADE GALVANIZED RIGID STEEL	
ACT AD	ACOUSTIC CEILING TILE	GWB GYP	GYPSUM WALL BOARD GYPSUM	
ADJ	ACCESS DOOR ADJUSTABLE			
ADJT	ADJACENT	HC	HOLLOW CORE	
ADMIN	ADMINISTRATION	HD	HAND DRYER	
AEC	AUTOMATED EXTERNAL DEFIBRILLATORS	HDF	HIGH DENSITY FIBERBOARD	
AL	ALUMINUM	HDR	HEADER	
ALUM	ALUMINUM	HDWD	HARDWOOD	
AP	ACCESS PANEL	HDWR	HARDWARE	
APC	ACOUSTIC PANEL CEILING	HM	HOLLOW METAL	
ASPH	ASPHALT	HR	HOUR	
AUTO	AUTOMATIC	HR	HANDRAIL	
AVG	AVERAGE	HS	HARDWARE SET	
AWP	ACOUSTIC WALL PANEL	HSS HVAC	HOLLOW STRUCTURAL SHAPE HEATING VENTILATING AND AIR CONDITIONING	
B.O. BCS	BOTTOM OF BABY CHANGING STATION	IAW	IN ACCORDANCE WITH	
BD	BOARD	ID	INSIDE DIAMETER	
BLK	BLOCK	IF	INSIDE FACE	
BLKG	BLOCKING	IIP	INSULATED INFILL PANEL GLASS	
BLKHD	BULKHEAD	IJ	ISOLATION JOINT	
BM(S)	BEAM(S)	IJS	IN JOIST SPACE	
BOT	BOTTOM	INC	INCLUDE(ING)	
BRDG	BRIDGING	INSUL	INSULATION	
BRG BRKT	BEARING BRACKET	JAN	JANITOR	
BT	BATHTUB	JBE	JOIST BEARING ELEVATION	
BTWN	BETWEEN	JBX	JUNCTION BOX	
CAB	CABINET	JCT JFB	JUNCTION JOINT FILLER BOARD	
CBD	CHALKBOARD	JST	JOIST	
CER	CERAMIC	JT	JOINT	
CF	CUBIC FEET CONTRACTOR FURNISHED CONTRACTOR INSTALLED	KCJ	KEYED CONSTRUCTION JOINT	
CFMF	COLD-FORMED METAL FRAMING	KD	KNOCKDOWN	
CG	CLEAR FLOAT GLASS	КН	KITCHEN HOOD	
CGD	CORNER GUARD	КІТ	KITCHEN	
CI CIG	CAST IRON CLEAR INSULATING GLASS	L	ANGLE	
CIP	CAST IN PLACE	LAB	LABORATORY	
CJ	CONTROL JOINT	LAM	LAMINATED	
CJA	CONTROL JOINT ABOVE	LAV	LAVATORY	
CLO	CLOSET	LBR	LUMBER	
CLR	CLEAR	LDG	LOADING	
CMU	CONCRETE MASONRY UNIT	LF	LINEAR FOOT	
COL	COLUMN COMMON	LG LG	LENGTH (LONG) LAMINATED GLASS	
COMB	COMBINATION COMMUNICATIONS	LIN LINO	LINEAR LINOLEUM	
COMPR	COMPRESSIBLE	LKR	LOCKER	
CONF	CONFERENCE	LOC	LOCATION	
CONFIG	CONFIGURATION	LONG	LONGITUDINAL	
CORR	CORRIDOR	LSC	LIFE SAFETY CODE	
CP	COVER PLATE	LTG	LIGHTING	
CPT	CARPET	LV	LOUVER	
CR	CHAIR RAIL	LVT	LUXURY VINYL TILE	
CS CSTJ	COUNTERSINK CONSTRUCTION JOINT	MAG	MAGNETIC	
CSWK	CASEWORK	MAINT	MAINTENANCE	
CT	CERAMIC TILE	MAN	MANUAL	
CTG	CLEAR TEMPERED FLOAT GLASS	MAS	MASONRY	
CTIG	CLEAR TEMPERED INSULATING GLASS	MATL	MATERIAL	
CU	COPPER	MB	MOP BASIN	
CU	COMBINATION UNIT	MBD	MARKER BOARD	
CV	CONDOM VENDOR	MBH	MOP/BROOM HOLDER	
CY	CUBIC YARD	MC	MEDICINE CABINET	
CYL	CYLINDER	ME MEMB MH	MEMBRANE	
DB	DECIBEL	MR/S	MANHOLE MIRROR WITH SHELF	
DBL	DOUBLE	MTD	MOUNTED	
DC	DUST COLLECTOR	MTG	MOUNTING	
DEPR DEPT	DEPRESS(ION)(ED) DEPARTMENT	MUL	MULLION	
DET	DETENTION	NC	NOISE CRITERIA	
DF	DRINKING FOUNTAIN	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	
DG DIAG	DOOR GRILLE DIAGONAL	NOM	NOMINAL	
DPFG	DAMPROOFING	O to O	OUT TO OUT	
DR	DOOR	OA	OVERALL	
DSN	DOWNSPOUT NOZZLE	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	
DW	DISHWASHER	OFF	OFFICE	
DWL(S)	DOWEL(S)	OFOI	OWNER FURNISHED OWNER INSTALLED	
DWR	DRAWER	OH	OPPOSITE HAND	
		OPG(S)	OPENING(S) OPERATIONAL SAFETY AND HEALTH ADMINISTRATION	
EB EE	EXPANSION BOLT EACH END	OSHA OTB	OPEN TO BELOW	
EEW EEWS	EMERGENCY EYE WASH EMERGENCY EYE WASH SHOWER	OVFL	OVERFLOW	
EFF	EFFICIENCY	P	PAINT	
EJ	EXPANSION JOINT	PAN B	PANIC BOLT	
ELAS ELEV	ELASTOMERIC ELEVATOR	PB PC	PARTICLE BOARD PRECAST CONCRETE	
EMER	EMERGENCY	PCD	PAPER CUP DISPENSER	
ENCL	ENCLOSURE	PCT	PORCELAIN CERAMIC TILE	
ENTR	ENTRANCE	PD	PANIC DEVICE	
ERF	EPOXY RESIN FLOORING	PERF	PERFORATED	
EUI	ENERGY USE INTENSITY	PERP	PERPENDICULAR	
EW	EACH WAY	PG	PATTERN GLASS	
EWC EXP	ELECTRIC WATER COOLER EXPANSION	PIC PIG	PATTERN GLASS PORTABLE INSTRUMENT CONNECTION PATTERN INSULATING GLASS	
EXP EXP	EXPOSED	PL	PLATE	
F	FABRIC	PL PL	PROPERTY LINE PLASTIC LAMINATE	
F.O.	FACE OF	PLAM	PLASTIC LAMINATE	
FAB	FABRICATE(D)	PLBG	PLUMBING	
FB	FACE BRICK	PR	PAIR	
FD	FLOOR DRAIN	PREFAB	PREFABRICATED	
FDN	FOUNDATION	PROJ	PROJECT(OR) (ION)	
FE	FIRE EXTINGUISHER	PS	PROJECTION SCREEN	
FEC	FIRE EXTINGUISHER CABINET	PT	POINT	
FF	FINISH FLOOR	PT	POINT OF TANGENCY	
FH	FIRE HYDRANT	PTD	PAPER TOWEL DISPENSER	
FHC	FIRE HOSE CABINET	PTD/R	COMBINATION TOWEL DISPENSER/RECEPTACLE	
FIG FIX	FIGURE	PTD/R PTN PVC	PARTITION POLYVINYL CHLORIDE	
FIX FLASH FLEX	FLASHING FLEXIBLE	PVC PWL	SOUND POWER LEVEL	
FLG	FLOORING	QGV	QUAD GAS VALVE	
FLM	FULL LENGTH MIRROR	QT	QUARRY TILE	
FLUOR	FLUORESCENT	QTR RND	QUARTER ROUND	
FO FOC	FINISH OPENING FACE OF CONCRETE	R	RISER	
FOF	FACE OF FINISH	RAD	RADIUS	
FOM	FACE OF MASONRY	RB	RUBBER BASE	
FOS	FACE OF STUD	RC	REMOTE CONTROL	
FOW	FACE OF WALL	RCP	REFLECTED CEILING PLAN	
FDW FP FR	FIRE RESISTANT	RD REF	ROOF DRAIN REFERENCE	
FRP	FIBERGLASS REINFORCED PANEL	REFL	REFLECTED	
FRT	FIRE RESISTANCE TREATED	REM	REMOVABLE	
FS	FLOOR SINK	RESIL	RESILIENT	
FSS	FOLDING SHOWER SEAT	RF	RESILIENT FLOORING	
FTG	FOOTING	RF	RUBBER FLOOR	
FVC	FIRE VALVE CABINET	RFM	RECESSED FLOOR MAT	
FWC	FABRIC WALL COVERING	RH	ROBE HOOK	
G	GROUT	RI&C	ROUGH IN AND CONNECT	
	GAUGE GALLON	S SAT	SINK SPRAYED ACOUSTIC TREATMENT	
GA GAL			SOUND ABSORBING WALL UNITS	
GAL GALV	GALVANIZED GRAB BAR	SAW SB	SPLASH BLOCK	
GAL	GALVANIZED GRAB BAR GARBAGE DISPOSAL GENERAL	SAW SB SC SC		

A

G'D NS



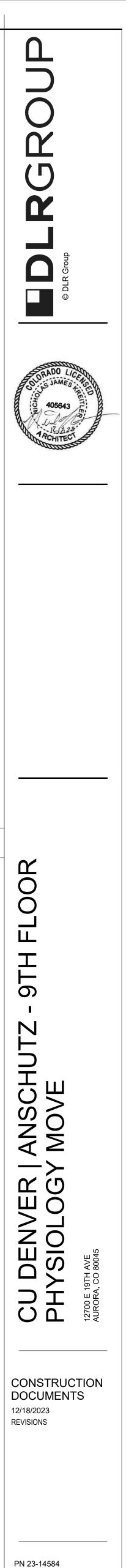
# UNIVERSITY OF COLORADO DENVER ANSCHUTZ MEDICAL CAMPUS R2 9TH FLOOR PHYSIOLOGY MOVE

# PN 23-145834 12700 E 19TH AVE AURORA, CO 80045 **COMBINED CONTRACT**

INDEX OF DRAWINGS

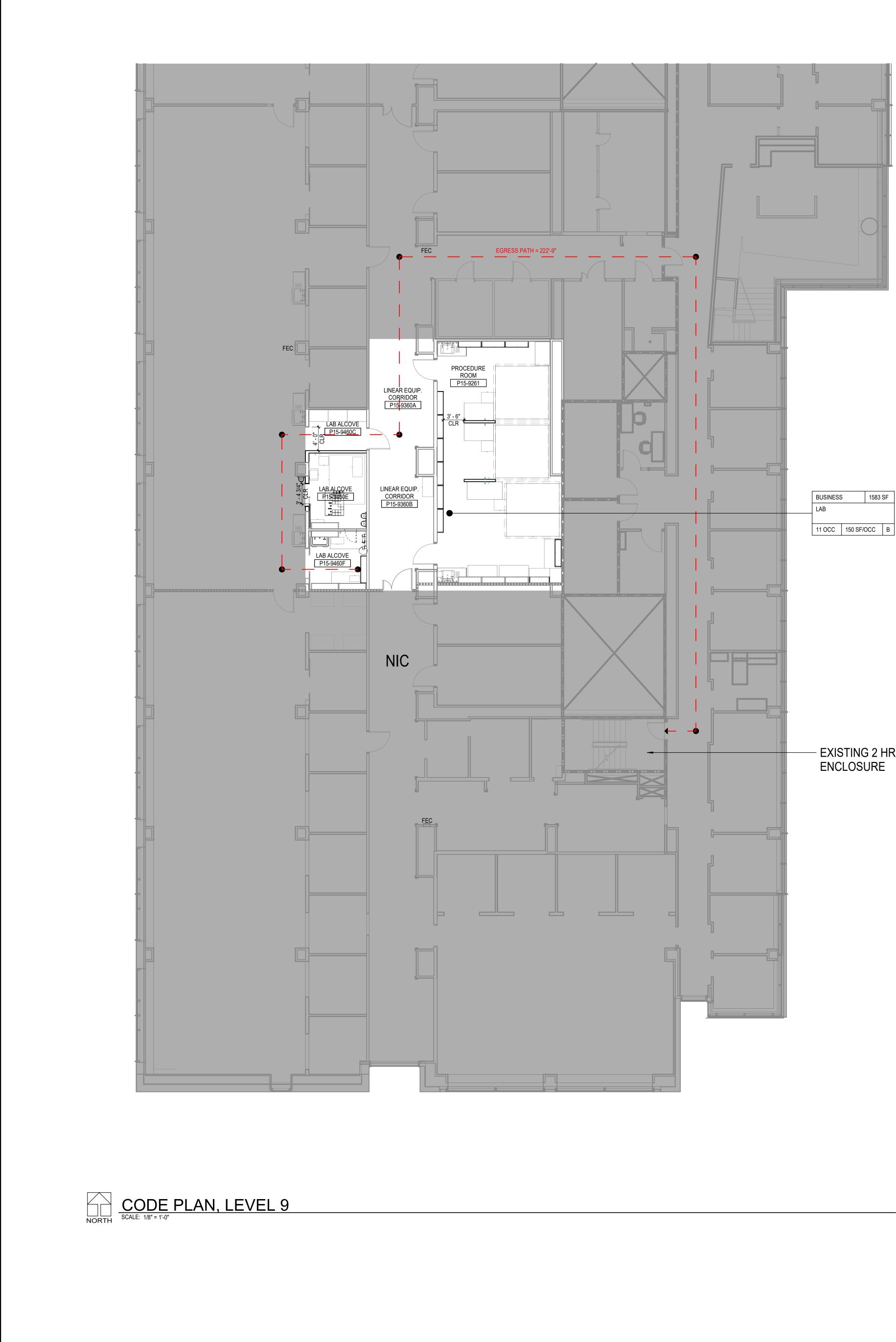
	.GENERAL.		.PLUMBING.
G0.1	COVER SHEET	P0.1	PLUMBING GENERAL NOTES & SYMBOLS
	.CODE.	PD2.1	LEVEL 09 - PLUMBING DEMOLITION PLAN
CP1.9	CODE PLAN - LEVEL 9	P2.1	LEVEL 09 - PLUMBING PLAN
	.ARCHITECTURAL.	P6.1	PLUMBING SCHEDULES
AD1.9	DEMOLITION PLAN AND REFLECTED CEILING PLAN - LEVEL 9		.MECHANICAL.
A1.9	FLOOR PLAN AND REFLECTED CEILING PLAN - LEVEL 9	M0.1	MECHANICAL SYMBOLS, ABBREVIATIONS & NOTES
A8.1	PARTITION TYPES, DOOR SCHEDULE, AND DETAILS	MD1.9	LEVEL 09 - MECHANICAL DEMOLITION PLANS
	.INTERIORS.	M1.9	LEVEL 09 - MECHANICAL PLANS
	.INTERIORS.	M7.1	MECHANICAL DETAILS & SCHEDULES
A11.1	INTERIOR DETAILS		
A12.9	FINISH FLOOR PLAN AND SCHEDULE - LEVEL 9		
	LABORATORY		.ELECTRICAL.
		E0.1	ELECTRICAL SYMBOLS, ABBREVIATIONS & NOTES
QL1.9	ENLARGED EQUIPMENT PLAN AND SCHEDULE - LEVEL 9	ED1.1	ELECTRICAL DEMOLITION PLAN - LEVEL 9
		E1.0	FLOOR PLAN - LEVEL 9
	.FIRE PROTECTION.	E5.1	ELECTRICAL DIAGRAMS
FP0.1 FP1.1	FIRE PROTECTION SYMBOLS & ABBREVIATIONS LEVEL 09 - FIRE PROTECTION PLAN		

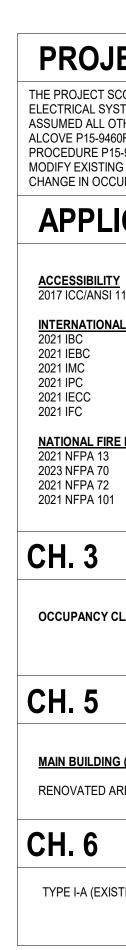




37-24103-00 COVER SHEET







EXISTING 2 HR RATED STAIR
 ENCLOSURE

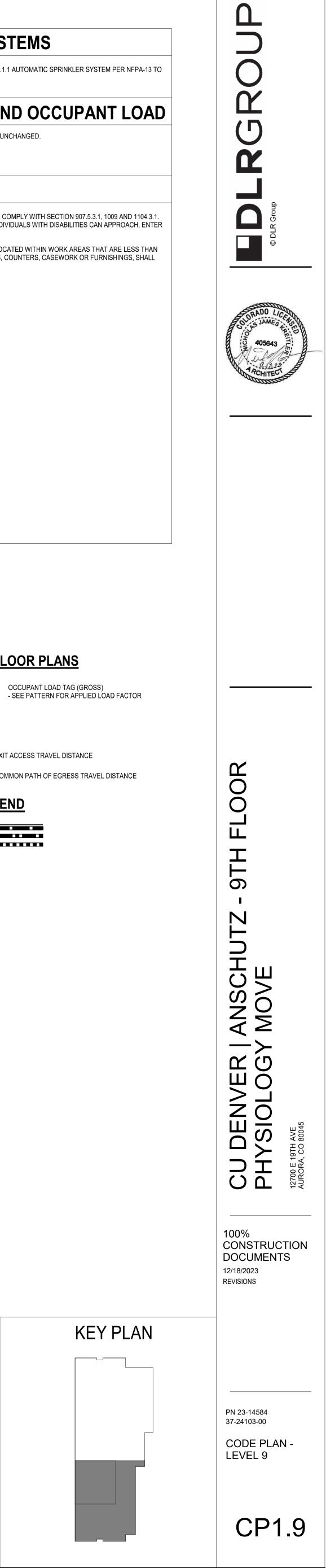
ECT DESCRIPTION	<b>CH.9 FIRE PROTECTION SYSTEMS</b>
COPE CONSISTS OF SELECT DEMOLITION OF EXISTING WALLS, CEILING, LAB CASEWORK, LAB GAS & GTEMS. ENLARGEMENT OF LAB ALCOVE P15-9460E. INSTALLATION OF NEW CEILING AND LIGHT FIXTURES IT IS THER EXISTING LIGHTING TO REMAIN UNMODIFIED. INSTALLATION OF NEW FUME EXTRACTION ARM IN LAB OF. INSTALLATION OF NEW LAB SINK AND CASEWORK IN P15-9460F. INSTALLATION OF NEW PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW PARTITIONS IN CASEWORK OF ACCOMMODATE DEMOVED FEMOLS & NEW FOUR FUME IN THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK FOR ACCOMMODATE DEMOVED FEMOLS & NEW FOUR FUME IN FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN CASEWORK IN P15-9460F. INSTALLATION OF NEW FOR THE PARTITIONS IN FILLY FOR THE PARTITIONS IN FILLY FOR THE PARTITION FOR	BUILDING IS FULLY SPRINKLERED IN ACCORDANCE WITH 903.2 AND 903.3.1.1 AUTOMATIC SPRINKLER SY BE MODIFIED AS REQUIRED.
5-9261. MODIFY EXISTING POWER LOCATIONS TO ACCOMMODATE REMOVED ITEMS & NEW EQUIPMENT. G HVAC & PLUMBING SYSTEMS TO ACCOMMODATE REMOVED ITEMS & NEW EQUIPMENT. THERE WILL BE NO JPANCY COUNT AND EXISTING EXITING WILL REMAIN.	CH.10 MEANS OF EGRESS AND OCCUPA
CABLE CODES	OCCUPANCY LOAD REMAINS UNCHANGED, MEANS OF EGRESS REMAINS UNCHANGED. EXIT TRAVEL DISTANCE B OCCUPANCY - 300'-0"
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES <u>IL BUILDING CODE</u> INTERNATIONAL BUILDING CODE AND STATE AMENDEMNTS	CH. 11 ACCESSIBILITY
INTERNATIONAL EXISTING BUILDING CODE INTERNATIONAL MECHANICAL CODE INTERNATIONAL PLUMBING CODE INTERNATIONAL ENERGY CONSERVATION CODE INTERNATIONAL FIRE CODE	SPACES WITHIN EMPLOYEE WORK AREAS SHALL ONLY BE REQUIERD TO COMPLY WITH SECTION 907.5. NEW CONSTRUCTION TO BE DESIGNED AND CONSTRUCTED SO THAT INDIVIDUALS WITH DISABILITIES O AND EXIT THE WORK AREA.
E PROTECTION CODE STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS NATIONAL ELECTRIC CODE NATIONAL FIRE ALARM AND SIGNALING CODE LIFE SAFETY CODE	1104.3.1 EMPLOYEE WORK AREAS EXCEPTION 1: COMMON USE PATHS LOCATED WITHIN WORK AREAS 1,000 SF IN SIZE AND DEFINED BY PERMANENTLY INSTALLED PARTITIONS, COUNTERS, CASEWORK OR I NOT BE REQUIED TO BE ACCESSIBLE ROUTES.
OCCUPANCY CLASSIFICATION AND USE	
LASSIFICATION AND USE REMAINS UNCHANGED	
BUILDING AREA	
(EXISTING BUILDING AREA) EXISTING BUILDING. NO CHANGE IN AREA PROPOSED.	
EXISTING BUILDING AREA) EXISTING BUILDING. NO CHANGE IN AREA PROPOSED.	
(EXISTING BUILDING AREA) EXISTING BUILDING. NO CHANGE IN AREA PROPOSED. REA: 1381 SF	

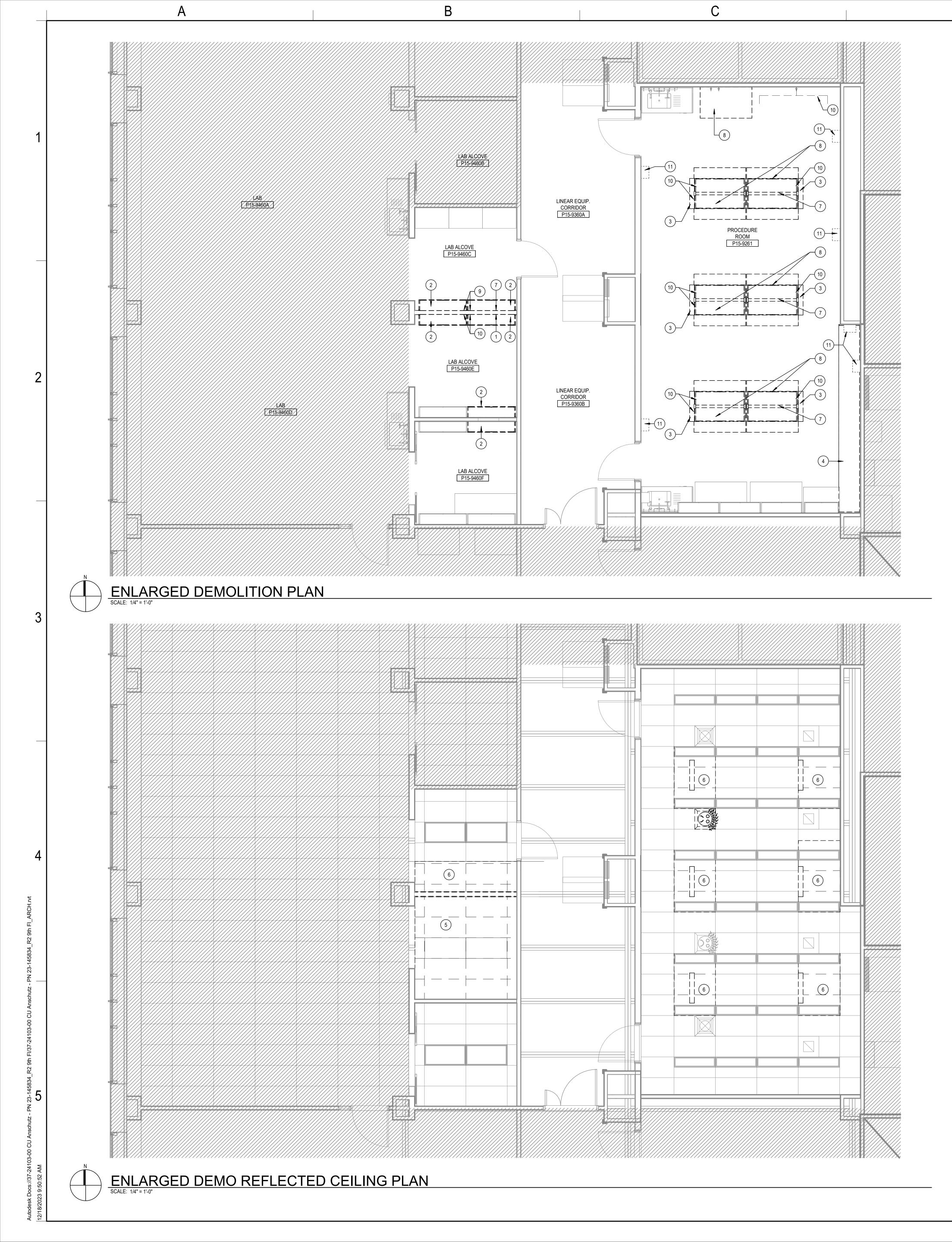
# LEGEND - CODE FLOOR PLANS

	Area name	XXXX SF		OCCUPANT LOAD TAG (GRO - SEE PATTERN FOR APPLIE				
	Space Fun	ction			- SEE PATTERIN FOR APPLIE			
	XXX OCC	XXX SF/	000	G				
M	AX TRAVEL	= Length	►	E	EXIT ACCESS TRAVEL DISTANCE			
MAX CP = Length								
<b>)</b>			0	(	COMMON PATH OF EGRESS TRA			

# **SEPARATION LEGEND**

HOURLY RATING 1 = 1 HOUR 2 = 2 HOUR SP = SMOKE PARTITION





Ε

	•
	DEMOLITION
DEI	MOLITION NOTES APPLY T
	THE CONTRACTOR SHALL
A.	COORDINATE ALL DEMOL ARCHITECT AND OWNER SHALL BE MADE TO MININ OPERATIONS. EXCESSIV APPROVED AND COORDII REPRESENTATIVE. IN AL
B. C.	FOR USER'S SAFETY. COORDINATE ANY DISRU OWNER AND AS SPECIFIE CONSTRUCT TEMPORAR THE EXISTING BUILDING V TO ISOLATE ANY DEMOLI
D.	GENERAL PUBLIC AND AS AND CODE OFFICIAL HAV LOCATIONS WITH THE OV THROUGHOUT THE WORI MAINTAIN A SECURE, WE TIMES.
E.	VERIFY ALL EXISTING CO ELEVATIONS AND NOTIFY
F.	DISCREPANCIES. REMOVE IN THEIR ENTIRE MILLWORK, PLUMBING FI MARKERBOARDS, AND O THE DEMOLITION/CONST
G.	DRAWINGS.
H.	PROVIDE PROTECTION F AND EQUIPMENT FROM D CONSTRUCTION-RELATE
I.	CONTRACT. REPAIR OR REPLACE ITE OF DEMOLITION OR CONS AND/OR CONDITION.
J.	EXISTING MATERIALS SHA OTHERWISE OR AS AUTH
K.	VERIFY AND MAINTAIN TH COMMUNICATION AND DA
L.	INTERRUPTION OF THEIR PATCH FLOOR, WALL ANI FROM REMOVAL OR RE-F DUCTWORK, CONDUIT, A MAINTAIN FIRE-RESISTAN
M.	REQUIRED FOR NEW OR CAP ALL DISCONNECTED WALL OR FLOOR. PATCH NEW OR EXISTING ADJAC

# SHEET NOTES

BEYOND DEMOLITION.

- NEW FINISH. TILES. DEMOLITION.

## N GENERAL NOTES

TO ALL DEMOLITION SHEETS.

OLITION AND PHASING EFFORTS WITH THE R'S REPRESENTATIVE. EVERY EFFORT IIMIZE DISRUPTION OF OWNER'S SIVE NOISE OR VIBRATION SHALL BE PRE-RDINATED WITH THE OWNER'S ALL CASES, PROVISIONS SHALL BE MADE UPTION OF UTILITY SERVICES WITH THE

RY CONSTRUCTION PARTITIONS WITHIN WHICH OFFER A ONE-HOUR ENCLOSURE LITION/CONSTRUCTION WORK FROM THE AS DEEMED NECESSARY BY THE OWNER AVING JURISDICTION. COORDINATE OWNER AND MAINTAIN MEANS OF EGRESS EATHER-TIGHT ENCLOSURE AT ALL

ONDITIONS, DIMENSIONS AND FY THE ARCHITECT OF ANY

IRETY ALL EXISTING WALLS, DOORS, FIXTURES, CEILINGS, SOFFITS, OTHER ITEMS, AS REQUIRED TO EXECUTE STRUCTION WORK DESCRIBED BY THE SERVE THE RIGHT TO SALVAGE ANY

FOR ALL EXISTING BUILDING MATERIALS DAMAGE DUE TO ANY DEMOLITION OR TED INCIDENT PERFORMED UNDER THIS

TEMS THAT ARE DAMAGED AS A RESULT INSTRUCTION TO MATCH EXISTING FINISH SHALL NOT BE REUSED UNLESS NOTED UTHORIZED BY ARCHITECT.

THE LOCATION OF EXISTING POWER, DATA CABLES TO PREVENT IR SERVICE. ND CEILING PENETRATIONS RESULTING

E-ROUTING OF NEW OR EXISTING PIPING, AND OTHER ITEMS, AS REQUIRED TO ANCE-RATED SEPARATIONS. FINISH AS R EXISTING ADJACENT SURFACES. D MECHANICAL PIPING LINES WITHIN THE CH AND FINISH AS REQUIRED TO MATCH NEW OR EXISTING ADJACENT SURFACES. N. SEE MECHANICAL AND ELECTRICAL DRAWINGS AND NOTES FOR FURTHER SEQUENCING AND SCOPE OF WORK. O. WHERE PLASTER/STUD WALLS ARE INDICATED TO BE REMOVED,

PREPARE ADJACENT WALLS TO RECEIVE NEW PATCH/FINISH BY SAWCUTTING ADJACENT PLASTER FINISH A MINIMUM OF 1'-0"



 $\sim$ 

R

REMOVE EXISTING WALL. SALVAGE EXISTING WALL MOUNTED RACEWAY FOR REINSTALLATION IN NEW CONSTRUCTION, COORDINATE WITH ELECTRICAL DEMOLITION PLANS. REMOVE EXISTING WALL MOUNTED SHELVING

AND SALVAGE FOR RE-INSTALLATION IN NEW CONSTRUCTION. PATCH AND REPAIR WALL FOR

REMOVE EXISTING SERVICE CHASE AND SUPPORT STRUCTURE. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR UTILITIES. COORDINATE WITH CU ANSCHUTZ OFFICE OF INFORMATION TECHNOLOGY FOR ITEMS TO BE SALVAGED AND RELOCATED.

REMOVE EXISTING WALL MOUNTED COUNTERTOP AND SUPPORTS. RETURN TO OWNER'S STORAGE. PATCH AND REPAIR WALL FOR NEW FINISH. REMOVE EXISTING ACT GRID AND TILES, LIGHT FIXTURE.COORDINATE WITH PLUMBING, HVAC, AND ELECTRICAL DEMOLITION PLANS. REMOVE PORTION OF EXISTING ACT GRID AND

EXISTING RACEWAY AND TASK LIGHTING TO BE REMOVED. COORDINATE WITH ELECTRICAL DEMOLITION PLANS.

MOVE AND STORE EXISTING MOVEABLE CASEWORK, TABLES, AND WALL MOUNTED SHELVING UNITS FOR RE-USE PER OWNER'S INSTRUCTION, OR AS REQUIRED FOR NEW WORK. COORDINATE WITH OWNER. REMOVE EXISTING GAS SERVICE FIXTURE/VALVE. REFER TO PLUMBING DRAWINGS FOR EXTENT OF

EXISTING GAS VALVE TO BE RELOCATED IN NEW WALL. REFER TO RENOVATION PLAN FOR LOCATIONS. REFER TO PLUMBING DRAWINGS FOR MORE INFORMATION.

REMOVE EXISTING WALL MOUNTED LOCK BOXES AND RETURN TO OWNER'S STORAGE. PATCH AND REPAIR WALL FOR NEW FINISH.

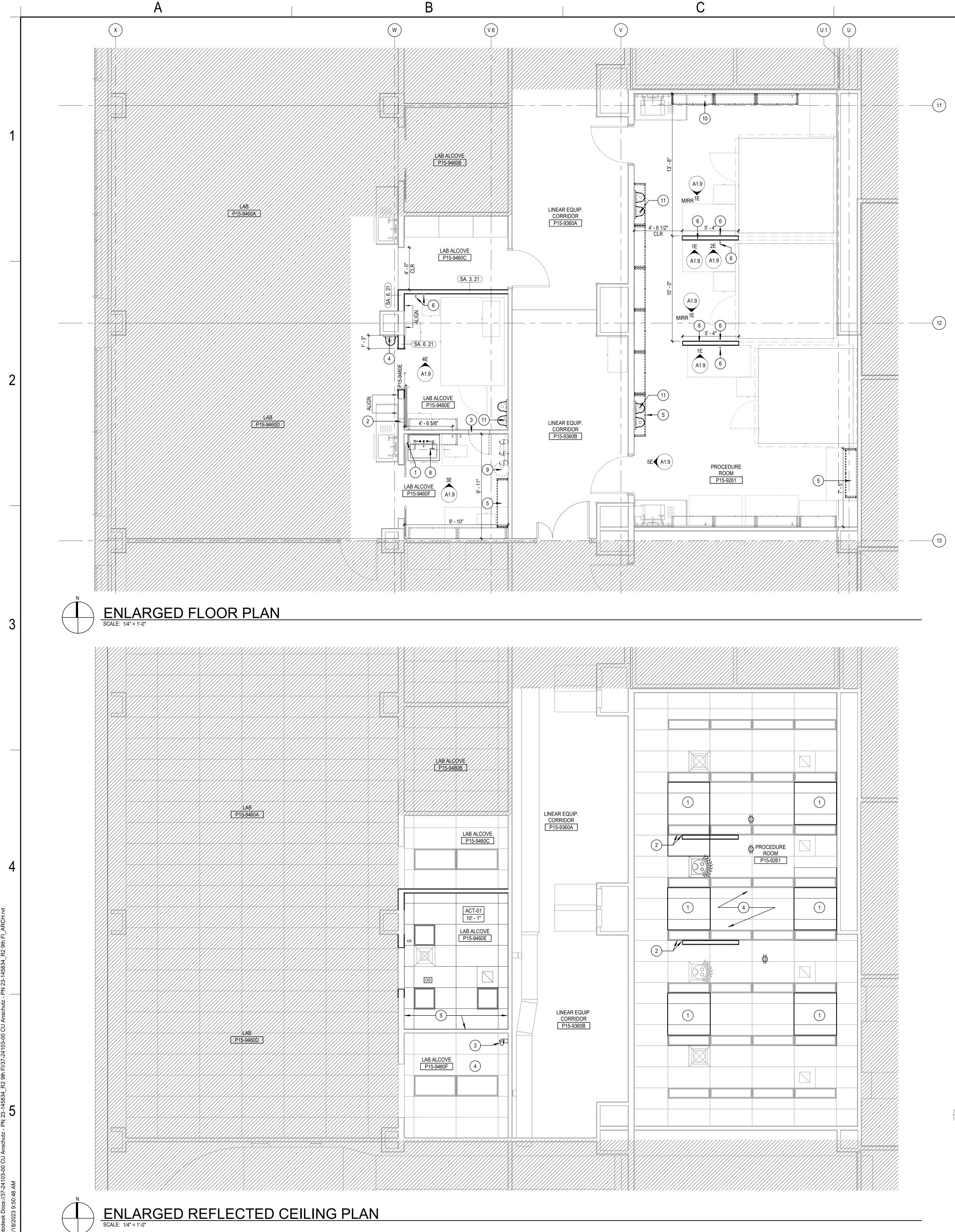
Ľ 0 Ο LL Т 0 N CU DENVER | ANSCHU PHYSIOLOGY MOVE

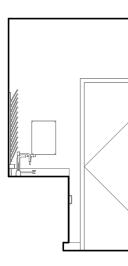
100% CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

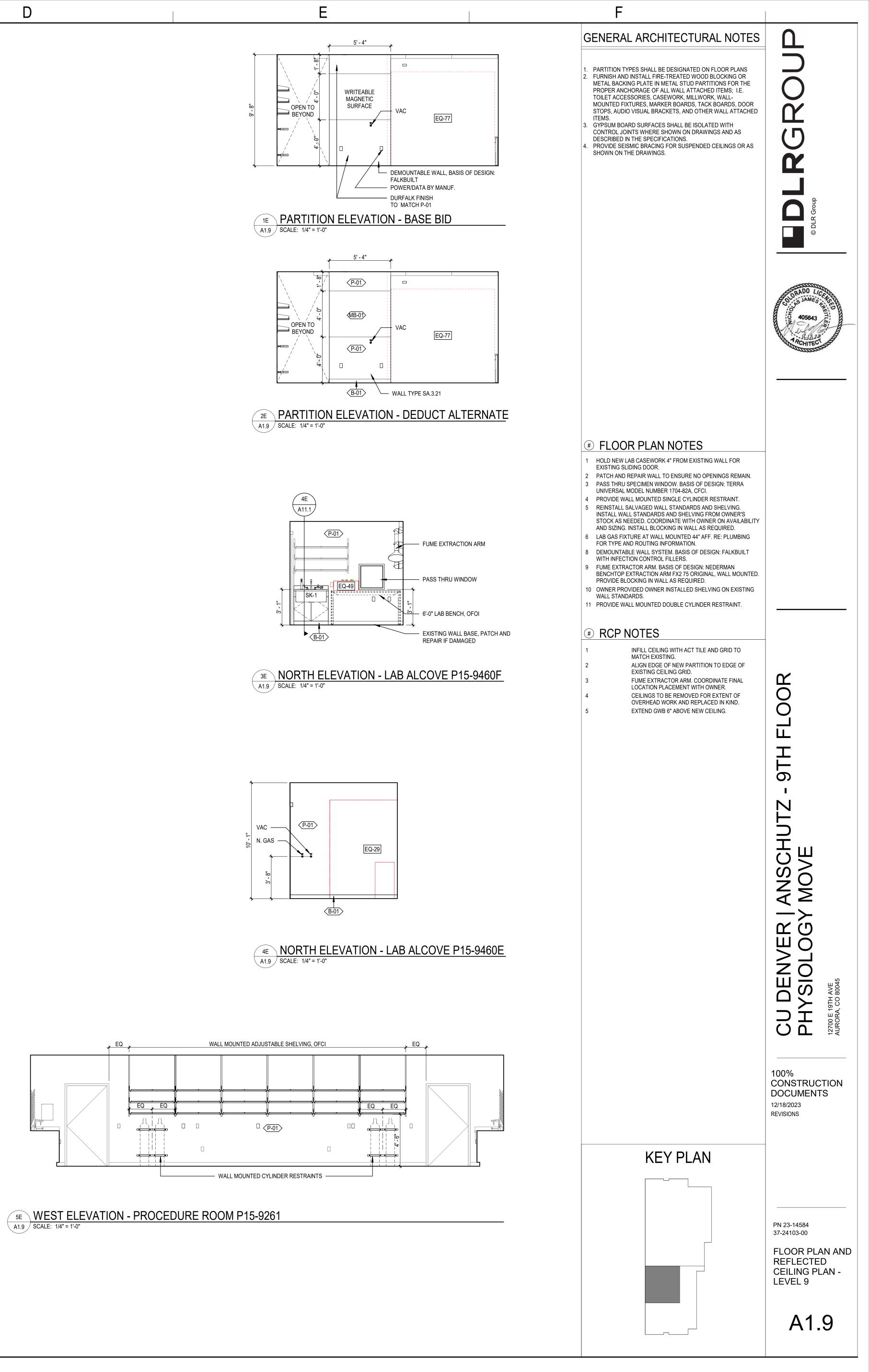
PN 23-14584 37-24103-00

DEMOLITION PLAN AND REFLECTED CEILING PLAN -LEVEL 9

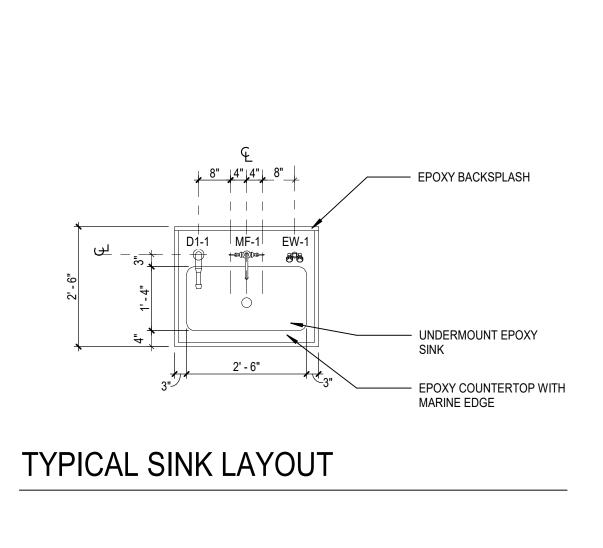
AD1.9

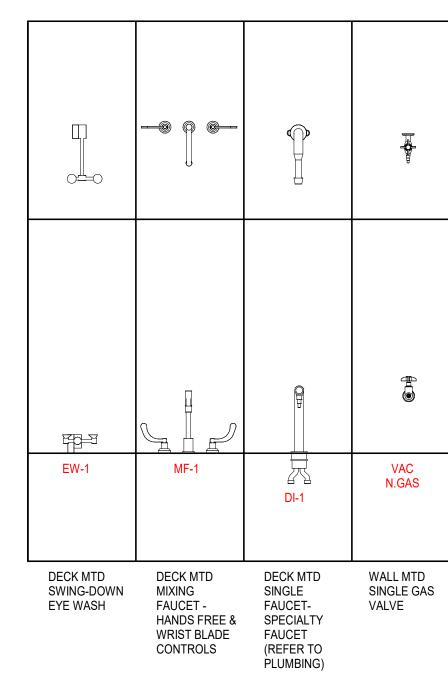




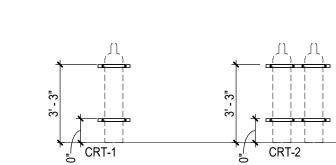








LABORATORY FIXTURE LEGEND



U

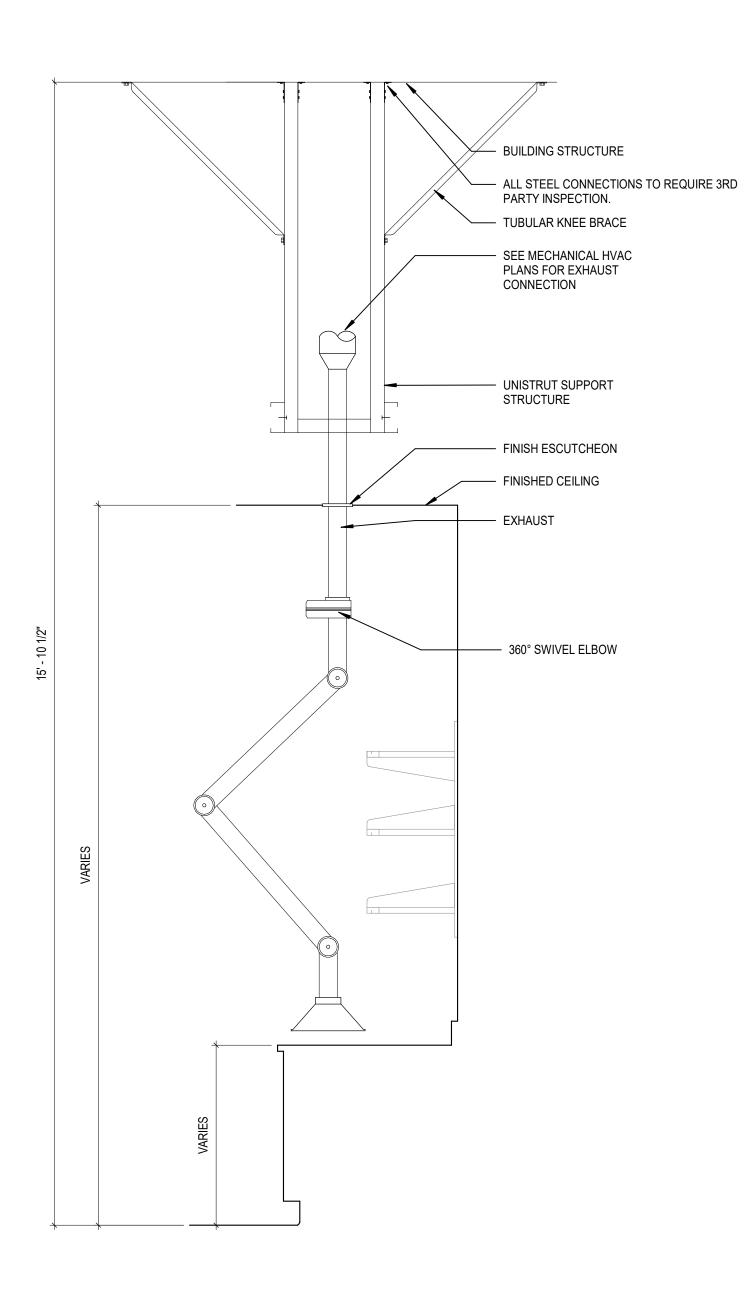
PLAN <mark>≁<sup>1' - 4"</sup>≁</mark>



-DOUBLE CYLINDER RESTRAINT (REFER TO PLANS)

ACCESSORIES

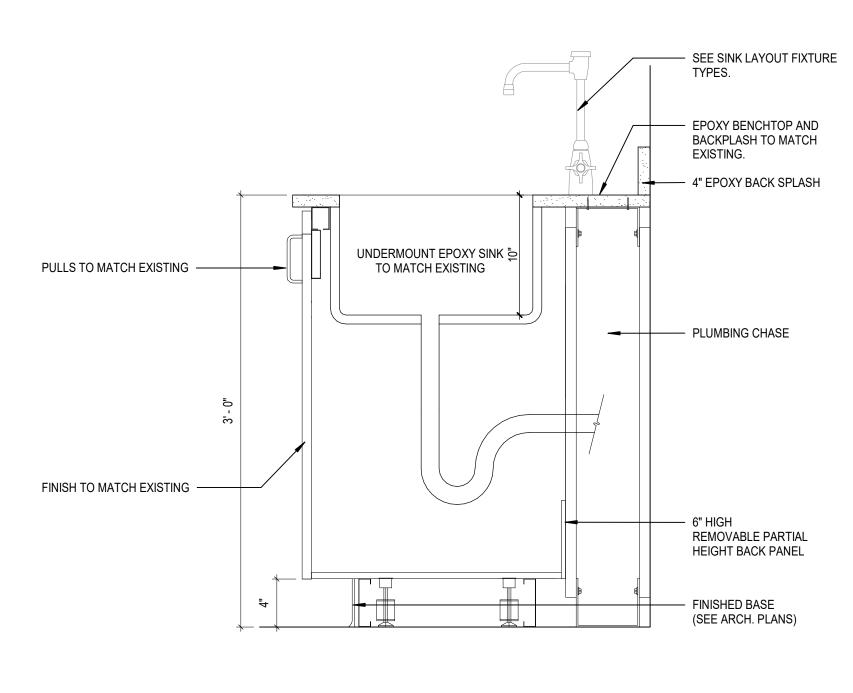
Α

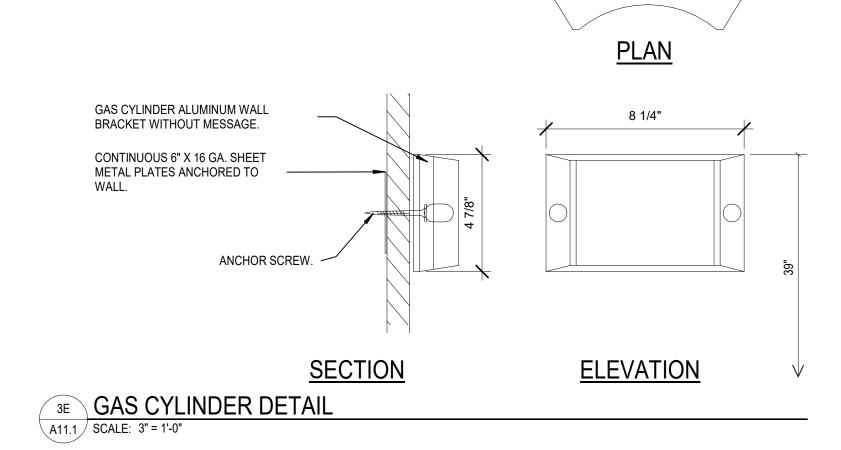


2D LAB - SNORKEL A11.1 SCALE: 3/4" = 1'-0"

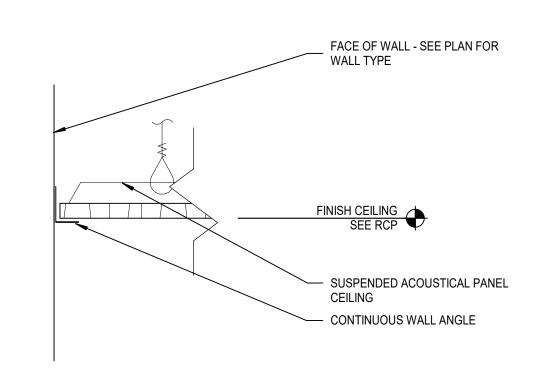
С

# 4E LAB - CASEWORK SECTION DETAIL A11.1 SCALE: 1 1/2" = 1'-0"

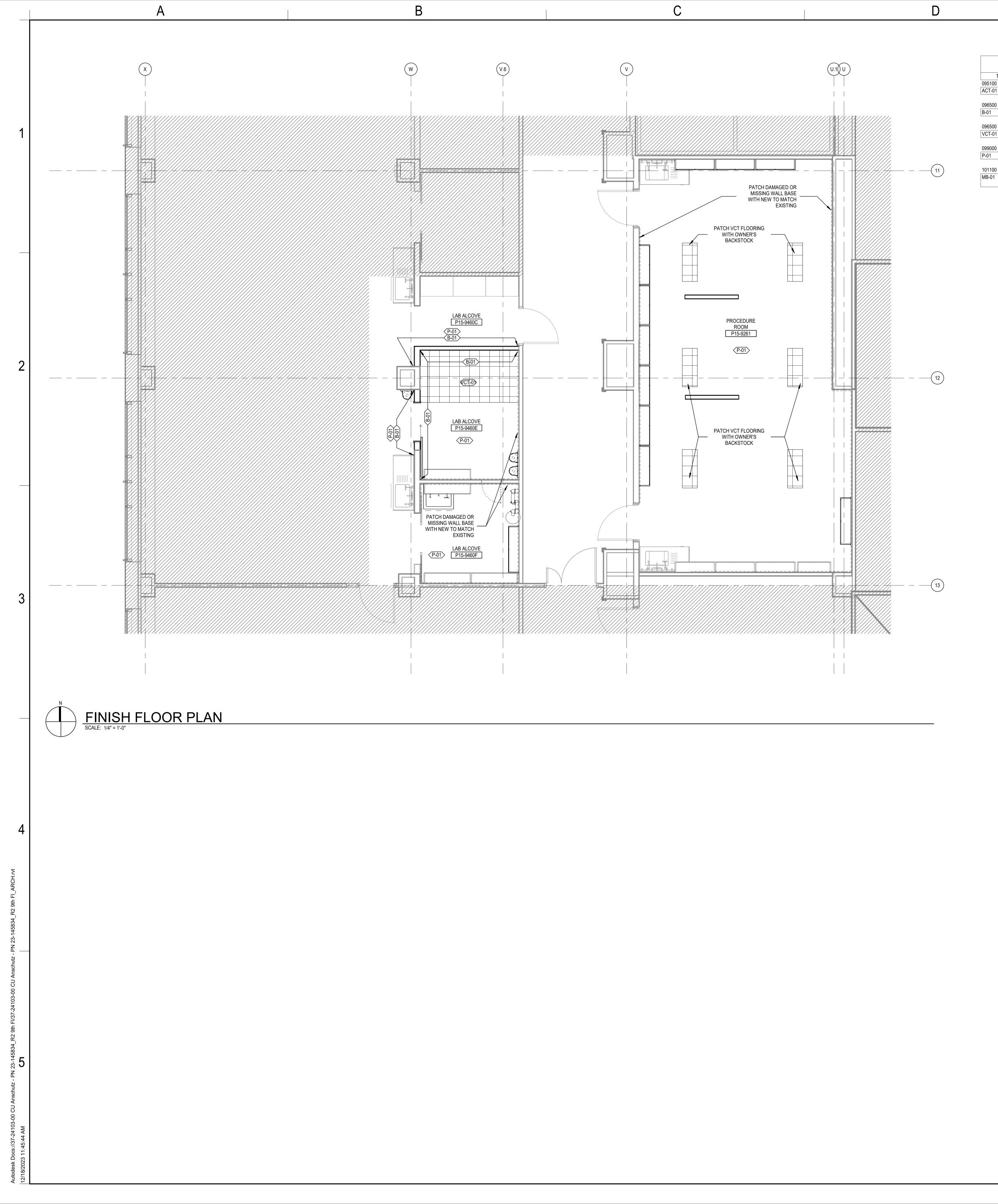




### **2E** APC PERIMETER @ WALL TILE A11.1 SCALE: 3" = 1'-0"







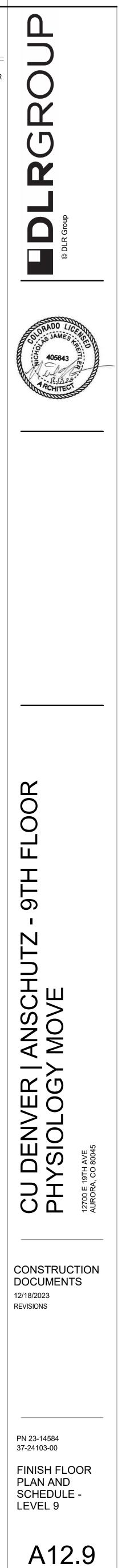
			FINISH SCHE	DUI F		
TAG	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR/FINISH	SIZE	COMMENTS
	C CEILING TILE		11(00001		OIZE	CONNENTO
1	LAB CEILING TILE	ARMSTRONG	ULTIMA HEALTH ZONE	WHITE	24" X 48" X 3/4"	TO MATCH EXISTING
0 RESILIEN	T FLOORING RESILIENT BASE	JOHNSONITE		#31 ZEPHYR	4"	TO MATCH EXISTING
0 VINYL CO						
1	VINYL COMPOSITION TILE	ARMSTRONG	IMPERIAL TEXTURE	TO MATCH EXISTING		
0 PAINTING						

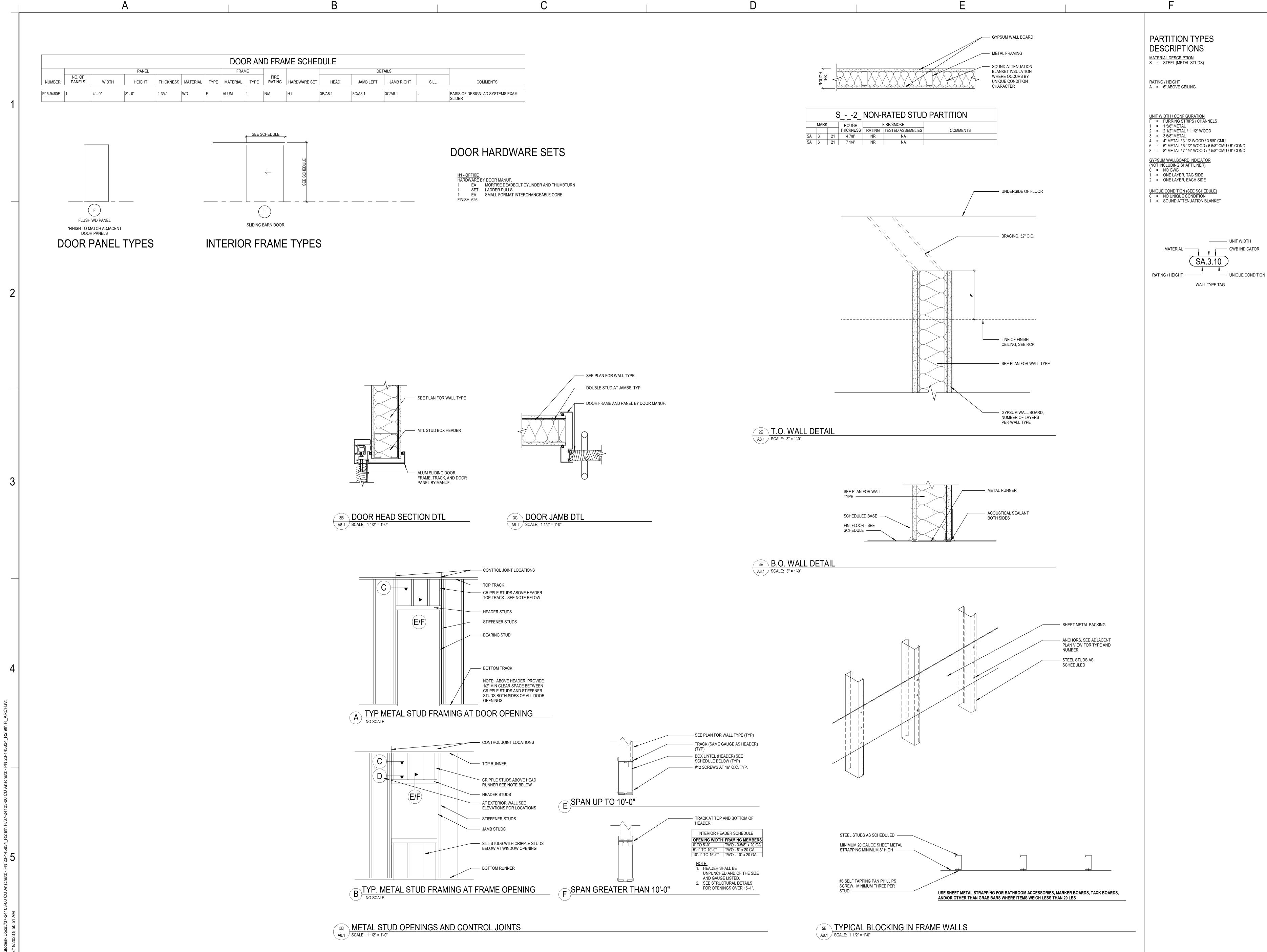
Ε

# **INTERIOR FINISH PLAN GENERAL NOTES**

F

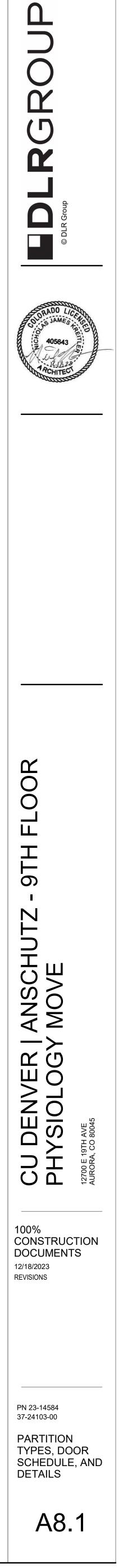
A. INTERIOR FINISH PLAN GENERAL NOTES APPLY TO ALL INTERIOR A. INTERIOR FINISH PLAN GENERAL NOTES APPLY TO ALL INTERIOR FINISH PLAN SHEETS.
B. FOR FLOOR TILE PRODUCTS, ADJUST LAYOUT AS NECESSARY TO AVOID USING CUT WIDTHS THAT EQUAL LESS THEN ONE-HALF OF A TILE AT ROOM PERIMETER.
C. PATCH AND PAINT ALL EXISTING WALLS AS REQUIRED. ALL NEW WALLS TO BE PAINTED P-01.

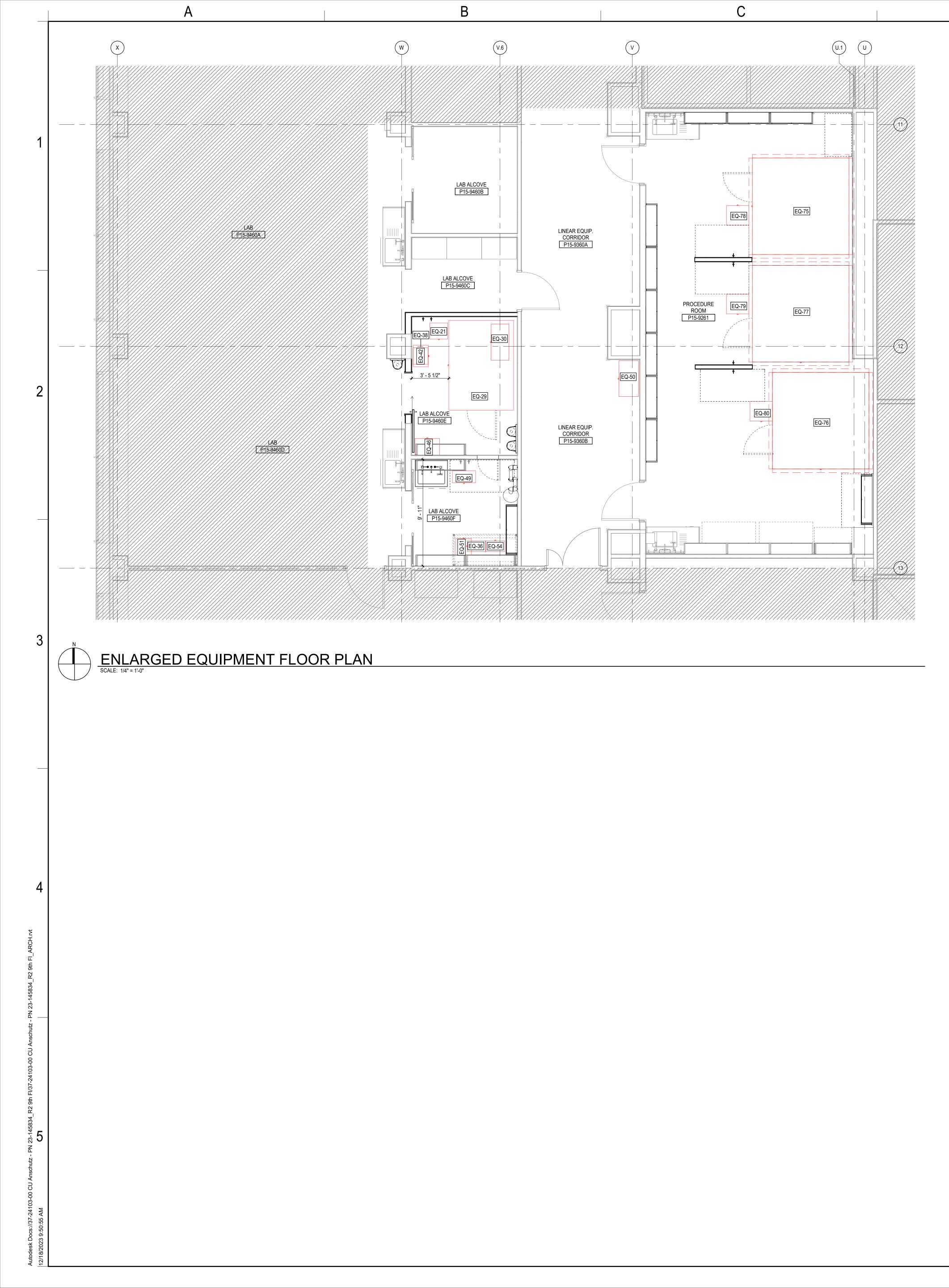




SILL	COMMENTS
-	BASIS OF DESIGN: AD SYSTEMS EXAM
	SILL -



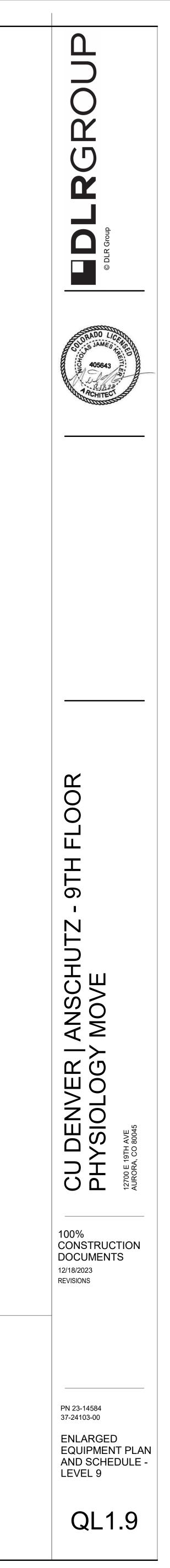


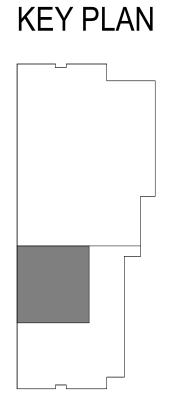


			LABORATORY EQ	UIPMENT SCHEDUL	E								
	EQUIPMENT IDEN	NTIFICATION			DIMEN	SIONS IN	INCHES	C	LEARAN	CE (IN) IF	REQUIRE	D	
ID	INSTALLED BY (OWNER OR CONTRACTOR)	EQUIPMENT NAME	MANUFACTURER	MODEL	WIDTH	DEPTH	HEIGHT	FRONT	REAR	LEFT	RIGHT	TOP	СОММЕ
EQ-21	OFOI	sound cart			20"	18"	46 1/2"	0"	0"	0"	0"	0"	
EQ-29	OFOI	Sound booth	ETS-Lindgren		100 1/2"	72 1/2"	103"	0"	0"	0"	0"	0"	
EQ-30	OFOI	Temporal bone cart	Rubbermaid		40 1/2"	20"	38"	0"	0"	0"	0"	0"	
EQ-36	OFOI	microscope	olypus optical		12"	20 1/2"	26"	0"	0"	0"	0"	0"	
EQ-38	OFOI	custom sound booth			24"	17"	30"	0"	0"	0"	0"	0"	
EQ-42	OFOI	custom metal rig			18 1/2"	17"	22"	0"	0"	0"	0"	0"	
EQ-46	OFOI	tool box	husky		27 1/2"	18 1/2"	38"	0"	0"	0"	0"	0"	
EQ-49	OFOI	toolbox	westward		26"	13 1/2"	10"	0"	0"	0"	0"	0"	
EQ-50	OFOI	freezer	danby		40"	22"	33"	0"	0"	0"	0"	0"	
EQ-51	OFOI	refrigerator	avanti		17 1/2"	18 1/2"	33"	0"	0"	0"	0"	0"	
EQ-54	OFOI	axio	Zeiss	ts4773	21"	12"	21"	0"	0"	0"	0"	0"	
EQ-75	OFOI	sound booth	ETS-Lindgren		108"	108"	98"	4"	4"	4"	4"	18"	
EQ-76	OFOI	sound booth	ETS-Lindgren		108"	108"	98"	4"	4"	4"	4"	18"	
EQ-77	OFOI	sound booth	ETS-Lindgren		108"	108"	98"	4"	4"	4"	4"	18"	
EQ-78	OFOI	AV rack			25"	22"	75"	0"	0"	0"	0"	0"	
EQ-79	OFOI	AV rack			25"	22"	75"	0"	0"	0"	0"	0"	
EQ-80	OFOI	AV rack			25"	22"	75"	0"	0"	0"	0"	0"	

Ε

D





	А			В
	ABE	BREVIATIONS		
	#	NUMBER	CJ	CONTROL JOINT
	&	AND	CJ	CONSTRUCTION JOINT
	(D)	DEMOLISHED	CJA	CONTROL JOINT ABOVE
	(E)	EXISTING	CKT	CIRCUIT
	(R)	RELOCATED	CKT BK	CIRCUIT BREAKER
	@	AT	CL	CENTER LINE
	°C	DEGREES CELSIUS	CL	CIRCUIT LINE
	°F	DEGREES FAHRENHEIT	CLG	CEILING
	Ø	PHASE	CLOS	CLOSET
	Ø	DIAMETER	CLR CM	CLEAR CEILING MOUNTED CORRUGATED METAL PIPE
1	A A A	COMPRESSED AIR AMPERE AMP	CMP CMU CO	CONCRETE MASONRY UNIT CLEAN OUT
	A/C	AIR CONDITIONING(ER)	CO	CARBON MONOXIDE
	A/E	ARCHITECT/ENGINEER	CO	CONDUIT ONLY
	AABC	ASSOCIATED AIR BALANCE COUNCIL	CO2	CARBON DIOXIDE
	AAP	ALARM ANNUNCIATOR PANEL	COL	COLUMN
	AAP	AREA ALARM PANEL	COMB	COMBINATION
	AAV	AUTOMATIC AIR VENT	COMM	COMMUNICATIONS
	AAV	AIR ADMITTANCE VALVE	COMP	COMPRESSOR UNIT
	AB	ANCHOR BOLT	COMP	COMPOSITE
	ABS	ACRYLONITRILE-BUTADIENE-STYRENE	COMPR	COMPRESSIBLE
	AC	ALTERNATING CURRENT	CONC	CONCRETE
	AC	ACOUSTIC CEILING	COND	CONDENSATE
	ACC	AIR COOLED CONDENSER	CONF	CONFERENCE
	ACC	ACCESSIBLE	CONFIG	CONFIGURATION
	ACCU	AIR COOLED CONDENSING UNIT	CONN(S)	CONNECTION(S)
	ACM	ALUMINUM COMPOSITE MATERIAL	CONST	CONSTRUCTION
	ACST	ACOUSTIC	CONT	CONTINUOUS
	AD	AREA DRAIN	CONTR	CONTRACT(OR)
	AD	ACCESS DOOR	CONV	CONVECTOR
	ADDN	ADDITION OR ADDITIONAL	COOR	COORDINATE
	ADJ	ADJUSTABLE	COORD	COORDINATE
	ADJT	ADJACENT, ADJOINING	CP	CONDENSATE PUMP
	ADMIN	ADMINISTRATION	CP	COVER PLATE
	ADO	AUTOMATIC DOOR OPENER	CPS	CYCLES PER SECOND
	AF	AIR FILTER	CPT	CARPET
	AFC	ABOVE FINISHED COUNTER	CPVC	CHLORINATED POLYVINYL CHLORIDE
	AFF	ABOVE FINISHED FLOOR	CR	CORROSION RESISTANT
	AFG	ABOVE FINISHED GRADE	CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
	AGF	AIR GAP FITTING	CS	COUNTERSINK
	AHJ	AUTHORITY HAVING JURISDICTION	CS	COMBINATION SEWER
2	AHRI AHU	AIR-CONDITIONING HEATING AND REFRIGERATION INSTITUTE AIR HANDLING UNIT	CS CSK CSMU	CARBON STEEL COUNTERSUNK CALCIUM SILICATE MASONRY UNIT
	AI	AREA INLET	CSP	COMBINATION STANDPIPE
	AI	ANALOG INPUT	CSWK	CASEWORK
	ALT	ALTERNATE	CT	COOLING TOWER
	ALUM AMB AMBA	ALUMINUM AMBIENT AMERICAN BOILER MANUFACTURERS	CT CT	CERAMIC TILE CURRENT TRANSFORMER
	AMP ANCH	AMERICAN BOLER MANOFACTORERS ASSOCIATION AMPERE ANCHOR	CTL CTR CU	CONTROL CENTER COPPER
	AP APC	ACCESS PANEL ACOUSTIC PANEL CEILING	CU CU CU	CONDENSING UNIT CUBIC COMBINATION UNIT
	APPROX	APPROXIMATE	CUH	CABINET UNIT HEATER
	AR	ACID RESISTING	CW	COLD WATER
	AR	ARGON	CWP	CONDENSER WATER PUMP
	ARCH	ARCHITECTURAL	CWR	CONDENSER WATER RETURN
	AS	AIR SEPARATOR	CWS	CONDENSER WATER SUPPLY
	ASB	ASBESTOS	CWV	COMBINATION WASTE AND VENT
	ASCE ASHRAE	AMERICAN SOCIETY OF CIVIL ENGINEERS AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING	CY CYL	CUBIC YARD CYLINDER
	ASME	ENGINEERS AMERICAN SOCIETY OF MECHANICAL ENGINEERS	D D	DRAIN DIFFUSER
	ASPH	ASPHALT	D	DEPTH
	AUTO	AUTOMATIC	D	DATA
	AV	AUDIO-VIDEO, AUDIO-VISUAL	d	PENNY ( NAIL 10D)
	AV	ACID VENT	DB	DECIBEL
	AV	AIR VENT	DB	DRY BULB
	AVG	AVERAGE	DBA	DECIBELS A
2	AW	ACID WASTE	DBL	DOUBLE
	AWG	AMERICAN WIRE GAUGE	DC	DIRECT CURRENT
	AWP	ACOUSTIC WALL PANEL	DC	DUST COLLECTOR
3	B B to B	BOILER BACK TO BACK	DCJ DDC DEG	DUMMY CONTROL JOINT DIRECT DIGITAL CONTROL DEGREE
	BAS BAT	BUILDING AUTOMATION SYSTEM BATTERY	DEMO DEPR DEPT	DEMOLISH OR DEMOLITION DEPRESS(ION)(ED) DEPARTMENT
	BBO	BOILER BLOW OFF	DET	DETAIL
	BC	BALANCING COCK	DET	DETENTION
	BC	BARE COPPER	DF	DRINKING FOUNTAIN
	BCMU BD BDD	BURNISHED CONCRETE MASONRY UNIT BOARD BACK DRAFT DAMPER	DFR DFS	DIESEL FUEL RETURN DIESEL FUEL SUPPLY
	BET	BETWEEN	DFU	DRAINAGE FIXTURE UNIT
	BF	BOILER FEED	DFV	DIESEL FUEL VENT
	BFF	BELOW FINISH FLOOR	DG	DOOR GRILLE
	BFP	BACKFLOW PREVENTER	DH	DUCT HEATER
	BFR	BELOW FLOOR	DHU	DEHUMIDIFICATION UNIT
	BFV	BUTTERFLY VALVE	DI	DEIONIZED WATER
	BHP	BREAK HORSEPOWER	DI	DUCTILE IRON
	BI	BACKWARD INCLINED (FAN IMPELLER/WHEEL)	DIA	DIAMETER
	BKR	BREAKER	DIAG	DIAGONAL
	BL	BUILDING LINE	DIC	DISCHARGE
	BLDG	BUILDING	DIFF	DIFFUSER
	BLK	BLOCK	DIM	DIMENSION
	BLKG	BLOCKING	DISC	DISCONNECT
	BLKHD	BULKHEAD	DISC SW	DISCONNECT SWITCH
	BM	BENCH MARK	DISCH	DISCHARGE
	BM(S)	BEAM(S)	DISTR	DISTRIBUTION
	BMS	BUILDING MANAGEMENT SYSTEM	DIV	SPECIFICATION DIVISION
	BOD	BOTTOM OF DUCT	DL	DRUM LOUVER
	BOF BOP	BOTTOM OF FOOTING BOTTOM OF PIPE	DL DM DMPR	DEAD LOAD DAMPER MOTOR DAMPER
4	BOT BPIP BRDG BRC	BOTTOM BOILER PLANT INSTRUMENTATION PANEL BRIDGING BEARING	DN DO or " DOAS	DOWN DITTO DEDICATED OUTDOOR AIR SYSTEM UNIT
	BRG BRKT BSMT	BEARING BRACKET BASEMENT	DOE DP	DEPARTMENT OF ENERGY DIFFERENTIAL PRESSURE
9th FI_MEP.rvt	BT BTU BTUH	BATHTUB BRITISH THERMAL UNIT BRITISH THERMAL UNIT PER HOUR	DPFG DPI DPS DBT	DAMPROFFING DIFFERENTIAL PRESSURE INDICATOR DIFFERENTIAL PRESSURE SWITCH
2 9th FI_	BUR BV	BUILT UP ROOFING BALL VALVE	DPT DR DR	DIFFERENTIAL PRESSURE TRANSMITTER DOOR DRAIN
23-145834_R2	C	CONDUIT	DS	DISTILLED WATER
	C	CONDENSER WATER	DS	DOWNSPOUT
	CA	COMBUSTION AIR	DSN	DOWNSPOUT NOZZLE
PN 23-14	CANT	CANTILEVER	DSP	DRY STANDPIPE
	CAP	CAPACITY	DSPR	DRY SPRINKLER PIPING
	CAS	CASING	DSPR	DRY SPRINKLER PIPE
CU Anschutz - I	CBD	COUNTER-BALANCED DAMPER	DSTB	DISTRIBUTED
	CBD	CHALKBOARD	DTL	DETAIL
	CC	COOLING COIL	DTR	DUCT THRU ROOF
0	CCR CCTV	CONTROL CONTRACTOR CLOSED CIRCUIT TELEVISION	DW DWBP DWDI	DISHWASHER DOMESTIC WATER BOOSTER PUMP DOUBLE WIDTH DOUBLE INLET
9th FI/37-24103-0	CD CD CD	CONDENSATE DRAIN CEILING DIFFUSER CONSTRUCTION DOCUMENTS	DWG(S) DWL(S) DWR	DOUBLE WIDTH DOUBLE INLET DRAWING(S) DOWEL(S) DRAWER
9th FI/37	CDA CDF	CLEAN DRY AIR (COMPRESSED AIR) COMBINATION DRINKING FOUNTAIN & BOTTLE FILLING STATION	DWRP DX	DOMESTIC WATER RECIRCULATING PUMP DIRECT EXPANSION
27 2	CE CEM CENT	COVER ELEVATION CEMENT CENTRIFUGAL	DXS E	DOUBLE EXTRA STRONG
PN 23-145834	CER	CERAMIC	EA	EACH
	CF	CUBIC FEET	EA	EXHAUST AIR
	CFCI	CONTRACTOR FURNISHED CONTRACTOR	EA	EACH FACE
1	CFH CFM	INSTALLED CUBIC FEET PER HOUR CUBIC FEET PER MINUTE	EAT EB EB	ENTERING AIR TEMPERATURE ELECTRIC BASEBOARD RADIATION EXPANSION BOLT
) CU Ans	CG	CORNER GUARD	EBH	ELECTRIC BASIN HEATER
	CH	CHILLER	EC	ELECTRICAL CONTRACTOR
	CH	CHANNEL	ECON	ECONOMIZER
:24103-00 I AM	CHWP CHWR CHWS	CHILLED WATER PUMP CHILLED WATER RETURN CHILLED WATER SUPPLY	ECON ECS EDH EE	ECONOMIZER EMERGENCY COMMUNICATION SYSTEM ELECTRIC DUCT HEATER EACH END
)ocs://37-2	CI CI CI CI	CAST IRON CURB INLET CAST IN PLACE	EER EEW	ENERGY EFFICIENCY RATIO EMERGENCY EYE WASH
Autodesk Docs://37-24103-00 CU Anschutz 12/18/2023 11:42:21 AM	CIP CIP CIRC	CAST IN PLACE CAST IRON PIPE CIRCULATING	EEWS EF EF	EMERGENCY EYE WASH SHOWER EXHAUST FAN EACH FACE
4 <u>+</u>				

EFF EFFICIENCY EXHAUST AIR EG ELECTRICAL H EH EIFS EXTEROR INSU EXPANSION JO EJ ELEVATION EL ELAS ELASTOMERIC ELEC ELECTRICAL(A ELEV ELEVATOR EMCS ENERGY MANA EMD ESTIMATED MA EMER EMERGENCY EMT ELECTRICAL M EMV ENCL ENCLOSURE ENT ENTERING ENTR ENTRANCE EOMD END OF MAIN I EP EP EXPLOSION PF EPO EMERGENCY EQUAL EQ EQUIP EQUIPMENT EQUIV EQUIVALENT EXISTING (TO I ER EXHAUST REG ER ERA ERF ES EXTRA STRON ES ESP EXTERNAL ST EST ESTIMATE ΕT EXPANSION TA EACH WAY EW EWC ELECTRIC WA ELECTRIC WA EWH EWT ENTERING WA EXC EXCAVATE EXH EXHAUST EXIST EXISTING EXP CONDITIONING UNIT EXPANSION EXP EXPOSED EXPL EXPLOSION EXT EXTERIOR FURNACE FACE FIRE SERVICE FIRE ALARM FA FACE FA FA FAA FIRE ALARM A FAB FACP FIRE ALARM C FB FACE BRICK FLUID COOLEF FC FCMU FLUTED CONC FCO FLOOR CLEAN FCU FAN COIL UNIT FCV FLOW CONTRO FCW FILTERED COLI FLOOR DRAIN FD FD FDC FIRE DEPARTI FDN FOUNDATION FDNDR FOUNDATION D FDR FEEDER FDV FDVC FE FUME HOOD E FEA FEC FIRE EXTINGU FF FIRE HYDRAN FH FH FHC FIG FIN FINISHED FIXTURE FIX FLOOR FL FLA FULL LOAD AN FLASH FLASHING FLEX FLEXIBLE FLG FLANGE FLG FLOORING FLM FULL LENGTH FLUOR FLUORESCENT FM FIRE MAIN FM FORCE MAIN FACTORY MUT FM FMCS FACILITIES MA FME FLOW MEASUF FNPT FO FINISH OPENIN FACE OF FO FOC FACE OF CONC FOF FUEL OIL FILL FOF FACE OF FINIS FOM FACE OF MASO FOR FUEL OIL RETU FOS FUEL OIL SUPP FOS FACE OF STUD FOV FOW FACE OF WALL FP FP FPB FPD FIRE PUMP DIS FPI FPM FEET PER MIN FR FR FR FRP FS FLOW SWITCH FLOOR SINK FS FIRE SMOKE D FSD FSEC FOOD SERVICI FEET FT FIN TUBE FT FLOW TRANSM FT FOOTING FTG FURN FURNISH(ED) FUT FUTURE FV FIELD VERIFY FACE VELOCIT FV FVC FIRE VALVE CA FWC FABRIC WALL GRILLE G NATURAL GAS G GAUGE GA GALLON GAL GALV GALVANIZED GRAD BAR GB GC GENERAL CON GCMU GLAZED CONC GCO GD GEA GEN GENERATOR GEN GENERAL GFA GROSS FLOOF GFCMU GROUND-FACE GFI, GFCI GROUND FAUL GFRC GLASS FIBER I GHR GLYCOL-WATE GHS GLYCOL-WATE GI GALVANIZED II GLUE LAMINAT GL GLASS GL GMU GLASS MASON GND GROUND GOVT

GPD

# С

EXTEROR INSULATION AND FINISH SYSTEM EVAAUSION JOINT GR EVAAUSION JOIN	LWT LEAVING WAT LWT LEAVING WAT TE FFUSERS M THOUSAND NA MAKE-UP AIR MA MAKE-UP AIR MA MAKE-UP AIR MA MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR I Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MC METAL COMP MD MOTORIZED D MD MOTORIZED D MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MG MOTOR GENE MH MANUFACTUF MG MOTORIZED L ML MOTORIZED L MH MOP HOLDER MH MANUFACTUF MFR MEDIUM PRES MFR MAROR MARNER MFR MIRROR MR/S MIRROR WITH
ELASTROVERIC         GRC         GALVANCED RIGIO CONDUT           ELECTROVENCIA(A)         GRC         GALVANCED RIGIO CONDUT           ELECTROVENCIA(A)         GRC         GALVANCED RIGIO TESA           ENERGY MANAGEMEENT CONTROL SYSTEM         GRC         GALVANCED RIGIO STELL           EMERGY MANAGEMEENT CONTROL SYSTEM         GRC         GALVANCED RIGIO STELL           EMERGY MARCEMEENT CONTROL SYSTEM         GRC         GALVANCED RIGIO STELL           EMERGY MARCEMENT CONTROL SYSTEM         GRC         GALVANCED RIGIO STELL           EMERGY MARCEMENT CONTROL SYSTEM         GRC         GALVANCED RIGIO STELL           EMERGY MARCEMENT CONTROL SYSTEM         GYS         GASOLINE           ENTRANCE         GYVF         GREASE VENT           ENTRANCE         GYVF         GREASE VENT           ENTRANCE         GYVF         GREASE VENT           ENTRANCE ONCR OFF         GYPF         GYRSUM           EDUIMMENT         HE         HEIGHT           EDUIMMENT         HE         HOOK CORE           ENTRANCIO ELECTROVER OFF         GYP         GYRSUM           ENTRANCIO ELECTROVER OFF         GYP         GYRSUM           ENTRANCIO TANCEMENT         HE         HOOK CONE           ENTRANCIO TANCEMENT         HE </td <td>TE LW LONG WAY LWT LEAVING WAT ETE FUSERS M THOUSAND NPLASTER MA MIXED AIR MA MAKE-UP AIR MA MEDICAL CON MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR I MAX MANUAL AIR N MAY MANUAL AIR N MAX MAXIMUM MB MACHINE BOL MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B' MC MECHANICAL MCA MINIMUM CIRC MCA MINIMU</td>	TE LW LONG WAY LWT LEAVING WAT ETE FUSERS M THOUSAND NPLASTER MA MIXED AIR MA MAKE-UP AIR MA MEDICAL CON MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR I MAX MANUAL AIR N MAY MANUAL AIR N MAX MAXIMUM MB MACHINE BOL MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B' MC MECHANICAL MCA MINIMUM CIRC MCA MINIMU
ELEVATOR         GRD         GRUES         GRUES <t< td=""><td>FUSERS M THOUSAND N PLASTER MA MA MIXED AIR MA MAKE-UP AIR MA MAKE-UP AIR MA MEDICAL COM MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAS MASONRY MATL MATENAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR I Y MAV MANUAL AIR N MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAL MC MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTU</td></t<>	FUSERS M THOUSAND N PLASTER MA MA MIXED AIR MA MAKE-UP AIR MA MAKE-UP AIR MA MEDICAL COM MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAS MASONRY MATL MATENAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR I Y MAV MANUAL AIR N MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAL MC MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTU
ESTIMATED MAXIMUM DEMAND ENERGENCY ENERGENCY ELECTRICAL METALLIC TUBING ELECTROLAL METALLIC TUBING ENERGENCY ENTRANCE ENERGENCY ENTRANCE	MA MAKE-UP AIR MA MAKE-UP AIR MA MEDICAL CON MAC MACHINE MAG MACHINE MAG MACHINE MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR U MAX MAXIMUM MB MACHINE BOL MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MCA MINIMUM CIRC MCA MINIMUM CIRC MCA MINIMUM CIRC MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MIN METAL HALLO MFR MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MIN MINIMUM MISC MISCELLANED MH MOTORIZED L MH MOTORIZED L MIN MINIMUM MISC MISCELLANED MIN MINIMUM MISC MISCELLANED MLO MAIN LUGS OI MLO MAIN LUGS OI MLVWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MR MIRROR MR/S MIRROR WITH MR/S MIRROR WITH
ELECTRICAL METALLIC TUBING         GS         GASOLINE           EMERGENCY WANDS VALVE         GV         GATE VALVE           ENCOSURE         GV         GREASE VENT BELOW FLOOG           ENTERNO         GVP         GREASE VENT BELOW FLOOG           ENTERNO         GVP         GREASE VENT BELOW FLOOG           END OF MAIN DRIP         GVB         GYPSUM WALLBOARD           ELCITRO-NEUMATIC         GWR         GEOTHERMAL WATER RETUR           END OF MAIN DRIP         GWB         GEOTHERMAL WATER RETUR           EDUPMENT         H         HEIGHT           EQUIPMENT         H         HEIGHT           EQUIPMENT         H         HEIGHT           EDUSTING TO BE IRELOCATED         H2         HYDROGEN           ENANST REGISTER         HB         HOGC BIB           ENANST REGISTER         HB         HOGC CINC           ENTERNO, TATIC PRESSURE         HC         HANDICAP           ENTERNO, TATIC PRESSURE         HCR         HOTCHILED WATER RETUR           ESTIMATE         HCS         HANDICAP           ENTERNO, TATIC PRESSURE         HCR         HOTCHILED WATER RETUR           ESTIMATE         HCS         HANDICAP           ENTERNO         HCATE RETUR <td< td=""><td>MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR Q Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MC METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTUF MFR MANUFACTUF MR MIN MINIMUM MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVITH IRCULATION MS MAGNETIC ST MR/S MIRROR WITH IRCULATION MS MAGNETIC ST</td></td<>	MAC MACHINE MAG MAGNETIC MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL N MAU MAKEUP AIR Q Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAV MANUAL AIR Y MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MC METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTUF MFR MANUFACTUF MR MIN MINIMUM MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVITH IRCULATION MS MAGNETIC ST MR/S MIRROR WITH IRCULATION MS MAGNETIC ST
ENCLOSURE         GV         GREASE VINT           ENTERING         GVF         GREASE VINT ELOW FLOOD           END OF MAIN DRIP         GWB         GYPSUM WALL BOARD           ELOTRO-NEUMATIC         GWR         GEOTHERMAL WATER RETUR           END OF MAIN DRIP         GWB         GEOTHERMAL WATER RETUR           END OF MAIN DRIP         GWB         GEOTHERMAL WATER RETUR           END OF MOUNT         H         HEIGHT           EOUMMENT         H         HEIGHT           EOUMALENT         HE         HYDROEN           EDURSTING TO BE I RELOCATED         H2         HYDROEN           EVANUEST REGISTER         HB         HOSE BIB           ENERGY RECYCHERY AIR         HC         HATING COLL           EVANDER Y RESIN FLOORING         HC         HATING COLL           ENTRA STRO PHOVER         HC         HATING COLL           EVANDER Y RESIN FLOORING         HC         HATING COLL           ENTRA STRO PHOVER         HC	AINT MAINT MAINTENANC MAN MANUAL MAS MASONRY MATL MATERIAL NAY MAV MANUAL AIR M MAU MAKEUP AIR U MAV MANUAL AIR M MAV MANUAL AIR M MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MCA MINIMUM CIRU MCB MAIN CIRCUT MCA MINIMUM CIRU MCB MAIN CIRCUT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MIN METAL HALIDI MFR MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MIN MINIMUM MISC MISCELLANEO ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OI MLWK MILLWORK DENSATE MO MASONRY OP AS MCCP MAXIMUM OVI JRN MPG MEDIUM PRES MR MIRROR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
ENTRANCE GW GREASE WASTE GWA GREASE WASTE GWA GW GY GY GW GY	MAS MASONRY MATL MATERIAL MAS MASONRY MATL MATERIAL MAU MAKEUP AIR U MAV MANUAL AIR V MAV MANUAL AIR V MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBD MARKER BOA MC MECHANICAL MC MEDICINE CA MCA MINIMUM CIR MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MECH MECHANICAL MERB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MIN MINIMUM MISC MISCELLANEO ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OI MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
ELECTRO-PREUMATIC         GWR         GECTHERMAL WATER BUPL           EVER.OSION PROOF         GVS         GECTHERMAL WATER SUPPL           EQUIPMENT         H         HEIGHT           EQUIPMENT         H1         HOOK ONE END           EQUIPMENT         H1         HOOK ONE END           EVALUAT REGISTER         H8         HOSE BIB           EVENDY RESIN FLOORING         HC         HEATING COLL           EVENDY RESIN FLOORING         HC         HOULOW CORE           EVENDY RESIN FLOORING         HC         HADICAP BENCH           EXTRA STACK SOWER         HC         HOTCHILLED WATER RETURE           EVENTA STACK ON SOMER         HC         HOTCHILLED WATER RETURE           EXTRA STACK SOWER         HC         HOTCHILLED WATER RETURE           EVANSION TANK         HOW         HAND CAP BENCH           EVANSION TANK         HOW         HAND CAP ENCH           ELCOTIC WATER HEATER         HODC HAND CAP ENCH           ELCOTIC WATER HEATER         HOR         HEADER           EVANSION         HEV         HOSE END VALVE           EVANSION         HEV         HOUR         HANDCAP           ELCOTIC WATER HEATER         HOW         HANDCAP AUVVE           EVANSION	N MAU MAKEUP AIR I Y MAV MANUAL AIR M MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MECH MECHANICAL MERB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANUFACTUF
EMERCENCY POWER OFF         GYP         GYPSUM           EQUAL         EQUAL         H         HEIGHT           EQUALENT         HE         HOOK ONE END           EXISTING (TO BE ) RELOCATED         H2         HYDROGEN           EXMANST RECISTER         HB         HOSE BIB           ENERGY RECOVERY AR         HC         HEATING COLL           ENERGY RECVERY AR         HC         HADICAP           EXTERNAL STATIC PRESSURE         HC         HANDICAP DENCH           ENTRATIC PRESSURE         HCR         HOTCHILLED WATER EFTUR           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER EFTUR           EXAMING TANK         HCW         HARD DRYER           ELCOTIC WATER COLLER         HDB         HARDBORD           ELCOTIC WATER HATER         HDOP         HANDICAP           ELCOTIC WATER HEATER         HDOP         HARDWARE           EXAVATE         HOWR         HARDWARE	MAX MAXIMUM MAX MAXIMUM MB MACHINE BOL MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CAI MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MDF MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFR MANU
EQUIPMENT         H         HEIGHT           EQUIVALENT         H1E         H00K ONE END           EXMITING (TO BE ) RELOCATED         H2         HYDROGEN           EXHAUST RECISTER         H8         H05E BIB           ENERGY RECOVERY AIR         HC         HEATING COLL           EVERSY RECOVERY AIR         HC         HEATING COLL           EVERSY RECOVERY AIR         HC         HADICAP           EVERSY RESOVER         HC         HADICAP EENCH           EVERSY RESOVER         HC         HADICAP EENCH           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER RETURE           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER ENDPLY           EVERNATION TANK         HOC         HAND DRYER           ELECTER WATER HEATER         HOCR         HANDICAP           ELECTER WATER HEATER         HOR         HEADER           EXAVATE         HOWN         HARDWOOD           EXAVATE         HOWN         HARDWOOD           EXAVATE         HOWN         HARDWOOD           EVENSION         HEV         HOSE END VALVE           EVENSION         HEV         HOUR INTENSITY DISCHARGE           EVENSION         HOWN         HARDWARE	MBD MARKER BOA MBH THOUSAND B MC MECHANICAL MC MEDICINE CA MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFR MANUFACTUF MFRG MOTOR GENE MH METAL HALIDI MH METAL HALIDI MH MOP HOLDER MIN MINIMUM MISC MISCELLANED MLO MAIN LUGS OU MLWK MILLWORK DENSATE MO MASONRY OP AS MCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXSTING (TO BE) RELOCATED         H2         HYDROGEN           EXHAUST REGISTER         H3         HOSE BIB           ENERGY RECOVERY AIR         HC         HEATING COLL           EPOXY RESIN FLOORING         HC         HADICAP           ENTERNAL STATIC PRESSURE         HC         HADICAP BENCH           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER RETURE           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER RETURE           EXTERNAL STATIC PRESSURE         HCR         HOTCHILLED WATER RETURE           EACH WAY         HD         HAND CAP           ELCTIC WATER COOLER         HDDP         HANDCAP           ELCTIC WATER COOLER         HDDP         HARBOARD           ELCTIC WATER COOLER         HDDR         HARDWARE           ELCTIC WATER COOLER         HDDR         HARDWARE           ELCTIC WATER COOLER         HDVR         HARDWARE           EXAVIST         HDVR         HARDWARE           ELCTIC WATER HEATER         HDVR         HARDWARE           EXAVIST         HDVR         HARDWARE           EVALUST         HDVR         HARDWARE           EVALUST         HDVR         HARDWARE           EVALUST         HDVR <t< td=""><td>MC MECHANICAL MC MEDICINE CAU MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFR MANUFACTUF</td></t<>	MC MECHANICAL MC MEDICINE CAU MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MD MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFR MANUFACTUF
ENERCY RECOVERY AIR         HC         HEATING COLL           EPOXY RESIN FLOORING         HC         HADDICAP BENCH           EXTERNAL STATIC PRESSURE         HCB         HADDICAP BENCH           EXTERNAL STATIC PRESSURE         HCB         HOTCHILLED WATER RESURE           EXTERNAL STATIC PRESSURE         HCB         HOTCHILLED WATER SUPPLY           EXPANSION TANK         HCW         HARD DAYER           ELCTRIC WATER COOLER         HDBD         HARDBOARD           ELCTRIC WATER HEATER         HDC         HANDICAP           ELCTRIC WATER HEATER         HDC         HANDICAP           EXAVATE         HDWR         HARDWOOD           EXAVATE         HDWR         HARDWOOD           EXAVATE         HDWR         HARDWOOD           EXAVATE         HOWR         HARDER           EXAVATE         HOWR         HARDER           EXAVATE         HOWR         HARDWOOD           EXAVATE         HOWR         HARDWOOD           EXAVATE         HOWR         HARDER           EVANATE         HOWR         HARDER           EXAVATE         HOWR         HARDWARE           EXAVATE         HOWR         HARDWARE           EXAVATE         HOWR<	MCA MINIMUM CIRC MCB MAIN CIRCUIT MCM METAL COMP MD MOTORIZED D MD MOTORIZED D MD MOTORIZED D MDO MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MOTOR GENE MH MANHOLE MH METAL HALIDI MH MOP HOLDER MIN MINIMUM MISC MISCELLANEO MLDG MOLDING MLO MAIN LUGS OI MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EMERCENCY SHOWERHCHANDICAPEXTERNAL STATC PRESSUREHCRHANDICAP BENCHEXTERNAL STATC PRESSUREHCRHOTCHILLED WATER RETURIEXTRINAL STATC PRESSUREHCRHOTCHILLED WATER SUPPLYEXPANSION TANKHCWHARD COLD WATEREACH WAYHDHARD COLD WATEREACH WAYHDHARD COLD WATERELCTRIC WATER HEATERHDCPHANDICAPELCTRIC WATER TEMPERATUREHDRHEADEREXCAVATEHDWRHARDWOODEXATERHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHDWRHARDWOODEXANTEHORHANDCAPEXROSIONHIDHIGH INTENSITY DISCHARCEEXTERIORHIGHORHANDCEHPHORSE POWERFARENHEITHORIZHORZINTALFIRELINEHPHORSE POWERFIRE ALARMHPNHIGH PRESSURE STEAM CONFIRE ALARMHPNHIGH PRESSURE STEAM CONFIRE ALARM ANNUNCLATORHPSHIGH PRES	MCM METAL COMP MD MOTORIZED D MDF MEDIUM DENS MDO MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH MANHOLE MH MOP HOLDER MH MOP HOLDER MIN MINIMUM MISC MISCELLANEO MISC MISCELLANEO MISC MISCELLANEO ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OI MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MPS MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXTERNAL STATIC PRESSUREHORHOTCHILLED WATER RETURIESTIMATEHORHOTCHILLED WATER SUPPLYEXPANSION TANKHOWHARD COLD WATEREACH WAYHOHARD COLD WATERELCTIR (WATER COLERHOBDHARDBCARDELECTRIC WATER HEATERHOCPHARDBCARDELECTRIC WATER HEATERHORHEADEREXCAVATEHOWNHARDWOODEXHANSIONHEHELUMEXATENHOWNHARDWOADEXATATEHOWNHARDWOADEXATINGHEHELUMEXATINGHEHELUMEXATINGHEHELUMEXATINGHEHELUMEXATINGHEHELUMEXATINGHIDHANDEREXATINGHIDHANDEREXATERIORHIDHANDEREXRENCIONHIDHORIZONTALFIRELINEHORIZHORIZONTALFIRELINEHPHORIZONTALFIRESERVICEHPHIGH PRESSURE STEMA CONTRALFIRE SERVICEHPCHIGH PRESSURE STEMA CONTRALFACEHPHIGH PRESSURE STEMA CONTRALFACEHPHIGH PRESSURE STEMA CONTRALFAREALARMHPNGHIGH PRESSURE STEMA CONTRALFIRE SERVICEHPCHIGH PRESSURE STEMA CONTRALFIRE SERVICEHPCHIGH PRESSURE STEMA CONTRALFIRE ALARMHPNGHIGH PRESSURE STEMA CONTRALFIRE ALARMANNUNCLATORHPSFIRE ALARM ANNUNCLATORHPSFIRE ALARM CONTROL PANEL<	M MDF MEDIUM DENS MDO MEDIUM DENS MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFR MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH METAL HALIDI MH MOP HOLDER MH MOP HOLDER MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OU MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MRS MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXPANSION TANKHOWHARD COLD WATEREACH WAYHDHAND DRYERELECTRIC WATER COOLERHDBDHAND DRYERELECTRIC WATER TEATERHDDPHANDDCAPELECTRIC WATER TEMPERATUREHDPHEADEREXCAVATEHDWRHEADEREXCAVATEHDWRHARDWAREEXTENIG WATER TEMPERATUREHDWHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXAVATEHDWRHARDWAREEXPLOSIONHIDHGH INTENTY DISCHARGEEXTERIORHIDHGH INTENTY DISCHARGEEXAVATEHORIZONTALHORIZONTALFARENHEITHORIZHORIZONTALFIRELINEHPHORIZONTALFIREALARMHPHORIZONTALFIREALARMHPHORIZONTALFIREALARMHPHIGH PRESSURE STEAM CONFIREALARMHPRHIGH PRESSURE STEAM CONFIREA	MECH MECHANICAL MECH MECHANICAL MEMB MEMBRANE MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH METAL HALIDI MH MOP HOLDER MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES MCP MAXIMUM OV JRN MPG MEDIUM PRES MPS MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
ELECTRIC WATER COOLERHDBDHARDBOARDELECTRIC WATER HEATERHDCPHANDICAPENTERING WATER TEMPERATUREHDWHARDWOODEXAUSTHDWHARDWOODEXHAUSTHDWHARDWAREEXAUSTHDWHARDWAREEXITENIGHEHELIUMEXPOSIONHEHELIUMEXPOSIONHDHIGH INTENSITY DISCHARGEEXPLOSIONHIDHIGH INTENSITY DISCHARGEEXPLOSIONHDHIGH INTENSITY DISCHARGEEXTERIORHOHARDEP AUTOMATICFAREENHEITHORIZHORIZONTALFIRELINEHPHORSE POWERFURNACEHPHORSE POWERFURNACEHPHORT PESSURE STEAM CONFIRE SERVICEHPHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE STEAM SUPFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFABRICATE(D)HRHOUTFABRICATE(D)HSHEAT RECOVERY WATER SUPFLUIDE CONCETE MASONRY UNITHRWSHEAT RECOVERY WATER SUPFLUIDE CONCETE MASONRY UNITHRWSHEAT RECOVERY WATER SUPFLUTED CONCETE MASONRY UNITHSTHEADSTUDFOON CLEAN OUTHSTHEADSTUDFOUND CAINNHTGHEATREFUUTED CONCETE MASONRY UNITHSTHEADSTUDHSTHEATREOVERY WATER SUPFOUND CLEAN <td< td=""><td>MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH METAL HALIDI MH MOP HOLDER MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MR MIRROR MRS MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK</td></td<>	MET METAL MEZZ MEZZANINE MFR MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH METAL HALIDI MH MOP HOLDER MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES MPS MEDIUM PRES MR MIRROR MRS MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
ENTERING WATER TEMPERATUREHDRHEADEREXAUATEHOWDHARDWORDEXHAUSTHOWDHARDWAREEXISTINGHEHELUMEXPANSIONHEHELUMEXPOSEDHGRHARGEREXPOSEDHGRHARGEREXPOSEDHGRHARGEREXTERIORHMHOLLOW METALFARENHEITHORIZHORIZONTALFIRELINEHPHORIZONTALFIRELINEHPHORIZONTALFIRELINEHPHORISE POWERFIRESENCEHPHEAT PUMPFACEHPHIGH PRESSURE STEAM CONFIRE SERVICEHPHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE STEAM SUPFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSIS RECFUIDD COOLERHARC ONTROL PANELHROFARC BRICKHRORHOT REVERSE OSMOSIS RECFLUID COOLERHASTHIGH TRESSURE STEAM RETFLOOR CLEAN OUTHSTHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSTHEAT RECOVERY WATER SUFFLOOR DRAINHTHEIGHTFLOOR DRAINHTHEIGHTFLOOR DRAINHTHEIGHTFLOOR DRAINHTHEATINGFIRE EXTINGUISHERHTHEIGHTFLOOR DRAINHTHEATINGFIRE DEPARTMENT VALVEHSTHIGH TEMPERATURE HOT WAFUOD DRAINHTHEATINGFIRE DEPARTMENT VAL	MFR MANUFACTUF MFRG MANUFACTUF MG MOTOR GENE MH MANHOLE MH METAL HALID MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MRS MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXHAUSTHDWRHARDWAREEXISTINGHEHELUMEXPANSIONHEHOREXPANSIONHORHANGEREXPOSEDHORHANGEREXPLOSIONHIDHIGH INTENSITY DISCHARGEEXTERIORHMHOLLOW METALFARENHEITHORIZHORZONTALFIRELINEHPHORZONTALFIRELINEHPHORZONTALFURNACEHPHEAT PUMPFACEHPHIGH PRESSURE STEAM CONFIRE SERVICEHPCHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFIRE ALARM ANNUNCATORHPSHIGH PRESSURE SOLIUMFARECALERN CONTROL PANELHROHOT REVERSE OSMOSISFACEHPRHIGH PRESSURE SOLIUMFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROKHOT REVERSE OSMOSISFACE DRICKHROKHOT REVERSE OSMOSISFACE DRICKHRWSHEAT RECOVERY WATER RUFLUDE CONCRETE MASONRY UNITHRWSHEAT RECOVERY WATER RUFLOOR CLEAN OUTHSHEAD STUDFLOOR CLEAN OUTHSHEAT RECOVERY WATER RUFLOOR CLEAN OUTHSHEAT SEASONAL PERFORMAFLOOR CLEAN OUTHSHEAT RECOVERY WATER RUFLOOR CLEAN OUTHSHEAT RECOVERY WATER RUFLOOR CLEAN OUTHSTHIGH TEMPERATURE HOT WAFLOOR CLEAN OUTHSTHIGH TEMPERATURE HOT WAFLOOR CL	MG MOTOR GENE MH MANHOLE MH METAL HALID MH MOP HOLDER MIN MINIMUM MISC MISCELLANEC MISC MISCELLANEC MISC MISCELLANEC ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MRS MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXPANSIONHEVHOSE END VALVEEXPOSEDHGRHANGEREXPLOSIONHIDHIGH INTENSITY DISCHARGEEXTERIORHMHOLLOW METALHARD-OFF-AUTOMATICHORIZONTALFARENHEITHORIZHORIZONTALFIRELINEHPHORSE POWERFURNACEHPHIGH PRESSUREFRESSERVICEHPHIGH PRESSURE STEAM CONFIRE SERVICEHPCHIGH PRESSURE STEAM CONFRESS HARHPGHIGH PRESSURE STEAM CONFRESS HARHPGHIGH PRESSURE STEAM SCINFRESS HARHPGHIGH PRESSURE STEAM SCINFRESS HARHPSHIGH PRESSURE STEAM SCINFRESS HARHPSHIGH PRESSURE SCINUSISFACE BRICKHPGHOURFACE BRICKHROCHOT REVERSE OSMOSIS RECFLUID COLERHRWRHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSTHEAT SEASONAL PERFORMAFLOOR CLEAN OUTHSTHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSTHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSTHEAT TREOTHERFLOOR CLEAN OUTHSTHEAT TREOTHERFLOOR CLEAN OUTHSTHEAT TREOTHERFLOOR CLEAN OUTHSTHOT METERFLOOR CLEAN OUTHSTHEAT TREOTHERFLOOR CLEAN NETHTMHEAT TREOTHERFLOOR CLEAN NETHTMHEAT TREOTHERFLOOR	MH METAL HALID MH MOP HOLDER MIN MINIMUM MISC MISCELLANEO MISC MISCELLANEO MISC MISCELLANEO ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MR MIRROR MR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
EXPLOSIONHIDHIGH INTENSITY DISCHARGEEXTERIORHMHOLLOW METALHOAHAND-OFF-AUTOMATICFARENHEITHORIZHORIZONTALFIRELINEHPHORSE POWERFURNACEHPHEAT PUMPFACEHPHIGH PRESSURE STEAM CONFIRE SERVICEHPCHIGH PRESSURE STEAM CONFIRE SERVICEHPCHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFRESH AIRHPSHIGH PRESSURE STEAM STANFRESH AIRHPSHIGH PRESSURE STEAM STANFRESH AIRHPSHIGH PRESSURE STEAM STANFACEHPRHIGH PRESSURE STEAM STANFARCEDALHRHOURFARE ALARM ANNUNCIATORHPSFIRE ALARM CONTROL PANELHRHOURHOT REVERSE OSMOSIS RECFACE BRICKHROCHOT REVERSE OSMOSIS RECFLUIDE COOLERHRWRHEAT RECOVERY WATER REFFLUDED COLERHRWRFLOOR OLEAN OUTHSHEAT RECOVERY WATER REFFLOOR ORAINHTFLOOR ORAINHTFLOOR ORAINHTFLOOR ORAINHTFIRE DEPARTMENT CONNECTIONHTWRFIRE DEPARTMENT VALVEHVACFOUNDATION DRAINHUMHUM HUMIDIFIERFIRE DEPARTMENT VALVEHVACFIRE DEPARTMENT VALVEHVACFIRE DEPARTMENT VALVEHVACFIRE DEPARTMENT VALVEHVACFIRE HOSE CABINETHWFIRE HO	MIN MINIMUM MISC MISCELLANEG MISC MISCELLANEG MISC MISCELLANEG ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
HOAHAND-OFF-AUTOMATICFAHRENHEITHORIZHAND-OFF-AUTOMATICFIRELINEHPHORIZONTALFIRELINEHPHORIZONTALFURNACEHPHEAT PUMPFACEHPHIGH PRESSURE STEAM CONFIRE SERVICEHPCHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFRACEHPRHIGH PRESSURE STEAM SUPFRESH AIRHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE SOMOSISFRACE BRICKHRCHOT REVERSE OSMOSISFACE BRICKHRCHOT REVERSE OSMOSISFACE BRICKHRCHOT REVERSE OSMOSISFLOD COLERHRWRHEAT RECOVERY WATER SETFLUID CONCRETE MASONRY UNITHSNFHEAT SEGOMAL PERFORMAFLOOR CLEN OUTHSHEAT SEGOMAL PERFORMAFLOOR CLEN OUTHSHEAT SEASONAL PERFORMAFLOOR CLEN OUTHSHEAT SEASONAL PERFORMAFLOOR CLEN OUTROL VALVEHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGHTFLOOR DRAINHTGHEAT INGFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE EXTINGUISHERHWHEATING WATER RETURNFIRE DEPARTMENT VALVEHVACHEATING WATER	MISC MISCELLANEO ML MOTORIZED L MLDG MOLDING MLO MAIN LUGS OD MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR MIRROR MR MIRROR MR MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
FIRELINEHPHORSE POWERFURNACEHPHEAT PUMPFACEHPHIGH PRESSUREFIRE SERVICEHPCHIGH PRESSURE NATURAL GFIRE ALARMHPNGHIGH PRESSURE STEAM CONFIRE ALARMHPNRHIGH PRESSURE STEAM CONFRESH AIRHPNHIGH PRESSURE STEAM CONFRESH AIRHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE STEAM SUPFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROCHOT REVERSE OSMOSIS RECFLUID COOLERHRWRHEAT RECOVERY WATER RUFLOOR CLEAN OUTHSHEADSTUDFLOOR CLEAN OUTHSHEADSTUDFAN COIL UNITHSPFHEAT SEASONAL PERFORMAFLOOR CLEAN OUTHSHEADSTUDFAN COIL UNITHSPFHEAT SEASONAL PERFORMAFLOW CONTROL VALVEHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGHTFLOOR DRAINHTHEATSTINGFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING ONTFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RETURNFIRE EXTINGUISHERHWHEATING WATER SUPPLYFINISH FLOORIAQINDOOR AIR QUALITYFINISHEDIAQINDOOR	MLDG MOLDING MLO MAIN LUGS OF MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST TURN MS MOP SINK
FACEHPHIGH PRESSUREFIRE SERVICEHPCHIGH PRESSURE STEAM CONFIRE ALARMHPNGHIGH PRESSURE STEAM CONFACEHPRHIGH PRESSURE STEAM SUPFRESH AIRHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE SODIUMFABRICATE(D)HRHOURFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROHOT REVERSE OSMOSISFACE DRICKHROHOT REVERSE OSMOSISFLUID COOLERHARWRHEAT RECOVERY WATER REIFLUID CONCRETE MASONRY UNITHRWRHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSHEADSTUDFAN COIL UNITHSPFHEAT SEASONAL PERFORMAFLOWC CONTROL VALVEHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGHTFILOOR DRAINHTGHEATINGFIRE DAMPERHTRHIGH TEMPERATURE HOT WAFOUNDATIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWRHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE EXTINGUISHERHWDOMESTIC HOT WATER RECIURNFIRE EXTINGUISHERHWDOMESTIC HOT WATER RECIURNFIRE EXTINGUISHERHWHATING VENTILATING UNITFIRE EXTINGUISHERHWHEATING WATER RETURNFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECIURN	MLWK MILLWORK DENSATE MO MASONRY OP AS MOCP MAXIMUM OV JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST TURN MS MOP SINK
FIRE ALARMHPNGHIGH PRESSURE NATURAL GFACEHPRHIGH PRESSURE STEAM RETFRESH AIRHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE SODIUMFABRICATE(D)HRHOURFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROCHOT REVERSE OSMOSISFACE BRICKHROCHOT REVERSE OSMOSISFLUID COOLERHRWRHEAT RECOVERY WATER SUFFLUID CONCRETE MASONRY UNITHSWHEAT RECOVERY WATER SUFFLOW CONTROL VALVEHSTRHIGH STRENOTHFLOW CONTROL VALVEHSTRHIGH STRENOTHFLERED COLD WATERHTHEGHTFLOW CONTROL VALVEHSTRHIGH STRENOTHFILTERED COLD WATERHTHEAT RECOVERY WATER SUFFIRE DAMPERHTHEAT RECOVERY WATER SUFFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE DEPARTMENT VALVE CABINETHWCDOMESTIC HOT WATER RECIFIRE DEPARTMENT VALVE CABINETHWCDOMESTIC HOT WATER RECINGFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECINFFIRE EXTINGUISHERHWRHEATING WATER RETURNFIRE HYDRANTHZHEAT ISFIRE HOSE CABINETIAHWCFIRE HOSE CABINETIAHEAT RECOMFIRE HOSE CABINETIAINFRARED BURNERFICORIBINFRARED BURNER<	AS MOCP MAXIMUM OVI JRN MPG MEDIUM PRES PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST TURN MS MOP SINK
FRESH AIRHPSHIGH PRESSURE STEAM SUPFIRE ALARM ANNUNCIATORHPSHIGH PRESSURE SODIUMFABRICATE(D)HRHOURFARRICATE(D)HRHOURFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROCHOT REVERSE OSMOSIS RECFLUID COOLERHRWRHEAT RECOVERY WATER RETFLUED CONCRETE MASONRY UNITHRWSHEAT RECOVERY WATER RETFLOR CLEAN OUTHSHEADSTUDFAN COIL UNITHSPFHEAT SEASONAL PERFORMAFLOW CONTROL VALVEHSTRHIGH STRENGTHFILERED COLD WATERHTHEAT SEASONAL PERFORMAFLOW CONTROL VALVEHSTRHIGH TEMPERATURE HOT WAFOUNDATIONHTWHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVEHVACHEATING WATER RETURNFIRE EXTINGUISHERHWCDOMESTIC HOT WATERFIRE HODO EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWDOMESTIC HOT WATERFIRE HORANTHZHERTZ (FREQUENCY)FILTER HOUSINGFIRE HORANTHZFIRE HORANTIAHEATING WATER RETURNFIRE HORANTIAIN ACCORDANCE WITHFIXTUREIBINFRARED BURNE	PLY MPR MEDIUM PRES MPS MEDIUM PRES MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST URN MS MOP SINK
FABRICATE(D)HRHOURFIRE ALARM CONTROL PANELHROHOT REVERSE OSMOSISFACE BRICKHROHOT REVERSE OSMOSIS RECFLUID COOLERHRWRHEAT RECOVERY WATER REFFLUTED CONCRETE MASONRY UNITHRWSHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSHEADSTUDFAN COL UNITHSPFHEAT SEASONAL PERFORMAFLOOR CLEAN OUTHSHEADSTUDFAN COL UNITHSPFHEAT SEASONAL PERFORMAFLOOR CLEAN OUTHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGH STRENGTHFILTERED COLD WATERHTHEIGH TEMPERATURE HOT WAFIRE DAMPERHTHEATERFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWRHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVEHVACDOMESTIC HOT WATER RECITFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECITFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECITFIRE EXTINGUISHER CABINETHWRHEATING WATER SUPPLYFINSH FLOORHXHEATING WATER SUPLYFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGIDINSIDE OLAMERERFIQUREIAQINDOOR AIR QUALITYFINSHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORICINTERCOMFLASHINGIDI	MR MIRROR MR/S MIRROR WITH IRCULATION MS MAGNETIC ST TURN MS MOP SINK
FACE BRICKHROCHOT REVERSE OSMOSIS RECFLUID COOLERHRWRHEAT RECOVERY WATER RETFLUTED CONCRETE MASONRY UNITHRWRHEAT RECOVERY WATER SUIFLOOR CLEAN OUTHSHEADSTUDFAN COL UNITHSPHEAT SEASONAL PERFORMAFLOW CONTROL VALVEHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGHTFLOOR DRAINHTGHEAT SEASONAL PERFORMAFIRE DAMPERHTHEIGHTFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RECIFIRE EATINGUISHERHWCDOMESTIC HOT WATER RECIFUME HOOD EXHAUST AIRHWRHEATING WATER RECIUNFIRE EXTINGUISHER CABINETHWSHEATING WATER RECIUNFIRE EXTINGUISHER CABINETHWRHEATING WATER RECIUNFIRE EXTINGUISHER CABINETHWRHEATING WATER RECIUNFIRE HOSE CABINETI.E.THAT ISFIGUREIBINFRARED BURNERFIRE HOSE CABINETI.E.THAT ISFIGUREIBINFRARED BURNERFLOORIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORICINTERNATIONAL BUILDING COFULDARIEEEIEFUORALIEEEIEFLUORESCENTIESILLUMINATING ENGINE	IRCULATION MS MAGNETIC ST TURN MS MOP SINK
FLUTED CONCRETE MASONRY UNITHRWSHEAT RECOVERY WATER SUFFLOOR CLEAN OUTHSHEADSTUDFAN COLL UNITHSPFHEAT SEASONAL PERFORMAFLOW CONTROL VALVEHSTRHIGH STRENGTHFILTERED COLD WATERHTHEIGHTFLORD DRAINHTGHEATINGFIRE DAMPERHTRHEATINGFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RECINFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECINFIRE EXTINGUISHER CABINETHWRHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HODSINGFIRE HOUSINGFIRE HOUSINGINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMEERFLOORIECINTERNATIONAL BUILDING COFLASHINGIECINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMEERFLOORIECINTERNATIONAL BURGENGFIRE HONSINGIECINTERNATIONAL BURGENGFIRE HOUSINGIECINTERNATIONAL BURGENGFLUORESCENTIESILLUMINATING ENGINEERINGFLASHINGIECINVER	
FAN COIL UNITHSPFHEAT SEASONAL PERFORMANEFLOW CONTROL VALVEHSTRHIGH STRENGTHFLUTERED COLD WATERHTHEIGHTFLOOR DRAINHTGHEATINGFIRE DAMPERHTRHEATERFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAYERFOUNDATIONHTWRHIGH TEMPERATURE HOT WAYERFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING UNITFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATERFIRE DEPARTMENT VALVE CABINETHWCDOMESTIC HOT WATER RECILFUME HOOD EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FIRE HOSE CABINETI.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDI.e.THAT ISFIRE HOSE CABINETI.G.INTERNATIONAL BUILDING CCFULL LOAD AMPSI.CINTERNATIONAL BUILDING CCFULL LOAD AMPSI.CINTERNATIONAL BUILDING CCFULL LOAD AMPSI.CINTERNATIONAL ENERGY COFLOORI.GINSIDE DIAMETERFLEXIBLEI.EINVERT ELEVATIONFLASELEI.EINVERT ELEVATIONFLASELEI.EINVERT ELEVATIONFLASELEI.EINVERT ELEVATIONFLANGEI.EINSIDE FACE<	WID WOONTED
FILTERED COLD WATERHTHEIGHTFLOOR DRAINHTGHEATINGFIRE DAMPERHTRHEATERFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RECIIFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RECIINGFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECINNFIRE EXTINGUISHER CABINETHWRHEATING WATER RETURNFIRE HOOD EXHAUST AIRHWRHEATING WATER RUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGIIFIRE HOSE CABINETi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIDINSIDE DIAMETERFLOORIDINSIDE DIAMETERFLOORIDINSIDE DIAMETERFLOORIEEINSTITUTE OF ELECTRICAL AIFLUORSCENTIESILLUMINATING ENGINEERINGFLUORSCENTIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATED TO	
FIRE DAMPERHTRHEATERFIRE DEPARTMENT CONNECTIONHTWRHIGH TEMPERATURE HOT WAFOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATER RECILFURE DEPARTMENT VALVE CABINETHWCDOMESTIC HOT WATER RECILFURE EXTINGUISHERHWCDOMESTIC HOT WATER RECILFURE HOOD EXHAUST AIRHWRHEATING WATER REURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HOUSINGFIRE HOUSINGFIRE HOSE CABINETI.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLOORIEEINSTITUTE OF ELECTRICAL AIFUORINGIEEINSTITUTE OF ELECTRICAL AIFUORINGIEEINSTITUTE OF ELECTRICAL AIFUORSECENTIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFOREERSILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORE MAINIFINSIDE FACE<	MTWR MEDIUM TEMP MTWS MEDIUM TEMP
FOUNDATIONHTWSHIGH TEMPERATURE HOT WAFOUNDATION DRAINHUMHUMIDIFIERFEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATERFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECILFUME HOOD EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGIAQINDOOR AIR QUALITYFINISHEDIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLAGEIEINVERT ELEVATIONFLASHINGIDINSIDE DIAMETERFLANGEIECCINTERNATIONAL BUILDING COFLOORIEEEINVERT ELEVATIONFLASHINGIDINSIDE DIAMETERFLOORIECCINTERNATIONAL ENERGY COFLOORINGIEEEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIESILLUMINATING ENGINEERINGFILL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUAL	MUL MULLION MV MEDICAL VAC
FEEDERHVHEATING VENTILATING UNITFIRE DEPARTMENT VALVEHVACHEATING VENTILATING AND AFIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATERFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECIIFUME HOOD EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGIIFIRE HOSE CABINETi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORICINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLOORIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFUURESCENTIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIXISOLATION JOINT	
FIRE DEPARTMENT VALVE CABINETHWDOMESTIC HOT WATERFIRE EXTINGUISHERHWCDOMESTIC HOT WATER RECINFUME HOOD EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFULU LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	N NITROGEN
FUME HOOD EXHAUST AIRHWRHEATING WATER RETURNFIRE EXTINGUISHER CABINETHWSHEATING WATER SUPPLYFINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAQIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLOORINGIEEINVERT ELEVATIONFLANGEIECINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFUUL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	N2 LABORATORY
FINISH FLOORHXHEAT EXCHANGERFIRE HYDRANTHZHERTZ (FREQUENCY)FILTER HOUSINGi.e.THAT ISFIRE HOSE CABINETi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERCOMFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFUUL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	N20 NITROUS UXII N20 NITROUS UXII N/A NOT APPLICA
FILTER HOUSINGFIRE HOSE CABINETi.e.THAT ISFIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERNATIONAL BUILDING COFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFULL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NA NOT APPLICA NA NOT APPLICA NAT NATURAL
FIGUREIAQINDOOR AIR QUALITYFINISHEDIAWIN ACCORDANCE WITHFIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERCOMFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFULL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NC NORMALLY CI NC NOISE CRITER
FIXTUREIBINFRARED BURNERFLOORIBCINTERNATIONAL BUILDING COFULL LOAD AMPSICINTERCOMFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFULL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NC NURSE CALL NC NURSE CALL NEC NATIONAL ELI
FULL LOAD AMPSICINTERCOMFLASHINGIDINSIDE DIAMETERFLASHINGIDINSIDE DIAMETERFLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY CODFLOORINGIEEEINSTITUTE OF ELECTRICAL AIFULL LENGTH MIRRORIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NEMA NATIONAL ELI
FLEXIBLEIEINVERT ELEVATIONFLANGEIECCINTERNATIONAL ENERGY COLFLOORINGIECCINSTITUTE OF ELECTRICAL AIFULL LENGTH MIRRORIEEEINSTITUTE OF ELECTRICAL AIFULORESCENTIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NIC NOT IN CONTI NO NORMALLY O
FULL LENGTH MIRRORENGINEERSFLUORESCENTIESILLUMINATING ENGINEERINGFIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NO NUMBER
FIRE MAINIFINSIDE FACEFORCE MAINIGISOLATED GROUNDFACTORY MUTUALIHINTAKE HOODFACILITIES MANAGMENT CONTROL SYSTEMIJISOLATION JOINT	NOE NINGGEN BI
FACTORY MUTUAL       IH       INTAKE HOOD         FACILITIES MANAGMENT CONTROL SYSTEM       IJ       ISOLATION JOINT	SOCIETY NS NEUTRAL SEN NTS NOT TO SCAL
	NV NITROGEN VE
FLOW MEASURING EQUIPMENT IJS IN JOIST SPACE	02 OXYGEN O to O OUT TO OUT
FEMALE NPTIMCINTERNATIONAL MECHANICAFINISH OPENINGIMCINTERMEDIATE METAL COND	- CODE O&M OPERATION A
FACE OFININCHFACE OF CONCRETEIN HGINCHES OF MERCURY (PRESS	
FUEL OIL FILLIN WCINCHES OF WATER COLUMN (FACE OF FINISHINCINCLUDE(ING)	PRESSURE) OD OUTSIDE DIAM OD OVERFLOW D
FACE OF MASONRYINSULINSULATIONFUEL OIL RETURNINTINTERIOR	OF OUTSIDE FAC OFCI OWNER FURN
FUEL OIL SUPPLYIPIRON PIPEFACE OF STUDIPCINTERNATIONAL PLUMBING C	OFF OWNER FURN
FUEL OIL VENTIPSIRON PIPE SIZEFACE OF WALLIWINDIRECT WASTE	OHP OVERHEAD PO OHT OVERHEAD TI
FIRE PUMP FIREPROOFING JAN JANITOR	OPNG OPENING OPP OPPOSITE
FAN POWERED VAV TERMINAL     JB     JUNCTION BOX       FIRE PUMP DISCHARGE     JCT     JUNCTION	ORD OVERFLOW R OS&Y OUTSIDE SCR
FINS PER INCHJFBJOINT FILLER BOARDFEET PER MINUTEJSTJOISTFIRE RESISTANTJTJOINT	OSD OVERFLOW S OTCS OPEN TO CEIL
FIRE RESISTIVE	OV OIL VENT OVFL OVERFLOW
FIBERGLASS REINFORCED PANEL KCP KEENE'S CEMENT PLASTER	OVHD OVERHEAD OW OIL WASTE
FLOOR SINK KH KITCHEN HOOD	P POLE(S)
FOOD SERVICE EQUIPMENT CONTRACTOR KHS KITCHEN HOOD SUPPLY FAN	P POMP P/T PRESSURE/TE
FIN TUBE KO KNOCKOUT	PA PUBLIC ADDR PAN B PANIC BOLT
FOOTING KV KILOVOLT	PAR PARALLEL PB PULL BOX
FUTURE KVAR KILOVOLT AMPERES REACTIN	PB PARTICLE BU
FACE VELOCITY KWH KILOWATT HOUR	PBS PUSH BUTTO PC PRECAST CO
FIRE VALVE CABINET FABRIC WALL COVERING L ANGLE LA LABRATORY COMPRESSED A	PC PUMPED CON PCD PAPER CUP D
GRILLE LAB LABORATORY NATURAL GAS LAM LAMINATED	PCF POUNDS PER PCT PORCELAIN C
GAUGE LAT LEAVING AIR TEMPERATURE	PCV PRESSURE CO PCWP PROCESS CO
GALVANIZED LB(S) POUND(S)	
GRAD BARLBRLUMBERGENERAL CONTRACTORLDGLOADINGGLAZED CONCRETE MASONRY UNITLFLINEAR FOOT	PCWR PROCESS CO PCWS PROCESS CO
GRADE CLEAN OUT LG LENGTH (LONG) GARBAGE DISPOSAL LIN LINEAR	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHARDING
GREASE EXHAUST AIR LINO LINOLEUM	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHAPDIPLUMBING & IPENTPENTHOUSE
GENERATORLKRLOCKERGENERALLLLIVE LOADGROSS FLOOR AREALLHLONG LENGTH HORIZONTAL	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHAPDIPLUMBING & IPENTPENTHOUSEPERFPERFORATEDPERPPERPENDICUL
GROUND-FACE CONCRETE MASONRY UNITLLNLONG LENGTH HORIZONTALGROUND FAULT CIRCUIT INTERRUPTERLN2LIQUID NITROGEN	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHAPDIPLUMBING & IPDIPLUMBING & IPENTPENTHOUSEPERFPERFORATEDPERPPERPENDICULPFPOWER FACTPGPRESSURE G.
GROUND FAULT CIRCUIT INTERRUPTERLN2Eliquid NitrogenGLASS FIBER REINFORCED CONCRETELO2LIQUID OXYGENGLYCOL-WATER HEATING RETURNLOCLOCATION	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHAPDIPLUMBING & IPENTPENTHOUSEPERFPERFORATEDPERPPERPENDICUIPFPOWER FACTPGPROPANE GAPHPHASE
GLYCOL-WATER HEATING RETURN     LOG     LOGGTION       GLYCOL-WATER HEATING SUPPLY     LONG     LONGITUDINAL       GALVANIZED IRON     LPG     LIQUIFIED PETROLEUM GAS (	PCWRPROCESS COPCWSPROCESS COPDPRESSURE DIPDPUMP DISCHAPDIPLUMBING & IPDIPLUMBING & IPENTPENTHOUSEPERFPERFORATEDPERPPERPENDICULPFPOWER FACTPGPRESSURE GAPHPHASEPHCPRE-HEAT COPIPOINT OF INTER
GLUE LAMINATED     LPR     LOW PRESSURE STEAM RETU       GLASS     LPS     LOW PRESSURE STEAM SUPF	PCWR PROCESS CO PCWS PROCESS CO PD PRESSURE DI PD PUMP DISCHA PDI PLUMBING & I PENT PENTHOUSE PERF PERFORATED PERP PERPENDICU PF POWER FACT PG PRESSURE GA PG PROPANE GA PH PHASE PHC PRE-HEAT CO PI POINT OF INT PI PRESSURE IN PIC PORTABLE IN
GLASS MASONRY UNIT LR LIVING ROOM GROUND LS LAWN SPRINKLER	PCWR PROCESS CO PCWS PROCESS CO PD PRESSURE DF PD PUMP DISCHA PDI PLUMBING & D PENT PENTHOUSE PERF PERFORATED PERP PERPENDICUL PF POWER FACTO PG PRESSURE GA PG PROPANE GAS PH PHASE PHC PRE-HEAT CO PI POINT OF INTE PI PRESSURE IN PIC PORTABLE INS PIC POST INDICAT PI PL PLATE
GOVERNMENTLSCLIFE SAFETY CODEGALLONS PER DAYLTLIGHT	PCWR PROCESS CO PCWS PROCESS CO PD PRESSURE DF PD PUMP DISCHA PDI PLUMBING & D PENT PENTHOUSE PERF PERFORATED PERP PERPENDICUI PF POWER FACTO PG PRESSURE GA PG PROPANE GAS PH PHASE PHC PRE-HEAT CO PI POINT OF INTO PI POINT OF INTO PI POINT OF INTO PI PORTABLE INS PIC PORTABLE INS PIV POST INDICAT PL PLATE

LIGHTING LOUVER LABORATORY VACUUM LEAVING LONG WAY LEAVING WATER TEMPERATURE THOUSAND MIXED AIR MAKE-UP AIR MEDICAL COMPRESSED AIR MACHINE MAGNETIC MAINTENANCE MANUAL MASONRY MATERIAL MAKEUP AIR UNIT MANUAL AIR VENT MAXIMUM MACHINE BOLT MARKER BOARD THOUSAND BTU PER HOUR MECHANICAL CONTRACTOR MEDICINE CABINET MINIMUM CIRCUIT AMPACITY MAIN CIRCUIT BREAKER METAL COMPOSITE MATERIAL MOTORIZED DAMPER MEDIUM DENSITY FIBERBOARD MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE METAL MEZZANINE MANUFACTURER MANUFACTURING MOTOR GENERATOR MANHOLE METAL HALIDE MOP HOLDER MINIMUM MISCELLANEOUS MISCELLANEOUS MOTORIZED LOUVER MOLDING MAIN LUGS ONLY MILLWORK MASONRY OPENING MAXIMUM OVERCURRENT PROTECTION MEDIUM PRESSURE GAS MEDIUM PRESSURE STEAM RETURN MEDIUM PRESSURE STEAM SUPPLY MIRROR MIRROR WITH SHELF MAGNETIC STARTER MOP SINK MOUNTED MOUNTING METAL MEDIUM TEMP HOT WATER RETURN MEDIUM TEMP HOT WATER SUPPLY MULLION MEDICAL VACUUM MERCURY VAPOR MARKER WALL NITROGEN NORTH LABORATORY NITROGEN NITROUS OXIDE NITROUS OXIDE NOT APPLICABLE NOT APPLICABLE NATURAL NORMALLY CLOSED NOISE CRITERIA NURSE CALL NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURERS ASSN. NEUTRAL NOT IN CONTRACT

NORMALLY OPEN

NITROGEN DIOXIDE

NON RISING STEM

NEUTRAL SENSOR

OPERATION AND MAINTENANCE

OWNER FURNISHED CONTRACTOR INSTALLED

OWNER FURNISHED OWNER INSTALLED

OWNER FURNISHED OWNER INSTALLED

PRESSURE/TEMPERATURE TEST PORT

NOT TO SCALE

NITROGEN VENT

OUTSIDE DIAMETER

OVERHEAD POWER

OVERHEAD TELEPHONE

OVERFLOW ROOF DRAIN

OUTSIDE SCREW AND YOKE

OVERFLOW STORM DRAIN

OPEN TO CEILING SPACE

OVERFLOW DRAIN

OUTSIDE FACE

PUBLIC ADDRESS

PUSH BUTTON

PARTICLE BOARD

PUSH BUTTON STATION

PRECAST CONCRETE

PUMPED CONDENSATE

PAPER CUP DISPENSER

POUNDS PER CUBIC FOOT

PORCELAIN CERAMIC TILE

PRESSURE DROP

PUMP DISCHARGE

PERFORATED

PERPENDICULAR

POWER FACTOR

PROPANE GAS

PRE-HEAT COIL

POINT OF INTERSECTION

PRESSURE INDICATOR

POST INDICATOR VALVE

PORTABLE INSTRUMENT CONNECTION

PLASTIC LAMINATE

PRESSURE GAUGE

PRESSURE CONTROL VALVE

PROCESS COOLING WATER PUMP

PROCESS COOLING WATER RETURN

PROCESS COOLING WATER SUPPLY

PLUMBING & DRAINAGE INSTITUTE

LINED TRANSFER DUCT

### A. ALL FIRE PROTECTION WORK PERFORMED SHALL BODIES. IF THE DRAWINGS AND/OR SPECIFICATIO GOVERNING CODE REQUIREMENTS, THESE DRAW B. THE SPRINKLER DESIGN SHALL BE COORDINATED END, THE SPRINKLER CONTRACTOR IS RESPONS STRUCTURAL, MECHANICAL, PLUMBING, ELECTRIC 1. REFER TO THE ARCHITECTURAL DRAWING PARTITIONS, AND OCCUPANCIES. 2. REFER TO STRUCTURAL TO COORDINATE BUILDING. 3. REFER TO THE PLUMBING AND MECHANIC THE CEILINGS. THE SPRINKLER CONTRACT a. THE HORIZONTAL MECHANICAL UN EASY REMOVAL OF THE FILTER AN PANELS. THIS ACCESS SPACE HAS ADJACENT TO THE UNITS. LEAVE E PERFORM MAINTENANCE OR REP ELECTRICAL AND DUCT CONNECT b. IF ANY SPRINKLER PIPING IS RUN ACCESS AREAS, THE PIPE SHALL E SERVICE / ACCESS AREA. c. ALLOW ADEQUATE ROOM BELOW NOT LOCATE ANY PIPING SYSTEM 4. REFER TO THE ELECTRICAL DRAWINGS FO AND ALARM SYSTEMS. 5. PROVIDE PROTECTION ABOVE AND BELOV ARE LOCATED WITHIN THE CEILING PLENU 6. PROVIDE HEAVY DUTY PROTECTIVE GUAR SUBJECT TO ABUSE . 7. PER NFPA 13, FIRE SPRINKLER PIPING SHA SYSTEM. FIRE SPRINKLER PIPING NOT BE DUCTWORK HANGING SYSTEMS. 8. WHERE CEILINGS ARE TO BE INSTALLED, CEILING PLENUM UNLESS NOTED OTHERW SHALL BE OBTAINED FROM THE ARCHITEC WHICH HAS A SUSPENDED CEILING. 1.2 FIRE PROTECTION DEMOLITION SHEET NOTES

# **PROJECT INFORM**

# APPLICABLE COD

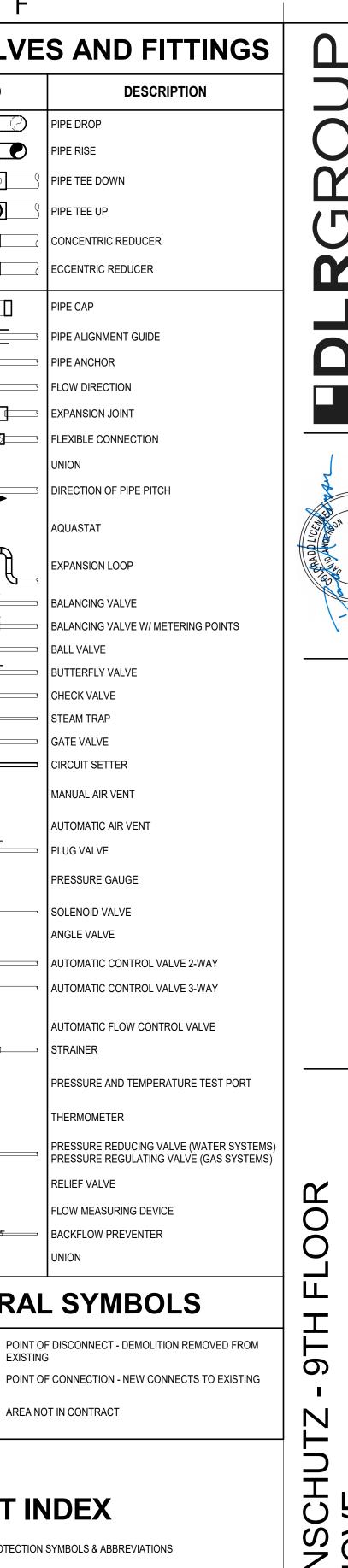
•	2021 IBC	-	INTERNATIONAL BUILDING CODE
•	2021 IEBC	-	INTERNATIONAL EXISTING BUILDING
•	2021 IMC	-	INTERNATIONAL MECHANICAL CODE
•	2021 IECC	-	INTERNATIONAL ENERGY CONSERVA
•	2021 NEC	-	NATIONAL ELECTRIC CODE
•	2021 IPC	-	NATIONAL PLUMBING CODE
•	2021 IFC	-	INTERNATIONAL FIRE CODE
•	NFPA	-	NATIONAL FIRE PROTECTION ASSOC

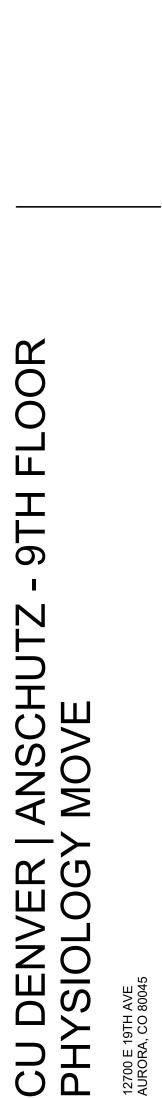
D		E			F	
GENERAL FIRE PROTECTION NOTES	FIRE F	PROTEC	TION SYMBOLS	PIPING	<b>VALVE</b>	
1.1 GENERAL NOTES	SCHEMATIC	3D	DESCRIPTION	SCHEMATIC	3D	DESCRIPTION
A. ALL FIRE PROTECTION WORK PERFORMED SHALL COMPLY WITH ALL CODES, LAWS AND GOVERNING BODIES. IF THE DRAWINGS AND/OR SPECIFICATIONS ARE MORE RESTRICTIVE OR EXCEED THE GOVERNING CODE REQUIREMENTS. THESE DRAWINGS AND SPECIFICATIONS SHALL GOVERN.	(	$\mathbf{\tilde{v}}$	ALARM VALVE, WET	c5		PIPE DROP
GOVERNING CODE REQUIREMENTS, THESE DRAWINGS AND SPECIFICATIONS SHALL GOVERN.			ALARM VALVE, DRY	<b>→</b>		PIPE RISE
B. THE SPRINKLER DESIGN SHALL BE COORDINATED WITH ALL OTHER ASPECTS OF THE BUILDING. TO THAT END, THE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE ARCHITECTURAL,		-≺ `	FIRE DEPARTMENT CONNECTION		6 (2) 9	PIPE TEE DOWN
STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS. 1. REFER TO THE ARCHITECTURAL DRAWINGS FOR BUILDING ELEVATIONS, CEILING DETAILS,			PENDENT SPRINKLER HEAD - WET PENDENT SPRINKLER HEAD - DRY	<b>∠o</b> ~?		PIPE TEE UP
PARTITIONS, AND OCCUPANCIES. 2. REFER TO STRUCTURAL TO COORDINATE PIPING LAYOUT WITH STRUCTURAL ELEMENTS OF THE		<b>●</b> ── ( ⊗───→	CONCEALED SPRINKLER HEAD - WET			CONCENTRIC REDUCER
BUILDING. 3. REFER TO THE PLUMBING AND MECHANICAL DRAWINGS TO ASSESS THE CONGESTION ABOVE THE OFFICIENCY OF CONTRACTOR SHALL OFFICIENCY OF CONSISTION ABOVE		- · · · ⊗—	CONCEALED SPRINKLER HEAD - DRY			ECCENTRIC REDUCER
THE CEILINGS. THE SPRINKLER CONTRACTOR SHALL SPECIFICALLY BE CONSCIOUS OF a. THE HORIZONTAL MECHANICAL UNITS HAVE BEEN LOCATED IN AREAS THAT ALLOW FOR EASY REMOVAL OF THE FILTER AND EASY ACCESS TO THE EQUIPMENT UNIT ACCESS		<b>9</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	RECESSED SPRINKLER HEAD - WET			
PANELS. THIS ACCESS SPACE HAS BEEN DESIGNATED BY THE DASHED LINE AREAS ADJACENT TO THE UNITS. LEAVE ENOUGH SPACE FOR SERVICE PERSONNEL TO			RECESSED SPRINKLER HEAD - DRY			PIPE CAP
PERFORM MAINTENANCE OR REPAIR. PROVIDE SUFFICIENT ROOM TO MAKE WATER, ELECTRICAL AND DUCT CONNECTIONS.		⊃ <u> </u>	UPRIGHT SPRINKLER HEAD - WET			PIPE ALIGNMENT GUIDE
<ul> <li>b. IF ANY SPRINKLER PIPING IS RUN WITHIN THE DESIGNATED EQUIPMENT SERVICE / ACCESS AREAS, THE PIPE SHALL BE REMOVED AND RE-ROUTED SO IT IS NOT WITHIN THE</li> </ul>		>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	UPRIGHT SPRINKLER HEAD - DRY SIDEWALL SPRINKLER HEAD - WET	<b>→ ×</b> →		PIPE ANCHOR
SERVICE / ACCESS AREA. c. ALLOW ADEQUATE ROOM BELOW THE MECHANICAL UNIT FOR A CONDENSATE TRAP. DO		<ul> <li>■</li> </ul>	SIDEWALL SPRINKLER HEAD - DRY			FLOW DIRECTION
NOT LOCATE ANY PIPING SYSTEMS BELOW ANY SUSPENDED MECHANICAL. 4. REFER TO THE ELECTRICAL DRAWINGS FOR THE INTERFACE BETWEEN THE FIRE SPRINKLER		<ul><li><b>→</b></li></ul>	SIDEWALL SPRINKLER HEAD - EXTENDED			EXPANSION JOINT
AND ALARM SYSTEMS. 5. PROVIDE PROTECTION ABOVE AND BELOW CEILINGS WHEN/WHERE COMBUSTIBLE MATERIALS ARE LOCATED WITHIN THE CEILING PLENUM.		⊲_	COVERAGE - WET SIDEWALL SPRINKLER HEAD - EXTENDED			FLEXIBLE CONNECTION
<ol> <li>PROVIDE HEAVY DUTY PROTECTIVE GUARDS FOR SPRINKLER HEADS IN ALL EXPOSED AREAS SUBJECT TO ABUSE.</li> </ol>	٦ ٦	S	COVERAGE - DRY			UNION
<ol> <li>PER NFPA 13, FIRE SPRINKLER PIPING SHALL BY SUPPORTED BY AN INDEPENDENT PIPE HANGER SYSTEM. FIRE SPRINKLER PIPING NOT BE SUPPORTED FROM OTHER PIPING, CONDUIT, OR</li> </ol>		<u>г</u>	FLOW SWITCH			DIRECTION OF PIPE PITCH
DUCTWORK HANGING SYSTEMS. 8. WHERE CEILINGS ARE TO BE INSTALLED, SPRINKLER PIPING SHALL BE INSTALLED WITHIN THE		≥s ⊑	PRESSURE SWITCH	ج <b>ب</b>		AQUASTAT
CEILING PLENUM UNLESS NOTED OTHERWISE ON THE DRAWINGS. WRITTEN AUTHORIZATION SHALL BE OBTAINED FROM THE ARCHITECT PRIOR TO EXPOSING ANY PIPING IN ANY ROOM		☆	OS&Y VALVE			EXPANSION LOOP
WHICH HAS A SUSPENDED CEILING.		÷	OS&Y VALVE (INDICATING)			
1.2 FIRE PROTECTION DEMOLITION SHEET NOTES				·		BALANCING VALVE
A. REMOVE EXISTING SPRINKER HEADS AND PIPING THIS ROOM.		ING AN	NOTATIONS			BALANCING VALVE W/ METERING POIL
B. REMOVE EXISTING SPRINKLER HEAD(S) IN THIS ROOM. REMOVE ALL RELATED PIPING BACK TO MAIN AND	SCHEMATIC	3D	DESCRIPTION			BALL VALVE BUTTERFLY VALVE
CAP.	)	0	EXISTING TO REMAIN - (E) or EXIST			CHECK VALVE
C. REMOVE SPRINKLER PIPING TO THIS LOCATION TO ALLOW GENERAL CONTRACTOR TO PERFORM HIS DEMOLITION WORK.	(			<b>├───</b> ⊗────┤		STEAM TRAP
	← − − − →	<u>}</u>	ITEM TO BE DEMOLISHED - (D) or DEMO	<b>⋈</b>		GATE VALVE
	<b>ہ</b> 18" CHWS	8 18" CHWS 9	PIPE SIZE TAG (DIAMETER WITH SYSTEM NAME)			CIRCUIT SETTER
PROJECT INFORMATION	، ب		ABOVE GROUND PIPING			MANUAL AIR VENT
PROJECT LOCATION: BOULDER, CO.	<u>ہے ا</u>	53	BELOW GROUND PIPING	<u>ج ۲ ج</u>		AUTOMATIC AIR VENT
PROJECT ALTITUDE: 5,400 FT. ASL (APPROX.)	1/8" / 12" SLOPE	1/8" / 12" SLOPE -	- PIPE SLOPE	<u>}</u>		PLUG VALVE
APPLICABLE CODES		8				PRESSURE GAUGE
	LE: -93' - 1"	LE: -93' - 8" -	- PIPE INVERT ELEVATION		<b></b>	SOLENOID VALVE
2021 IBC - INTERNATIONAL BUILDING CODE     2021 IEBC - INTERNATIONAL EXISTING BUILDING CODE						ANGLE VALVE
2021 IMC - INTERNATIONAL MECHANICAL CODE     2021 IECC - INTERNATIONAL ENERGY CONSERVATION CODE	DDC-xx-	•	<ul> <li>MECHANICAL EQUIPMENT TAG</li> </ul>			AUTOMATIC CONTROL VALVE 2-WAY
2021 NEC - NATIONAL ELECTRIC CODE     2021 IPC - NATIONAL PLUMBING CODE     2021 IFC - INTERNATIONAL FIRE CODE		4	- MECHANICAL EQUIPMENT CLEARANCE			AUTOMATIC CONTROL VALVE 3-WAY
2021 IFC - INTERNATIONAL FIRE CODE     NFPA - NATIONAL FIRE PROTECTION ASSOCIATION						
						AUTOMATIC FLOW CONTROL VALVE
					<b>.</b>	
						PRESSURE AND TEMPERATURE TEST
						THERMOMETER
						PRESSURE REDUCING VALVE (WATER PRESSURE REGULATING VALVE (GAS
				, ≱~ ,		RELIEF VALVE
						FLOW MEASURING DEVICE
					<del>1</del>	BACKFLOW PREVENTER
						UNION
				G	ENERA	L SYMBOLS

# SHEET INDEX

EXISTING

FP0.1 FIRE PROTECTION SYMBOLS & ABBREVIATIONS FP1.1 LEVEL 09 - FIRE PROTECTION PLAN





CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

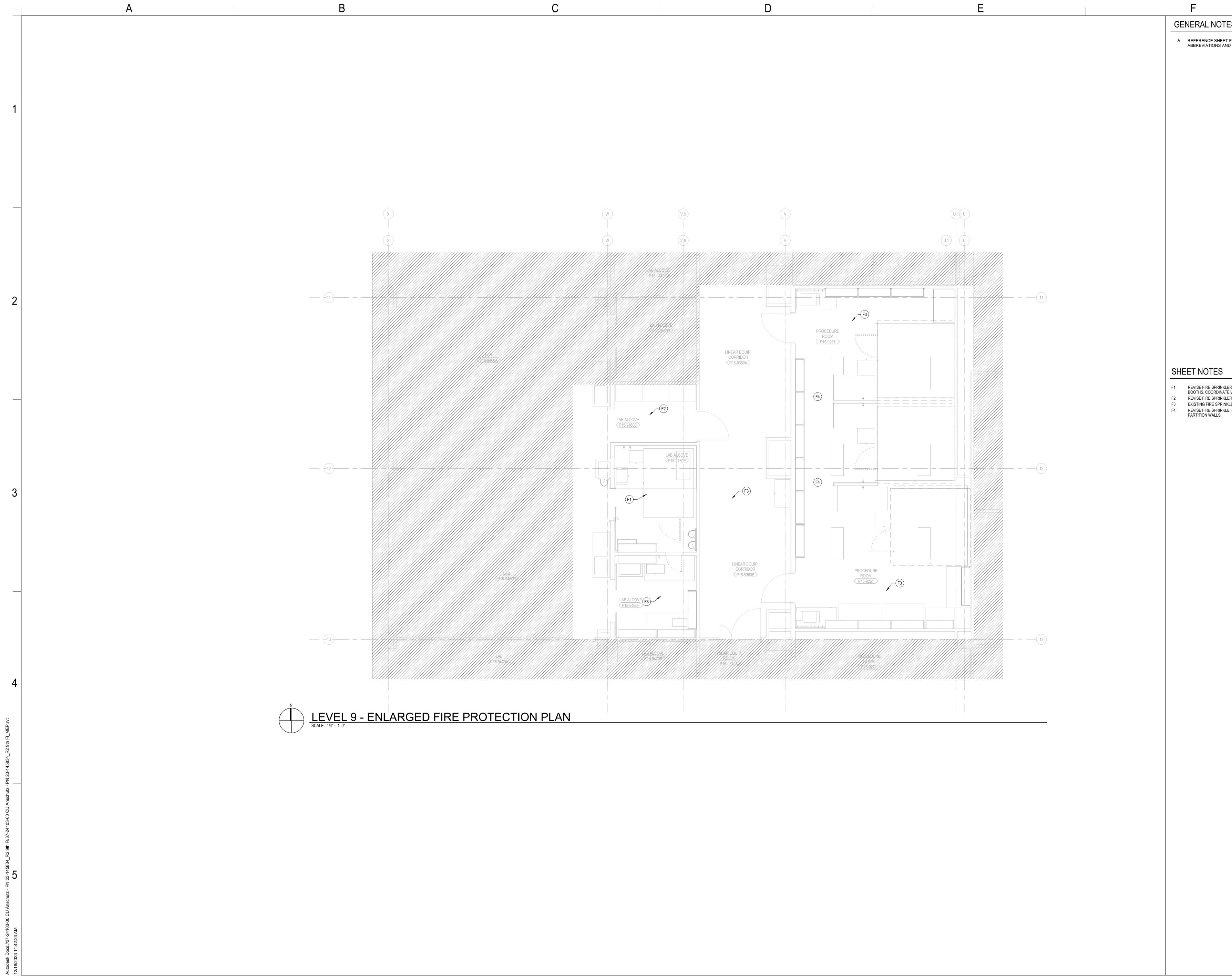
PN 23-14584 37-24103-00

FIRE PROTECTION SYMBOLS & ABBREVIATIONS

**FP0.1** 

NOTE ALL NOTES ON THIS SHEET ARE APPLICABLE TO ALL OTHER SHEETS IN THIS SET.

THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE APPLICABLE IN THIS SET OF DRAWINGS.



TES ET FP0.1 FOR SYMBOLS, ND GENERAL NOTES	EXP. 10/31/2025 EXP. 10/31/2025 EXP. 10/31/2025
CLER HEADS ABOVE NEW SOUND ATE WITH NEW CEILING ELEVATION. CLER HEADS IN NEW ROOM LAYOUT. NKLER LAYOUT TO REMAIN. CLE HEADS TO ACCOMMODATE	CU DENVER JANSCHUTZ - 9TH FLOOR PHYSIOLOGY MOVE
	CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS
	PN 23-14584 37-24103-00 LEVEL 09 - FIRE PROTECTION PLAN
	FP1.1

# **ABBREVIATIONS**

ABB	REVIATIONS
#	NUMBER
&	AND
(D)	DEMOLISHED
(E)	EXISTING
(R)	RELOCATED
@	AT
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
Ø	PHASE
Ø	DIAMETER COMPRESSED AIR
A	AMPERE
A	AMP
A/C	AIR CONDITIONING(ER)
A/E	ARCHITECT/ENGINEER
AABC	ASSOCIATED AIR BALANCE COUNCIL
AAP	ALARM ANNUNCIATOR PANEL
AAP	AREA ALARM PANEL
AAV	AUTOMATIC AIR VENT
AAV	AIR ADMITTANCE VALVE
AB	ANCHOR BOLT
ABS	ACRYLONITRILE-BUTADIENE-STYRENE
AC	ALTERNATING CURRENT
AC	ACOUSTIC CEILING
ACC	AIR COOLED CONDENSER
ACC	ACCESSIBLE
ACCU	AIR COOLED CONDENSING UNIT
ACM	ALUMINUM COMPOSITE MATERIAL
ACST	ACOUSTIC
AD	AREA DRAIN
AD	ACCESS DOOR
ADDN	ADDITION OR ADDITIONAL
ADJ	ADJUSTABLE
ADJT	ADJACENT, ADJOINING
ADMIN	ADMINISTRATION
ADO	AUTOMATIC DOOR OPENER
AF	AIR FILTER
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGF	AIR GAP FITTING
AHJ	AUTHORITY HAVING JURISDICTION
AHRI	AIR-CONDITIONING HEATING AND
AHU Al	REFRIGERATION INSTITUTE AIR HANDLING UNIT AREA INLET
AI	ANALOG INPUT
ALT	ALTERNATE
ALUM	ALUMINUM
AMB	AMBIENT
AMBA AMP	AMERICAN BOILER MANUFACTURERS ASSOCIATION AMPERE
ANCH	ANCHOR
AP	ACCESS PANEL
APC	ACOUSTIC PANEL CEILING
APPROX	APPROXIMATE
AR	ACID RESISTING
AR	ARGON
ARCH	ARCHITECTURAL
AS	AIR SEPARATOR
ASB	ASBESTOS
ASCE ASHRAE	AMERICAN SOCIETY OF CIVIL ENGINEERS AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING
ASME	ENGINEERS AMERICAN SOCIETY OF MECHANICAL
ASPH AUTO	ENGINEERS ASPHALT AUTOMATIC
AV	AUDIO-VIDEO, AUDIO-VISUAL
AV	ACID VENT
AV	AIR VENT
AVG	AVERAGE
AW	ACID WASTE
AWG	AMERICAN WIRE GAUGE
AWP	ACOUSTIC WALL PANEL
B	BOILER
B to B	BACK TO BACK
BAS	BUILDING AUTOMATION SYSTEM
BAT	BATTERY
BBO	BOILER BLOW OFF
BC	BALANCING COCK
BC	BARE COPPER
BCMU	BURNISHED CONCRETE MASONRY UNIT
BD	BOARD
BDD	BACK DRAFT DAMPER
BET	BETWEEN
BF	BOILER FEED
BFF	BELOW FINISH FLOOR
BFP	BACKFLOW PREVENTER
BFR	BELOW FLOOR
BFV	BUTTERFLY VALVE
BHP BI BKB	BREAK HORSEPOWER BACKWARD INCLINED (FAN IMPELLER/WHEEL)
BKR	BREAKER
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLKHD	BULKHEAD
BM	BENCH MARK
BM(S)	BEAM(S)
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOF	BOTTOM OF FOOTING
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BPIP	BOILER PLANT INSTRUMENTATION PANEL
BRDG	BRIDGING
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
BT	BATHTUB
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BUR	BUILT UP ROOFING
BV	BALL VALVE
C	CONDUIT
C	CONDENSER WATER
CA	COMBUSTION AIR
CANT	CANTILEVER
CAP	CAPACITY
CAS	CASING
CBD	COUNTER-BALANCED DAMPER
CBD	CHALKBOARD
CC	COOLING COIL
CCR	CONTROL CONTRACTOR
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONDENSATE DRAIN
CD	CEILING DIFFUSER
CD	CONSTRUCTION DOCUMENTS
CDA	CLEAN DRY AIR (COMPRESSED AIR)
CDF	COMBINATION DRINKING FOUNTAIN & BOTTLE FILLING STATION
CE	COVER ELEVATION
CEM	CEMENT
CENT	CENTRIFUGAL
CENT	CENTRIFUGAL
CER	CERAMIC
CF	CUBIC FEET
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED CUBIC FEET PER HOUR
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
CH	CHILLER
CH	CHANNEL
CHWP	CHILLED WATER PUMP
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI CI	CAST IRON CURB INLET CAST IN PLACE
CIP	CAST IN PLACE
CIP	CAST IRON PIPE
CIRC	CIRCULATING

CJ	CONTROL JOINT CONSTRUCTION JOINT
CJA	CONTROL JOINT ABOVE
CKT	CIRCUIT
CKT BK	CIRCUIT BREAKER
CL	CENTER LINE
CL	CIRCUIT LINE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR
CM	CEILING MOUNTED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CO	CARBON MONOXIDE
CO	CONDUIT ONLY
CO2	CARBON DIOXIDE
COL	COLUMN
	COMBINATION COMMUNICATIONS
COMP	COMPRESSOR UNIT
COMP	COMPOSITE
COMPR	COMPRESSIBLE
COMPR	CONCRETE CONDENSATE
CONF	CONFERENCE CONFIGURATION
CONN(S)	CONNECTION(S)
CONST	CONSTRUCTION
CONT	CONTINUOUS CONTRACT(OR)
CONV	CONVECTOR COORDINATE
COORD	COORDINATE
CP	CONDENSATE PUMP
CP	COVER PLATE
CPS	CYCLES PER SECOND
CPT	CARPET
CPVC	CHLORINATED POLYVINYL CHLORIDE
CR	CORROSION RESISTANT
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CS	COUNTERSINK
CS	COMBINATION SEWER
CS	CARBON STEEL
CSK	COUNTERSUNK
CSMU	CALCIUM SILICATE MASONRY UNIT
CSP	COMBINATION STANDPIPE
CSWK	CASEWORK
CT	COOLING TOWER
CT	CERAMIC TILE
CT	CURRENT TRANSFORMER
CTL	CONTROL
CTR	CENTER
CU	COPPER
CU CU	CORPER CONDENSING UNIT CUBIC
CU	COMBINATION UNIT
CUH	CABINET UNIT HEATER
CW	COLD WATER CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CWV	COMBINATION WASTE AND VENT
CY	CUBIC YARD
CYL	CYLINDER
D	DRAIN
D	DIFFUSER
D	DEPTH
D	DATA
d	PENNY ( NAIL 10D)
DB	DECIBEL
DB	DRY BULB
DBA	DECIBELS A
DBL	DOUBLE
DC	DIRECT CURRENT
DC	DUST COLLECTOR
DCJ	DUMMY CONTROL JOINT
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DEMO	DEMOLISH OR DEMOLITION
DEPR	DEPRESS(ION)(ED)
DEPT	DEPARTMENT
DET	DETAIL
DET	DETENTION
DF	DRINKING FOUNTAIN
DFR	DIESEL FUEL RETURN
DFS	DIESEL FUEL SUPPLY
DFU	DRAINAGE FIXTURE UNIT
DFV	DIESEL FUEL VENT
DG	DOOR GRILLE
DG	DOOR GRILLE
DH	DUCT HEATER
DHU	DEHUMIDIFICATION UNIT
DI DI	DEFONIDIFICATION ONT DEIONIZED WATER DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIC	DISCHARGE DIFFUSER
DIM	DIMENSION DISCONNECT
DISC SW	DISCONNECT SWITCH
DISCH	DISCHARGE
DISTR	DISTRIBUTION
DIV	SPECIFICATION DIVISION
DL	DRUM LOUVER
DL	DEAD LOAD
DM	DAMPER MOTOR
DMPR	DAMPER
DN	DOWN
DO or "	DITTO
DOAS	DEDICATED OUTDOOR AIR SYSTEM UNIT
DOE	DEPARTMENT OF ENERGY
DP DPFG	DIFFERENTIAL PRESSURE DAMPROFFING DIEEEDENTIAL PRESSURE INDICATOR
DPI	DIFFERENTIAL PRESSURE INDICATOR
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
DPT DR DR	DOOR
DR	DRAIN
DS	DISTILLED WATER
DS	DOWNSPOUT
DS	DOWNSPOUT
DSN	DOWNSPOUT NOZZLE
DSP	DRY STANDPIPE
DSPR	DRY SPRINKLER PIPING
DSPR	DRY SPRINKLER PIPE
DSTB DTL	DISTRIBUTED
DTR	DUCT THRU ROOF
DW	DISHWASHER
DWBP	DOMESTIC WATER BOOSTER PUMP
DWDI	DOUBLE WIDTH DOUBLE INLET
DWG(S)	DRAWING(S)
DWL(S)	DOWEL(S)
DWR	DRAWER
DWRP	DOMESTIC WATER RECIRCULATING PUMP
DX	DIRECT EXPANSION
DXS	DOUBLE EXTRA STRONG
E	EAST
EA	EACH
EA	EXHAUST AIR
EA	EACH FACE
EAT	ENTERING AIR TEMPERATURE
EB	ELECTRIC BASEBOARD RADIATION
EB	EXPANSION BOLT
EBH	ELECTRIC BASIN HEATER
EBH	ELECTRIC BASIN HEATER
EC	ELECTRICAL CONTRACTOR
ECON	ECONOMIZER
ECON	ECONOMIZER
ECS	EMERGENCY COMMUNICATION SYSTEM
EDH	ELECTRIC DUCT HEATER
EDH	ELECTRIC DUCT HEATER
EE	EACH END
EER	ENERGY EFFICIENCY RATIO
EER	ENERGY EFFICIENCY RATIO
EEW	EMERGENCY EYE WASH
EEWS	EMERGENCY EYE WASH SHOWER
EF	EXHAUST FAN
EF	EACH FACE

	FEIGHNOV
EFF	EFFICIENCY
EG	EXHAUST AIR GRILLE
EH	ELECTRICAL HEATER
EIFS	EXTEROR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELAS	ELASTOMERIC
ELEC	ELECTRICAL(AL)
ELEV	ELEVATOR ENERGY MANAGEMENT CONTROL SYSTEM
EMD	ESTIMATED MAXIMUM DEMAND
EMER	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EMV	EMERGENCY MIXING VALVE
ENCL	ENCLOSURE
ENT	ENTERING
ENTR	ENTRANCE
EOMD	END OF MAIN DRIP
EP	ELECTRO-PNEUMATIC
EP	EXPLOSION PROOF
EPO	EMERGENCY POWER OFF
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ER	EXISTING (TO BE ) RELOCATED
ER	EXHAUST REGISTER
ERA	ENERGY RECOVERY AIR EPOXY RESIN FLOORING
ES	EMERGENCY SHOWER
ES	EXTRA STRONG
ESP	EXTERNAL STATIC PRESSURE
EST	ESTIMATE
ET	EXPANSION TANK
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
EXC	EXCAVATE
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXP	EXPOSED
EXPL	EXPLOSION
EXT	EXTERIOR
F	FAHRENHEIT
F	FIRELINE
F	FURNACE
F	FACE
F	FIRE SERVICE
FA	FIRE ALARM
FA	FACE
FA	FRESH AIR
FAA	FIRE ALARM ANNUNCIATOR
FAB	FABRICATE(D)
FAD FACP FB	FIRE ALARM CONTROL PANEL
FC	FACE BRICK FLUID COOLER
FCMU	FLUTED CONCRETE MASONRY UNIT
FCO	FLOOR CLEAN OUT
FCU	FAN COIL UNIT
FCV	FLOW CONTROL VALVE
FCW	FILTERED COLD WATER
FD	FLOOR DRAIN
FD	FIRE DAMPER
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FDNDR	FOUNDATION DRAIN
FDR	FEEDER
FDV	FIRE DEPARTMENT VALVE
FDVC	FIRE DEPARTMENT VALVE CABINET
FE	FIRE EXTINGUISHER
FEA	FUME HOOD EXHAUST AIR
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FH	FIRE HYDRANT FILTER HOUSING
FHC	FIRE HOSE CABINET
FIG	FIGURE
FIN	FINISHED
FIX	FIXTURE
FL	FLOOR
FLA	FULL LOAD AMPS
FLASH	FLASHING
FLEX FLG	FLEXIBLE
FLG	FLOORING
flm	FULL LENGTH MIRROR
Fluor	FLUORESCENT
FM	FIRE MAIN
FM	FORCE MAIN
FM	FACTORY MUTUAL
FMCS	FACILITIES MANAGMENT CONTROL SYSTEM
FME	FLOW MEASURING EQUIPMENT
FNPT	FEMALE NPT
FO	FINISH OPENING
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FUEL OIL FILL
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOS	FACE OF STUD
FOV	FUEL OIL VENT
FOW	FACE OF WALL
FP	FIRE PUMP
FP	FIREPROOFING
FPB	FAN POWERED VAV TERMINAL
FPD	FIRE PUMP DISCHARGE
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FR	FIRE RESISTANT
FR	FIRE RESISTIVE
FR	FRAME
FRP	FIBERGLASS REINFORCED PANEL
FS	FLOW SWITCH
FS	FLOOR SINK
FSD	FIRE SMOKE DAMPER
FSEC FT	FIRE SMORE DAMPER FOOD SERVICE EQUIPMENT CONTRACTOR FEET
FT	FIN TUBE
FT	FLOW TRANSMITTER
FTG	FOOTING
FURN	FURNISH(ED)
FUT	FUTURE
FV	FIELD VERIFY
FV	FACE VELOCITY
FVC	FIRE VALVE CABINET
FWC	FABRIC WALL COVERING
G	GRILLE
G	GRIELE
G	NATURAL GAS
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAD BAR
GC	GENERAL CONTRACTOR
GCMU	GLAZED CONCRETE MASONRY UNIT
GCO	GRADE CLEAN OUT
GD	GARBAGE DISPOSAL
GEA	GREASE EXHAUST AIR
GEN	GENERATOR
GEN GEN GFA	GENERAL GROSS FLOOR AREA
GFCMU	GROUND-FACE CONCRETE MASONRY UNIT
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFRC	GLASS FIBER REINFORCED CONCRETE
GHR	GLYCOL-WATER HEATING RETURN
GHS	GLYCOL-WATER HEATING SUPPLY
GI	GALVANIZED IRON
GL	GLUE LAMINATED
GL	GLASS
GMU	GLASS MASONRY UNIT
GND	GROUND
GOVT	GOVERNMENT
GPD	GALLONS PER DAY

GALLONS PER HOUR GALLONS PER MINUTE GUARD RAIL GLASS REINFORCED CONCRETE GALVANIZED RIGID CONDUIT GLASS REINFORCED CONCRETE GRILLES, REGISTERS AND DIFFUSERS GLASS REINFORCED GYPSUM PLASTER GALVANIZED RIGID STEEL **GRAVITY VENTILATOR** GATE VALVE GREASE VENT GREASE VENT BELOW FLOOR GREASE WASTE GYPSUM WALL BOARD GEOTHERMAL WATER RETURN GEOTHERMAL WATER SUPPLY HOOK ONE END HYDROGEN HEATING COIL HOLLOW CORE HANDICAP BENCH HOT/CHILLED WATER RETURN HOT/CHILLED WATER SUPPLY HARD COLD WATER HAND DRYER

GRADE

GRILLE

GASOLINE

GYPSUM

HEIGHT

HOSE BIB

HANDICAP

HARDBOARD

HANDICAP

LTD

LTG

LVG

LWT

LV

LV

LW

M

MA

MA

MAG

MAINT

MAN

MAS

MAU

MAV

MAX

MBD

MBH

MC

MC

MCA

MCB

MCM

MD

MDF

MDO

MECH

MEMB

MET

MEZZ

MFRG

MG

MH

MH

MIN

MISC

MISC

MLDG

MLO

MLWK

MOCP

MPG

MPR

MPS

MR

MS

MS

MTD

MTG

MTWR

MTWS

MTL

MUL

MV

MV

MW

N2O

N20

N/A

NA

NC

NC

NC

NEC

NEMA

NEUT

NIC

NO

NO

NRS

NS

NTS

NV

02

O to O

OBSC

O&M

OA

OD

OD

OF

OFF

OFCI

OFOI

OHP

OHT

OPP

ORD

OSD

OV

OW

Р

Р

P/T

PA

PAN B

PAR

PB

PBS

PCD

PCT

PCV

PCWP

PCWR

PCWS

PD

PD

PDI

PENT

PERF

PERP

PF

PG

PG

PH

PHC

PIC

PIV

PLAM

PLAS

PLBG

PLYWD

PLUMBING

PLYWOOD

PL

PCF

PB

OS&Y

OTCS

OVFL

OVHD

OPNG

MR/S

MO

MFR

MATL

HEADER HARDWOOD HARDWARE HELIUM HOSE END VALVE HANGER HIGH INTENSITY DISCHARGE HOLLOW METAL HAND-OFF-AUTOMATIC HORIZONTAL HORSE POWER HEAT PUMP HIGH PRESSURE HIGH PRESSURE STEAM CONDENSATE HIGH PRESSURE NATURAL GAS HIGH PRESSURE STEAM RETURN HIGH PRESSURE STEAM SUPPLY HIGH PRESSURE SODIUM HOUR HOT REVERSE OSMOSIS HOT REVERSE OSMOSIS RECIRCULATION HEAT RECOVERY WATER RETURN HEAT RECOVERY WATER SUPPLY HEADSTUD HEAT SEASONAL PERFORMANCE FACTOR HIGH STRENGTH HEIGHT HEATING HEATER HIGH TEMPERATURE HOT WATER RETURN

HIGH TEMPERATURE HOT WATER SUPPLY HUMIDIFIER HEATING VENTILATING UNIT HEATING VENTILATING AND AIR CONDITIONING N DOMESTIC HOT WATER DOMESTIC HOT WATER RECIRCULATING HEATING WATER RETURN HEATING WATER SUPPLY HEAT EXCHANGER HERTZ (FREQUENCY)

THAT IS INDOOR AIR QUALITY IN ACCORDANCE WITH INFRARED BURNER INTERNATIONAL BUILDING CODE INTERCOM INSIDE DIAMETER INVERT ELEVATION INTERNATIONAL ENERGY CONSERVATION CODE NO2 INSTITUTE OF ELECTRICAL AND ELECTRONICS NOM ENGINEERS ILLUMINATING ENGINEERING SOCIETY INSIDE FACE ISOLATED GROUND INTAKE HOOD ISOLATION JOINT IN JOIST SPACE INTERNATIONAL MECHANICAL CODE INTERMEDIATE METAL CONDUIT INCH INCHES OF MERCURY (PRESSURE) INCHES OF WATER COLUMN (PRESSURE) INCLUDE(ING) INSULATION INTERIOR **IRON PIPE** INTERNATIONAL PLUMBING CODE IRON PIPE SIZE INDIRECT WASTE JANITOF JUNCTION BOX JUNCTION JOINT FILLER BOARD JOIST JOINT **KEYED CONSTRUCTION JOINT** KEENE'S CEMENT PLASTER KNOCKDOWN

KITCHEN HOOD KITCHEN HOOD EXHAUST FAN KITCHEN HOOD SUPPLY FAN KITCHEN KNOCKOUT KITCHEN SINK KILOVOLT **KILOVOLT AMPERES** KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR

ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATUR LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM LOCKER LIVE LOAD LONG LENGTH HORIZONTAL LONG LENGTH VERTICAL LIQUID NITROGEN LIQUID OXYGEN LOCATION LONGITUDINAL LIQUIFIED PETROLEUM GAS (PROPANE) LOW PRESSURE STEAM RETURN LOW PRESSURE STEAM SUPPLY LIVING ROOM LAWN SPRINKLER

LIFE SAFETY CODE

LIGHT

LS

LSC

LINED TRANSFER DUCT LIGHTING LOUVER LABORATORY VACUUM LEAVING LONG WAY LEAVING WATER TEMPERATURE THOUSAND MIXED AIR MAKE-UP AIR MEDICAL COMPRESSED AIR MACHINE MAGNETIC MAINTENANCE MANUAL MASONRY MATERIAL MAKEUP AIR UNIT MANUAL AIR VENT MAXIMUM MACHINE BOLT MARKER BOARD THOUSAND BTU PER HOUR MECHANICAL CONTRACTOR MEDICINE CABINET MINIMUM CIRCUIT AMPACITY MAIN CIRCUIT BREAKER METAL COMPOSITE MATERIAL MOTORIZED DAMPER MEDIUM DENSITY FIBERBOARD MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE METAL MEZZANINE MANUFACTURER MANUFACTURING MOTOR GENERATOR MANHOLE METAL HALIDE MOP HOLDER MINIMUM MISCELLANEOUS MISCELLANEOUS MOTORIZED LOUVER MOLDING MAIN LUGS ONLY MILLWORK MASONRY OPENING MAXIMUM OVERCURRENT PROTECTION MEDIUM PRESSURE GAS MEDIUM PRESSURE STEAM RETURN MEDIUM PRESSURE STEAM SUPPLY MIRROR MIRROR WITH SHELF MAGNETIC STARTER MOP SINK MOUNTED MOUNTING METAL MEDIUM TEMP HOT WATER RETURN MEDIUM TEMP HOT WATER SUPPLY MULLION MEDICAL VACUUM MERCURY VAPOR MARKER WALL NITROGEN NORTH LABORATORY NITROGEN NITROUS OXIDE NITROUS OXIDE NOT APPLICABLE NOT APPLICABLE NATURAL NORMALLY CLOSED NOISE CRITERIA NURSE CALL NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURERS ASSN. NEUTRAL NOT IN CONTRACT NORMALLY OPEN NUMBER NITROGEN DIOXIDE NOMINAL NON RISING STEM NEUTRAL SENSOR NOT TO SCALE NITROGEN VENT OXYGEN OUT TO OUT OPERATION AND MAINTENANCE OUTSIDE AIR OBSCURE ON CENTER OUTSIDE DIAMETER OVERFLOW DRAIN OUTSIDE FACE OWNER FURNISHED CONTRACTOR INSTALLED OWNER FURNISHED OWNER INSTALLED OWNER FURNISHED OWNER INSTALLED OVERHEAD POWER OVERHEAD TELEPHONE OPENING OPPOSITE OVERFLOW ROOF DRAIN OUTSIDE SCREW AND YOKE OVERFLOW STORM DRAIN OPEN TO CEILING SPACE

OIL VENT OVERFLOW OVERHEAD OIL WASTE

POLE(S) PUMP PRESSURE/TEMPERATURE TEST PORT PUBLIC ADDRESS PANIC BOLT PARALLEL PULL BOX PUSH BUTTON PARTICLE BOARD PUSH BUTTON STATION PRECAST CONCRETE PUMPED CONDENSATE PAPER CUP DISPENSER POUNDS PER CUBIC FOOT PORCELAIN CERAMIC TILE PRESSURE CONTROL VALVE PROCESS COOLING WATER PUMP PROCESS COOLING WATER RETURN PROCESS COOLING WATER SUPPLY PRESSURE DROP PUMP DISCHARGE PLUMBING & DRAINAGE INSTITUTE PENTHOUSE PERFORATED PERPENDICULAR POWER FACTOR PRESSURE GAUGE PROPANE GAS PHASE PRE-HEAT COIL POINT OF INTERSECTION PRESSURE INDICATOR PORTABLE INSTRUMENT CONNECTION POST INDICATOR VALVE PLATE PLACE(S) PLASTIC LAMINATE PLASTER

### **GENERAL PLUMBING NOTES** 1 GENERAL PLUMBING NOTES

A. THESE NOTES SHALL BE GENERALLY APPLIED TO ALL PLUMBING DRAWINGS. AS THEY ARE GENERAL IN NATURE, THEY MAY NOT BE SPECIFICALLY CALLED OUT ON THE PLANS. REFERENCE THE INDIVIDUAL DRAWINGS AS WELL AS DIVISION 22 SPECIFICATIONS FOR ADDITIONAL CONTRACTUAL REQUIREMENTS. B. SHOULD ANY CONFLICT OCCUR BETWEEN ANY PORTIONS OF THE CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS), THE CONTRACTOR IS DEEMED TO HAVE BASED THEIR BID/PRICE ON THE

- MORE EXPENSIVE MATERIAL, EQUIPMENT, PRODUCT OR WORK, UNLESS THEY HAVE REQUESTED AND OBTAINED A WRITTEN CLARIFICATION OR DECISION IN REGARD TO THE CONFLICT FROM THE ARCHITECT/ENGINEER. C. DRAWINGS AND MEASUREMENTS: 1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL
- SCOPE OF THE WORK I.E., ARRANGEMENT OF SYSTEMS AND EQUIPMENT, EXCEPT WHEN THEY HAVE BEEN SPECIFICALLY DIMENSIONED OR DETAILED. 2. PLUMBING PLANS ARE INTENDED TO SHOW SIZE, CAPACITY,
- APPROXIMATE LOCATION, DIRECTION, AND GENERAL RELATIONSHIP OF ONE WORK TRADE TO ANOTHER. COORDINATION: THE PLUMBING DESIGN SHALL BE COORDINATED WITH ALL OTHER ASPECTS OF THE BUILDING. TO THAT END, THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS WHERE AVAILABLE, AS WELL AS PHYSICALLY OBSERVING FIELD CONDITIONS BEFORE PERFORMING ANY WORK. EXTRAS WILL NOT BE PAID TO MOVE PIPING DUE TO CONFLICTS ARISING FROM LACK OF COORDINATION.
- a. REFER TO THE ARCHITECTURAL DRAWINGS FOR BUILDING ELEVATIONS, CEILING DETAILS, PARTITIONS, AND OCCUPANCIES. b. REFER TO STRUCTURAL DRAWINGS TO COORDINATE PIPING LAYOUT WITH STRUCTURAL ELEMENTS OF THE
- c. REFER TO THE FIRE PROTECTION DRAWINGS (WHEN AVAILABLE) AND MECHANICAL DRAWINGS TO ASSESS THE CONGESTION ABOVE CEILINGS. THE PLUMBING CONTRACTOR SHALL SPECIFICALLY BE CONSCIOUS OF ANY HORIZONTAL MECHANICAL EQUIPMENT LOCATIONS AS WELL AS THEIR CLEAR SERVICE SPACE REQUIREMENTS IN ADDITION TO ANY DUCTWORK OR HYDRONIC PIPING.
- d. CONTRACT DRAWINGS SHALL ONLY SERVE TO SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND STRUCTURE. SUCH DRAWINGS SHALL NOT BE CONSIDERED A SUBSTITUTE FOR FIELD VERIFICATION OF CONDITIONS. COORDINATION SHALL OCCUR PRIOR TO FABRICATION, PURCHASE, AND/OR INSTALLATION OF ALL WORK. DISCUSS, COORDINATE AND COOPERATE WITH OTHER TRADES AND COORDINATE THE WORK WITH THEIRS. COORDINATE CEILING CAVITY SPACE CAREFULLY
- WITH OTHER TRADES. BRING ANY CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER e. AS THE DRAWINGS ARE OF SMALL SCALE, IT IS NOT POSSIBLE TO SHOW ALL NECESSARY OFFSETS, FITTINGS, AND ACCESSORIES. OBTAIN EXACT LOCATIONS, FIELD MEASUREMENTS, ETC., AT THE SITE PRIOR TO THE FABRICATION OF ANY MATERIAL OR ORDERING OF
- EQUIPMENT 4. THE DESIGN (DRAWINGS AND SPECIFICATIONS) ARE BASED ON THE CHARACTERISTICS OF THE EQUIPMENT SCHEDULED / SPECIFIED. ALL CHANGES REQUIRED BY THE USE OF OTHER MANUFACTURERS (INCLUDING MANUFACTURERS THAT ARE LISTED IN THE SPECIFICATIONS) SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. a. THESE CHANGES SHALL INCLUDE, BUT NOT BE LIMITED TO REVISIONS TO FOUNDATIONS, ELECTRICAL CHANGES, SPACE REQUIRED FOR PLACEMENT OF EQUIPMENT,
- EQUIPMENT BASES, PIPING, CONTROLS, WIRING, WALL OR BUILDING OPENINGS, SERVICE ACCESS REQUIREMENTS, PIPING AND STRUCTURAL MODIFICATIONS. D. REFER TO THE CODE PLANS FOR FIRE AND/OR SMOKE CONSTRUCTION RATINGS. MAINTAIN INDICATED FIRE AND/OR SMOKE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE AND DUCT PENETRATIONS. SEAL PIPE AND DUCT PENETRATIONS WITH FIRESTOP MATERIALS, REFER TO DIVISION 07 SECTIONS
- PENETRATION FIRESTOPPING AND JOINT FIRESTOPPING FOR THROUGH-PENETRATION FIRESTOP ASSEMBLY PRODUCT SPECIFICATIONS. INSTALLATION OF FIRESTOP MATERIALS IS SPECIFIED AS WORK OF DIVISION 22. E. WORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODES, LOCAL AMENDMENTS, LAWS AND
- GOVERNING BODIES. WHERE THE PLANS AND/OR SPECIFICATIONS EXCEED THE GOVERNING CODE REQUIREMENTS. THE PLANS AND SPECIFICATIONS WILL GOVERN. F. PROVIDE COORDINATION DRAWINGS WHERE REQUIRED BY THE
- SPECIFICATIONS. RFIs RELATED TO COORDINATION ITEMS WILL NOT BE REVIEWED UNLESS COORDINATION DRAWINGS HAVE BEEN SUBMITTED.
- G. REFER TO THE PLUMBING FIXTURE SCHEDULE FOR NON-ACCESSIBLE PLUMBING FIXTURE MOUNTING HEIGHTS. COORDINATE WITH THE ARCHITECTURAL PLANS FOR THE MOUNTING HEIGHT OF ACCESSIBLE PLUMBING FIXTURES.
- H. ALL MATERIALS EXPOSED WITHIN AN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPMENT INDEX OF NOT MORE THAN 50.
- WHERE LOCATIONS OF ANY EXISTING UTILITY SERVICES ARE SHOWN, THEY SHALL BE CONSIDERED AS "APPROXIMATE". EXACT LOCATIONS OF ANY EXISTING UTILITY SERVICES SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO BEGINNING ANY CONSTRUCTION OR EXCAVATION. COORDINATE UTILITY SERVICE CONNECTION POINTS WITH EXTERIOR UNDERGROUND AND OVERHEAD UTILITIES AND SERVICES. COMPLY WITH REQUIREMENTS OF GOVERNING REGULATIONS, FRANCHISED SERVICE COMPANIES, AND CONTROLLING AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR
- AND SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION. J. EQUIPMENT LOCATION AND ACCESS 1. LOCATE EQUIPMENT WHICH MUST BE SERVICED, OPERATED, OR MAINTAINED IN ACCESSIBLE LOCATIONS. EQUIPMENT SHALL
- INCLUDE BUT NOT BE LIMITED TO WATER HEATERS, WATER CONDITIONING EQUIPMENT, VALVES, TRAPS, CLEANOUTS MOTORS, CONTROLLERS, AND LOW POINT DRAIN LOCATIONS MINOR DEVIATIONS FROM THE CONTRACT DRAWINGS MAY BI ALLOWED TO PROVIDE BETTER ACCESSIBILITY UNDER THE CONDITION THE CHANGES ARE REVIEWED & APPROVED BY THE
- ARCHITECT/ENGINEER PRIOR TO MAKING THE CHANGE. INACCESSIBLE INSTALLATION: WHERE THE ENGINEER DETERMINES THAT THE CONTRACTOR HAS INSTALLED EQUIPMENT SUCH THAT IT IS NOT CONVENIENTLY ACCESSIBLE FOR OPERATION AND/OR MAINTENANCE, THE EQUIPMENT WILL BE REMOVED AND REINSTALLED OR REMEDIAL ACTION SHALL BE PERFORMED AS SO AS TO MAKE THE INSTALLATION CONVENIENTLY ACCESSIBLE AT NO ADDITIONAL COST TO THE OWNER. THE TERM "CONVENIENTLY ACCESSIBLE" IS DEFINED AS CAPABLE OF BEING REACHED WITHOUT THE USE OF LADDERS, OR WITHOUT CLIMBING OR CRAWLING UNDER OR OVER OBSTACLES SUCH AS ELECTRICAL CONDUIT, MOTORS, FANS, PUMPS, BELT GUARDS, TRANSFORMERS, HIGH VOLTAGE LINES
- PIPING, AND DUCTWORK. a. EXCEPTION: ACCESSING VALVES FROM A LADDER IS ACCEPTABLE WHEN INSTALLED AS OUTLINED IN OTHER PARAGRAPHS OF THESE NOTES. ACCESSING POINT-OF USE WATER HEATER(S) THAT ARE LOCATED ABOVE A CEILING WHERE INDICATED AND DETAILED ON THE DRAWINGS.
- K. PIPE RUNS SHALL BE INSTALLED TO AVOID INTERFERENCE WITH OTHER WORK/TRADES. INSTALL PIPING AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING WALLS OR COLUMN CENTER LINES. DIAGONAL PIPING RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE. LOCATE GROUPS OF PIPES PARALLEL TO EACH OTHER. SPACE PIPING INCLUDING ANY INSULATION TO PROVIDE A 1-INCH MINIMUM CLEARANCE BETWEEN ADJACENT PIPING OR OTHER SURFACES. SPACE PIPING TO PERMIT VALVE SERVICING OR
- REPLACEMENT. L. IN AREAS WHERE PIPING IS INSTALLED ABOVE A CEILING AND THERE IS CONGESTED CEILING SPACE, INSTALL THE PIPING AS HIGH AS POSSIBLE WHILE GIVING CONSIDERATION OF OTHER TRADES AND THE SERVICEABILITY OF THE SYSTEMS. WHERE VALVES ARE SHOWN, THEY SHALL BE INSTALLED NO MORE THAN 18-INCHES ABOVE THE CEILINGS. IF IT IS NECESSARY TO INSTALL OFFSET(S) IN THE PIPING SO THE VALVES ARE INSTALLED NO MORE THAN 18-INCHES ABOVE THE CEILINGS, INSTALL A DRAIN VALVE WITH HOSE END CONNECTION FOR EACH SYSTEM ADJACENT TO THE ISOLATION VALVE(S). IF THERE IS AN OFFSET UP ON THE OUTLET SIDE OF THE ISOLATION VALVE(S).
- THEN PROVIDE A SECOND DRAIN VALVE AT THAT LOCATION. M. IN AREAS WHERE PIPING IS EXPOSED. INSTALL THE PIPING AS HIGH AS POSSIBLE. IF PRACTICABLE, INSTALL PIPING TIGHT TO STRUCTURE AND/OR STACKED ALONG AND TIGHT TO WALLS. N. PLUMBING EQUIPMENT, PIPING, OR ACCESSORIES SHOULD NOT BE LOCATED WITHIN ELECTRICAL EQUIPMENT ROOMS UNLESS INDICATED ON THE DRAWINGS. WHERE PIPING AND EQUIPMENT ARE INDICATED TO BE INSTALLED WITHIN ELECTRICAL EQUIPMENT ROOMS, MAINTAIN THE ELECTRICAL CODE REQUIRED WORKING AND DEDICATED SPACES.
- O. PLUMBING EQUIPMENT, PIPING, OR ACCESSORIES NOT USED IN CONNECTION WITH THE OPERATION OF THE ELEVATOR SHALL NOT BE INSTALLED IN ANY HOSTWAY, MACHINERY SPACE, MACHINE ROOM, CONTROL SPACE OR CONTROL ROOM.
- P. PLUMBING EQUIPMENT, PIPING, OR ACCESSORIES SHALL NOT PASS THRU OR OVER ANY SERVER (COMM / IT) ROOMS.
- Q. RUN CW, HW AND HWC LINES FULL SIZE THE ENTIRE LENGTH OF THE PLUMBING CHASE. BRANCH OFF TO INDIVIDUAL PLUMBING FIXTURES WITH PIPE SIZES AS SHOWN ON THE PLUMBING FIXTURE CONNECTION SCHEDULE. REFER TO PLUMBING RISER / ISOMETRIC DIAGRAMS FOR PIPING SIZES NOT SHOWN ON THE PLANS OR PLUMBING FIXTURE CONNECTION SCHEDULE.

THE VALVES.



# 'SURESEAL' BRAND.

MAINTENANCE.

•	2021 IBC	-
•	2021 IEBC	-
•	2021 IMC	-
•	2021 IECC	-
•	2021 NEC	-
•	2021 IPC	-
•	2021 IFC	-
•	NFPA	-

### R. INSTALL HANGERS FOR METALLIC PIPE AND TUBING NOT TO EXCEED THE MAXIMUM HORIZONTAL AND VERTICAL SPACING AND MINIMUM HANGER ROD DIAMETERS TO COMPLY WITH THE APPLICABLE CODES MSS SP-58 STANDARD PRACTICE FOR PIPE HANGERS AND SUPPORTS LOCALLY ENFORCED CODES AND AHJ REQUIREMENTS, WHICHEVER ARE MOST STRINGENT, WHERE CONFLICTS ARISE BETWEEN THE PLUMBING CODE REQUIREMENTS, MSS SP-58 AND THE PROJECT SPECIFICATIONS, THE MOST RESTRICTIVE OR THE REQUIREMENT THAT SPECIFIES SUPPORTS WITH HIGHEST LOAD RATING OR SHORTEST HANGER SPACING SHALL APPLY. 1. WHERE HANGER SPACING DOES NOT CORRESPOND WITH JOIST OR RIB SPACING, USE STRUCTURAL STEEL CHANNELS SECURED

DIRECTLY TO JOIST AND RIB STRUCTURE TO MEET THE REQUIRED HANGER SPACING, THEN, SUSPEND THE EQUIPMENT AND PIPING FROM THE CHANNELS. HOLES WILL NOT BE DRILLED OR BURNED IN STRUCTURAL STEEL WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD. 2. PROVIDE ADDITIONAL SUPPORTS AT VALVES, STRAINERS, INLINE

PUMPS AND OTHER HEAVY COMPONENTS. PROVIDE SUPPORT WITHIN ONE FOOT OF EACH PIPE ELBOW. INSTALL HANGERS FOR PLASTIC, FRP OR GLASS PIPING WITH THE MAXIMUM HORIZONTAL SPACING AND MINIMUM ROD DIAMETERS. TO COMPLY WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. LOCALLY ENFORCED CODES, AND AUTHORITIES HAVING JURISDICTION REQUIREMENTS, WHICHEVER ARE MOST STRINGENT. 4. SUPPORT VERTICAL RUNS OF PLASTIC, FRP OR GLASS PIPING TO COMPLY WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, LOCALLY ENFORCED CODES, AND AUTHORITIES HAVING JURISDICTION REQUIREMENTS, WHICHEVER ARE MOST STRINGENT. 5. THE USE OF CHAINS, WIRE, CABLE OR STRAP HANGERS ARE NOT ALLOWED FOR PIPE SUPPORTS. 6. REFER TO GENERAL SEISMIC NOTES FOR ADDITIONAL REQUIREMENTS FOR PROJECTS SUBJECTED TO SEISMIC DESIGN

REQUIREMENTS. S. PROVIDE SHUT OFF VALVES FOR ALL BRANCH WATER PIPING WHERE THE BRANCH CONNECTS TO THE MAIN AS SHOWN. LOCATE / ORIENT THE VALVES TO PERMIT PROPER OPERATION AND ACCESS FOR MAINTENANCE, GENERALLY, LOCATE VALVE STEMS IN OVERHEAD PIPING IN HORIZONTAL POSITION. PROVIDE A UNION ADJACENT TO ONE END OF ALL THREADED END VALVES. AS A RULE, THE VALVES SHALL BE INSTALLED NO MORE THAN 18-INCHES ABOVE AN ACCESSIBLE CEILING. IF THE CEILING IS NOT ACCESSIBLE, PROVIDE A MINIMUM 18" X 18" SIZE LOCKABLE ACCESS PANEL TO ACCESS TO SERVICE AND/OR REPLACE 1. ANY BRANCH PIPING FROM MAIN SERVING MORE THAN ONE

PLUMBING FIXTURE SHALL HAVE SHUT-OFF VALVES. SANITARY DRAINAGE PIPING SHALL SLOPED IN ACCORDANCE WITH THE TABLE BELOW FROM THE 2021 INTERNATIONAL PLUMBING CODE.

PIPE SIZE (IN)	[ICC 2021] MINIMUM SLOPE (INCH PER LF)
< = 2.5	1/4
3 TO 6	1/8
> = 8	1/16

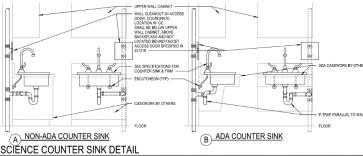
U. GREASE WASTE DRAINAGE PIPING UPSTREAM OF A GREASE INTERCEPTOR SHALL SLOPE AT NOT LESS THAN 1/4 INCH PER FOOT.

V. CONDENSATE SHALL NOT DISCHARGE INTO A STREET, ALLEY OR ONTO GRADE. CONDENSATE DRAINS FROM ALL COOLING COILS AND EVAPORATORS SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO A DRYWELL AS SHOWN ON THE PLANS. W. EACH PLUMBING VENT SHALL TERMINATE NOT LESS THAN 10 FEET

FROM, OR NOT LESS THAN 3-FEET ABOVE, AN OPENABLE WINDOW, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT, OR NOT LESS THAN 3-FEET IN EVERY DIRECTION FROM A LOT LINE. ALLEY AND STREET EXCEPTED. WHEN INSTALLED ABOVE THE ROOF, THE PLUMBING VENTS SHALL BE LOCATED 3-FEET ABOVE A FLAT ROOF WHERE HEAVY SNOWFALL IS ANTICIPATED. FOR HOSPITAL APPLICATIONS, PLUMBING VENT PIPING SHALL TERMINATE NOT LESS THAN TWENTY-FIVE (25) FEET FROM ANY AIR INTAKE OR VENT SHAFT.

X. PROVIDE CLEANOUTS (FLOOR OR WALL AS REQUIRED) EVERY 100', AT AGGREGATE CHANGES IN DIRECTION IN EXCESS OF 45°, AT THE END OF ALL SANITARY AND STORM DRAIN RUNS, AND AT THE BASE OF ALL SEWER AND STORM DRAIN STACKS. PROVIDE WHETHER INDICATED ON PLANS OR NOT BASED ON ACTUAL FIELD ROUTING.

Y. CLEANOUTS SHALL NOT BE LOCATED ABOVE CEILINGS FOR WASTE SYSTEMS. IN AREAS REQUIRING WASTE DRAIN PIPING UNDER SUPPORTED STRUCTURAL FLOOR SLABS, THE CLEANOUTS SHALL BE ACCESSED AT LEAST 6-INCHES ABOVE THE FLOOD LEVEL OF THE HIGHEST FIXTURE SERVED. CLEANOUT RISER(S) SHALL BE PROPERLY PLUGGED AND PAINTED TO MATCH THE ADJACENT SURFACE.



PROVIDE A BARRIER TYPE FLOOR DRAIN TRAP SEAL PROTECTION DEVICE (AS DEFINED BY THE ASSE 1072 STANDARD) EQUAL TO

AA. WATER HAMMER ARRESTORS WILL BE INSTALLED IN WATER PIPING ACCORDING TO PDI-WH 201. WATER HAMMER ARRESTERS SHALL BE INSTALLED WITH INLET ISOLATION VALVES TO ALLOW FOR

BB. THE DETAILS SHOWN ON THE DETAIL SHEETS APPLY TO ALL PLUMBING PLAN SHEETS. THE DETAILS ARE TO BE FOLLOWED FOR THE INSTALLATION OF ALL COMPONENTS AND EQUIPMENT SHOWN

# **PROJECT INFORMATION**

 PROJECT LOCATION: AURORA, CO PROJECT ALTITUDE: 5,400 FT. ASL (APPROX.)

# **APPLICABLE CODES**

INTERNATIONAL BUILDING CODE INTERNATIONAL EXISTING BUILDING CODE INTERNATIONAL MECHANICAL CODE INTERNATIONAL ENERGY CONSERVATION CODE NATIONAL ELECTRIC CODE

INTERNATIONAL PLUMBING CODE INTERNATIONAL FIRE CODE

NATIONAL FIRE PROTECTION ASSOCIATION

				F	
PL	UMBING	G SYMBOLS	PIPING	VALVE	S AN
SCHEMATIC	3D	DESCRIPTION	SCHEMATIC	3D	
ا     -     -       ا     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -       I     -     -		DOMESTIC COLD WATER (LINETYPE) DOMESTIC HOT WATER (LINETYPE) DOMESTIC HOT WATER RECIRC (LINETYPE) LAB NITROGEN VENT ACID VENT GREASE VENT OIL VENT INDIRECT WASTE	€ • \$ \$ \$ \$		PIPE DROP PIPE RISE PIPE TEE DOV PIPE TEE UP CONCENTRIC
		SANITARY VENT CLEAN OUT WALL CLEAN OUT			ECCENTRIC R
$\begin{array}{c} & & \\$		FLOOR CLEAN OUT GRADE CLEAN OUT (DOUBLE CLEAN OUT) FLOOR DRAIN / FLOOR SINK ROOF DRAIN / OVERFLOW DRAIN DOWNSPOUT NOZZLE			PIPE ALIGNME PIPE ANCHOR FLOW DIRECT EXPANSION JO
, , , , , , , , , , , , , , , , , , ,		WALL HYDRANT HOSE BIBB WATER HAMMER ARRESTER			FLEXIBLE CON UNION DIRECTION OF
	، ، سے ، سے	ANESTHESIA EVACUATOR MEDICAL COMPRESSED AIR OUTLET DEIONIZED WATER OUTLET			AQUASTAT EXPANSION LO BALANCING V
	،خ بخ بخ	DISTILLED WATER OUTLET NATURAL GAS OUTLET NITROGEN OUTLET	→ ₩i →		BALANCING VA BALL VALVE BUTTERFLY VA
	،خ بخ بخ	NITROUS OXIDE OUTLET OXYGEN OUTLET VACUUM INLET			CHECK VALVE STEAM TRAP GATE VALVE CIRCUIT SETT
(x	x	RISER TAG	, <sup>−</sup> <sup>+</sup> ,		MANUAL AIR V
0-	<u>8" ORD-</u> 1,500 SF	ROOF DRAIN TAG	,,,,,,,,,,	<b>6</b>	PLUG VALVE
	— <u>3" FS-</u>	PLUMBING FIXTURE TAG			SOLENOID VA
PIF	PING AN	NOTATIONS			ANGLE VALVE
SCHEMATIC	3D	DESCRIPTION	<b>₹</b>		AUTOMATIC C
		EXISTING TO REMAIN - (E) or EXIST ITEM TO BE DEMOLISHED - (D) or DEMO PIPE SIZE TAG (DIAMETER WITH SYSTEM NAME)			AUTOMATIC F STRAINER PRESSURE AN
, ,	<b>€</b> €	ABOVE GROUND PIPING BELOW GROUND PIPING			THERMOMETE PRESSURE RE PRESSURE RE
1/8" / 12" SLOPE	1/8" / 12" SLOPE	<ul> <li>PIPE SLOPE</li> <li>PIPE INVERT ELEVATION</li> </ul>			RELIEF VALVE FLOW MEASU BACKFLOW PF
DDC-xx-	-	<ul> <li>MECHANICAL EQUIPMENT TAG</li> </ul>	, , , , , , , , , , , , , , , , , , ,		UNION

MECHANICAL EQUIPMENT CLEARANCE

# **GENERAL SYMBOLS**

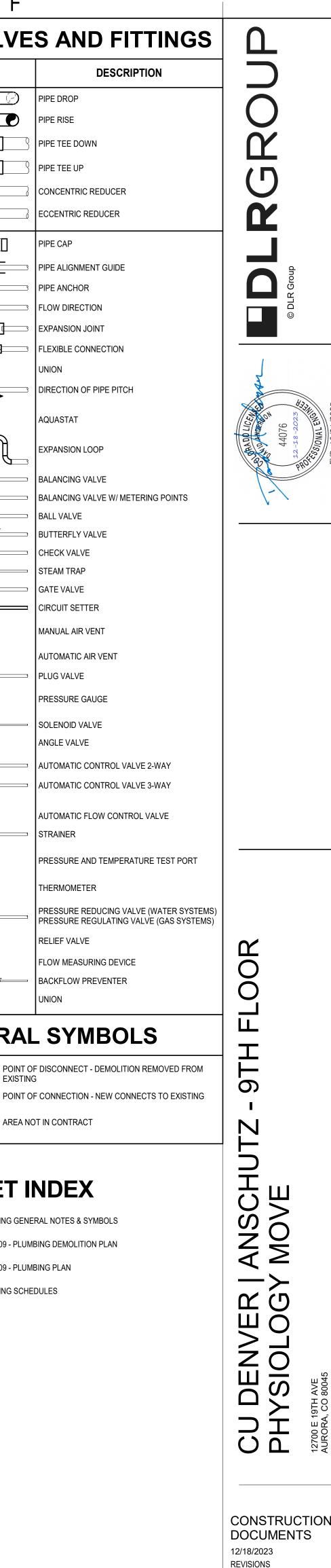
EXISTING < () > AREA NOT IN CONTRACT

# SHEET INDEX

P0.1 PLUMBING GENERAL NOTES & SYMBOLS PD2.1 LEVEL 09 - PLUMBING DEMOLITION PLAN P2.1 LEVEL 09 - PLUMBING PLAN

P6.1 PLUMBING SCHEDULES





PN 23-14584 37-24103-00

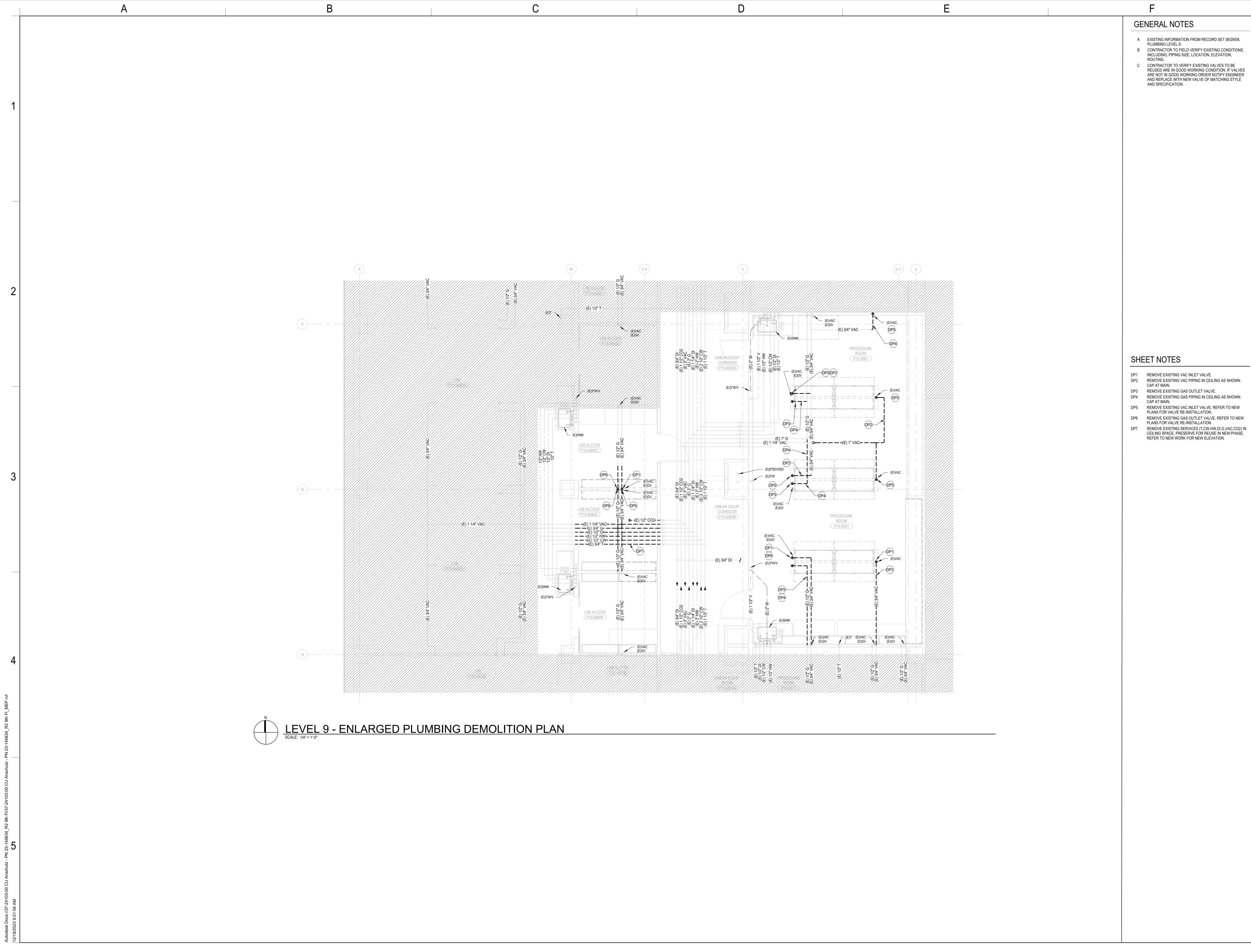
PLUMBING GENERAL NOTES & SYMBOLS

ALL NOTES ON THIS SHEET ARE APPLICABLE TO ALL OTHER SHEETS IN THIS SET.

NOTE

THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE APPLICABLE IN THIS SET OF DRAWINGS.





C CONTRACTOR TO VERIFY EXISTING VALVES TO BE REUSED ARE IN GOOD WORKING CONDITION. IF VALVES ARE NOT IN GOOD WORKING ORDER NOTIFY ENGINEER AND REPLACE WITH NEW VALVE OF MATCHING STYLE

Ω  $\mathbf{C}$ **(**) R 

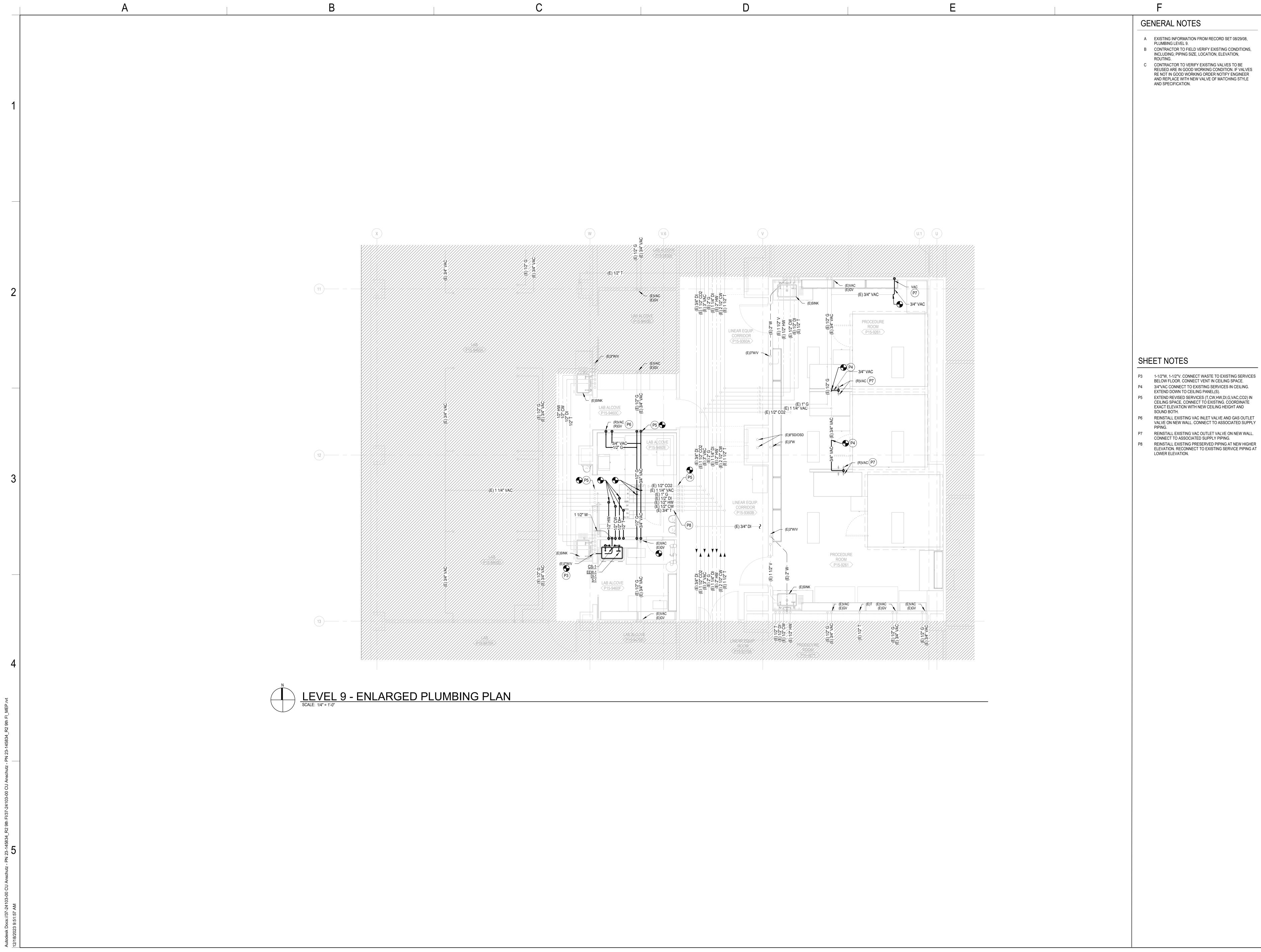


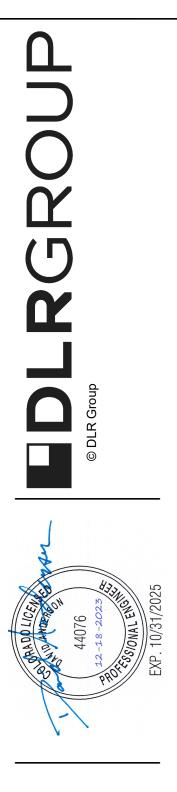
CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

PN 23-14584 37-24103-00

LEVEL 09 -PLUMBING DEMOLITION PLAN

PD2.1



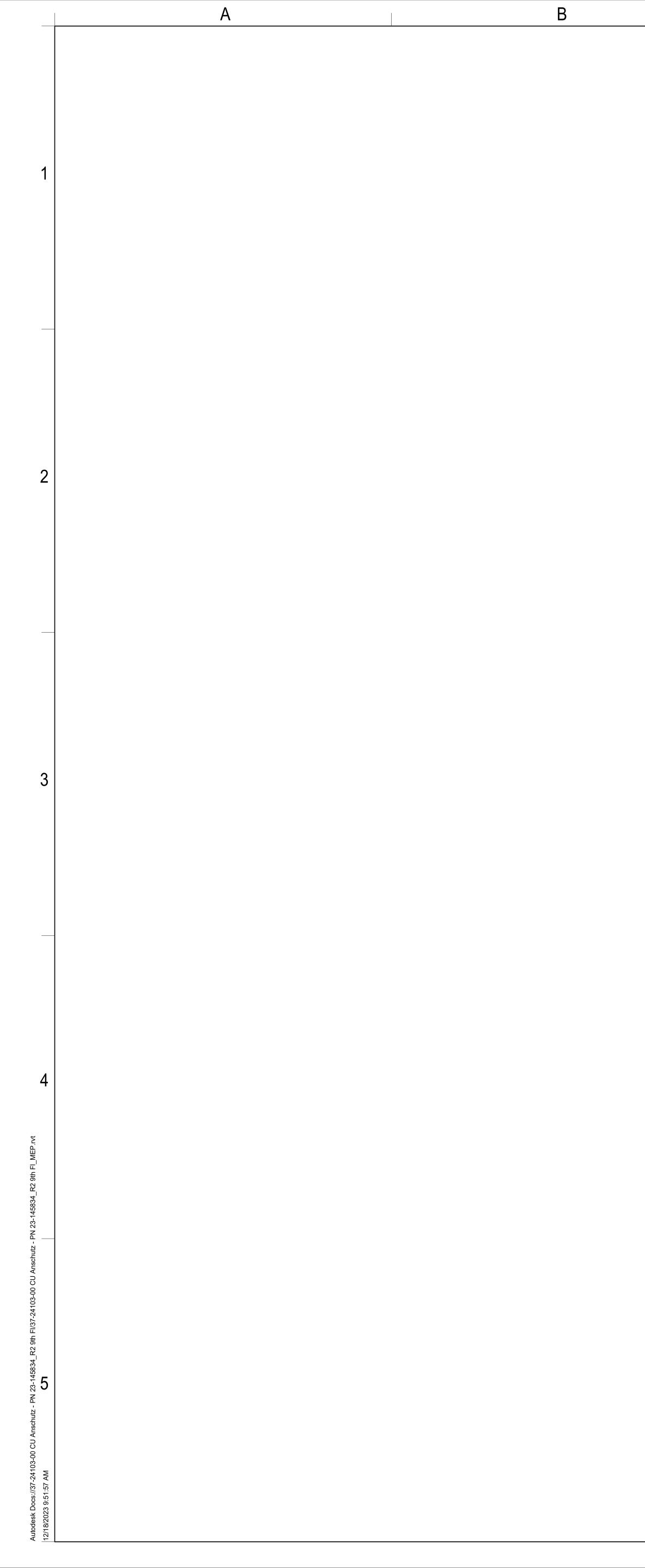




CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

PN 23-14584 37-24103-00 LEVEL 09 -PLUMBING PLAN

P2.1



С

MARK	FIXTURE DESCR
<u>CS-1</u>	COUNTER S
<u>DI-1</u>	DI FAUCE
<u>EEW-1</u>	EMERGENCY EY
<u>S-1</u>	SINK FAUC
NOTES:	
. REFER TO	MANUFACTURERS
2. DECK MOU	NTED WITH LOCK
3. DECK MOU	NTED, BARRIER FF
. DECK MOU	NTED, 10" SWING (
5. ARCHITEC	FURALLY PROVIDE

GENERAL PLUMBING FIXTURE SCHEDULE

				-							
RIPTION MANUFACTURER		MODEL	ТҮРЕ	SIZE	TRIM			CONNECTIONS			
	MANUFACIURER				MANUFACTURER	MODEL	ELECTRICAL REQUIREMENTS	WASTE	VENT	CW	
SINK											
ET	WATERSAVER	L7833	DECK MOUNTED	12.5"x6"	-	-	-	-	-	-	
YEWASH	WATERSAVER	EWBF849	DECK MOUNTED	14"x12"	WATERSAVER	TM6020	-	-	-	1/2"	
CET	WATERSAVER	L2222VB	DECK MOUNTED	12"x10"	-	-	-	-	-	1/2"	

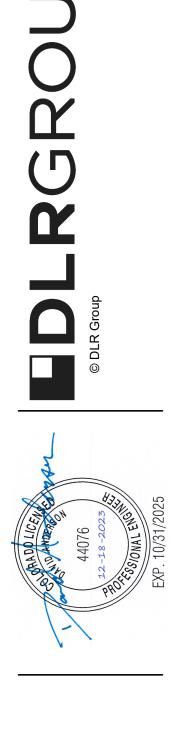
RS INSTALLATION INSTRUCTIONS FOR ADDITIONAL NOTATIONS AND INSTALLATION INSTRUCTIONS. REFER TO ARCHITECTURAL PLANS FOR MOUNTING ELEVATIONS.

KNUT AND WASHER, POLYPROPYLENE LINED INTERIOR, BRASS BODY, GOOSENECK SHAPE, NYLON HANDLE WITH INDEX DISC, COMPRESSION DIAPHRAM VALVE, SERRATED POLY HOSE END.

FREE, 90 SWING DOWN ACTIVATION, DUAL SPRAY. PROVIDE R OR L PER ARCH ELEVATION. THERMOSTATIC MIXING VALVE, BELOW SINK MOUNTING, ISOLATION VALVES, TEMPERATURE OUTLET GAUGE, MOUNTING BRACKET. G GOOSENECK, VACUUM BREAKER, SERRATED NOZZLE, DUAL HANDLE WRISTBLADE, COLORED INDEX.

DED COUNTER SINK, INTEGRAL WITH COUNTERTOP. REFER TO ARCHITECTURAL FOR ADDITIONAL INFORMATION.

HW	NOTES
	5
-	1, 2
1/2"	1, 3
1/2"	1, 4



DENVER   ANSCHUTZ - 9TH FLOOR	YSIOLOGY MOVE	9TH AVE , CO 80045
CU DE	PHYSI	12700 E 19TH AVE AURORA, CO 80045

CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

PN 23-14584 37-24103-00 PLUMBING SCHEDULES

P6.1

# ABBREVIATIONS

Α

ABB	REVIATIONS
#	NUMBER
&	AND
(D)	DEMOLISHED
(E)	EXISTING
(R)	RELOCATED
@	AT
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
Ø	PHASE
Ø	DIAMETER
A	COMPRESSED AIR
A	AMPERE
A	AMP
A/C	AIR CONDITIONING(ER)
A/E	ARCHITECT/ENGINEER
AABC	ASSOCIATED AIR BALANCE COUNCIL
AAP	ALARM ANNUNCIATOR PANEL
AAP	AREA ALARM PANEL
AAV	AUTOMATIC AIR VENT
AAV	AIR ADMITTANCE VALVE
AB	ANCHOR BOLT
ABS	ACRYLONITRILE-BUTADIENE-STYRENE
AC	ALTERNATING CURRENT
AC	ACOUSTIC CEILING
ACC	AIR COOLED CONDENSER
ACC	ACCESSIBLE
ACCU	AIR COOLED CONDENSING UNIT
ACM	ALUMINUM COMPOSITE MATERIAL
ACST	ACOUSTIC
AD AD	ACCESS DOOR
ADDN	ADDITION OR ADDITIONAL
ADJ	ADJUSTABLE
adjt	ADJACENT, ADJOINING
Admin	ADMINISTRATION
ADO	AUTOMATIC DOOR OPENER
AF	AIR FILTER
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGF	AIR GAP FITTING
ahj Ahri	AUTHORITY HAVING JURISDICTION AIR-CONDITIONING HEATING AND REFRIGERATION INSTITUTE
AHU	AIR HANDLING UNIT
Al	AREA INLET
AI	ANALOG INPUT ALTERNATE
ALUM	ALUMINUM
AMB	AMBIENT
AMBA	AMERICAN BOILER MANUFACTURERS ASSOCIATION
AMP	AMPERE
ANCH	ANCHOR
AP	ACCESS PANEL
APC	ACOUSTIC PANEL CEILING
APPROX	APPROXIMATE
AR	ACID RESISTING ARGON
ARCH	ARCHITECTURAL AIR SEPARATOR
ASB	ASBESTOS
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASHRAE	AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING
ASME	ENGINEERS AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPH	ASPHALT
AUTO	AUTOMATIC
AV	AUDIO-VIDEO, AUDIO-VISUAL
AV	ACID VENT
AV	AIR VENT
AVG	AVERAGE
AW	ACID WASTE
AWG	AMERICAN WIRE GAUGE
AWP B	ACOUSTIC WALL PANEL
B to B	BACK TO BACK
BAS	BUILDING AUTOMATION SYSTEM
BAT	BATTERY
BBO	BOILER BLOW OFF
BC	BALANCING COCK
BC	BARE COPPER
BCMU	BURNISHED CONCRETE MASONRY UNIT
BD	BOARD
BDD	BACK DRAFT DAMPER
BET	BETWEEN
BF	BOILER FEED
BFF	BELOW FINISH FLOOR
BFP	BACKFLOW PREVENTER
BFR	BELOW FLOOR
BFV	BUTTERFLY VALVE
BHP	BREAK HORSEPOWER
BI	BACKWARD INCLINED (FAN IMPELLER/WHEEL)
BKR	BREAKER
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLKHD	BULKHEAD
BM	BENCH MARK
BM(S)	BEAM(S)
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOF	BOTTOM OF FOOTING
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BPIP	BOILER PLANT INSTRUMENTATION PANEL
BRDG	BRIDGING
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
BT	BATHTUB
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BUR	BUILT UP ROOFING
BV	BALL VALVE
C	CONDUIT
C	CONDENSER WATER
CA	COMBUSTION AIR
CANT	CANTILEVER
CAP	CAPACITY
CAS	CASING
CBD	COUNTER-BALANCED DAMPER
CBD	CHALKBOARD
CC	COOLING COIL
CCR	CONTROL CONTRACTOR
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONDENSATE DRAIN
CD	CEILING DIFFUSER
CD	CONSTRUCTION DOCUMENTS
CDA	CLEAN DRY AIR (COMPRESSED AIR)
CDF	COMBINATION DRINKING FOUNTAIN & BOTTLE FILLING STATION
CE	COVER ELEVATION
CEM	CEMENT
CENT	CENTRIFLIGAL
CENT	CENTRIFUGAL
CER	CERAMIC
CF	CUBIC FEET
CFCI	COBIC FEET CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
CH	CHILLER
CH	CHANNEL
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CI CI CIP	CURB INLET CAST IN PLACE
CIP	CAST IRON PIPE
CIRC	CIRCULATING

CJ	CONTROL JOINT
CJ	CONSTRUCTION JOINT
CJA	CONTROL JOINT ABOVE
CKT	CIRCUIT
CKT BK	CIRCUIT BREAKER
CL	CENTER LINE
CL	CIRCUIT LINE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR
CM	CEILING MOUNTED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CO	CARBON MONOXIDE
CO	CONDUIT ONLY
CO2	CARBON DIOXIDE
COL	COLUMN
COMB	COMBINATION
COMM	COMMUNICATIONS COMPRESSOR UNIT
COMP	COMPOSITE
CONC	CONCRETE CONDENSATE
CONF	CONFERENCE CONFIGURATION
CONN(S)	CONNECTION(S)
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACT(OR)
CONV COOR	CONVECTOR
COORD	COORDINATE
CP	CONDENSATE PUMP
CP	COVER PLATE
CPS	CYCLES PER SECOND
CPT	CARPET
CPVC	CHLORINATED POLYVINYL CHLORIDE
CR	CORROSION RESISTANT
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CS	COUNTERSINK
CS	COMBINATION SEWER
CS	CARBON STEEL
CSK	COUNTERSUNK
CSMU	CALCIUM SILICATE MASONRY UNIT
CSP	COMBINATION STANDPIPE
CSWK	CASEWORK
CT	COOLING TOWER
CT	CERAMIC TILE
CT	CURRENT TRANSFORMER
CTL	CONTROL
CTR	CENTER
CU	COPPER
CU CU	CORPER CONDENSING UNIT CUBIC
CU CU CUH	COMBINATION UNIT CABINET UNIT HEATER
CW	COLD WATER CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CWV CY	COMBINATION WASTE AND VENT
CYL	CYLINDER
D	DRAIN
D	DIFFUSER
D	DEPTH
D	DATA
d	PENNY ( NAIL 10D)
DB	DECIBEL
DB	DRY BULB
DBA	DECIBELS A
DBL	DOUBLE
DC	DIRECT CURRENT
DC	DUST COLLECTOR
DCJ	DUMMY CONTROL JOINT
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DEMO	DEMOLISH OR DEMOLITION
DEPR	DEPRESS(ION)(ED)
DEPT	DEPARTMENT
DET	DETAIL
DET	DETENTION
DF	DRINKING FOUNTAIN
DFR	DIESEL FUEL RETURN
DFS	DIESEL FUEL SUPPLY
DFU DFV	DRAINAGE FIXTURE UNIT DIESEL FUEL VENT DOOR GRILLE
DG	DOUR GRILLE
DH	DUCT HEATER
DHU	DEHUMIDIFICATION UNIT
DH0 DI DI	DEIONIZED WATER DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIC	DISCHARGE
DIFF	DIFFUSER
DIM	DIMENSION
DISC	DISCONNECT
DISC SW	DISCONNECT SWITCH
DISCH	DISCHARGE
DISTR	DISTRIBUTION SPECIFICATION DIVISION
DL	DRUM LOUVER
DL	DEAD LOAD
DM	DAMPER MOTOR
DMPR	DAMPER
DN	DOWN
DO or "	DITTO
DOAS	DEDICATED OUTDOOR AIR SYSTEM UNIT
DOE	DEPARTMENT OF ENERGY
DP	DIFFERENTIAL PRESSURE
DPFG	DAMPROFFING
DPI	DIFFERENTIAL PRESSURE INDICATOR
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
DR	DOOR
DR	DRAIN
DS	DISTILLED WATER
DS	DOWNSPOUT
DSN	DOWNSPOUT NOZZLE
DSP	DRY STANDPIPE
DSPR	DRY SPRINKLER PIPING
DSPR	DRY SPRINKLER PIPE
DSTB	DISTRIBUTED
DTL	DETAIL
DTR	DUCT THRU ROOF
DW	DISHWASHER
DWBP	DOMESTIC WATER BOOSTER PUMP
DWDI	DOUBLE WIDTH DOUBLE INLET
DWDI	DOUBLE WIDTH DOUBLE INLET
DWG(S)	DRAWING(S)
DWL(S)	DOWEL(S)
DWR DWRP	DOWEL(3) DRAWER DOMESTIC WATER RECIRCULATING PUMP
DX	DIRECT EXPANSION
DXS	DOUBLE EXTRA STRONG
E	EAST
EA	EACH
EA	EXHAUST AIR
EA	EACH FACE
EAT	ENTERING AIR TEMPERATURE
EB	ELECTRIC BASEBOARD RADIATION
EB	EXPANSION BOLT
EBH	ELECTRIC BASIN HEATER
EC	ELECTRICAL CONTRACTOR
ECON	ECONOMIZER
ECS	EMERGENCY COMMUNICATION SYSTEM
EDH	ELECTRIC DUCT HEATER
EE	EACH END
EER	ENERGY EFFICIENCY RATIO
EEW	EMERGENCY EYE WASH
EEWS	EMERGENCY EYE WASH SHOWER
EF	EXHAUST FAN
EF	EACH FACE

EFF EG	EFFICIENCY EXHAUST AIR GRILLE
EH	ELECTRICAL HEATER
EIFS EJ	EXTEROR INSULATION AND FINISH SYSTEM EXPANSION JOINT
EL	
ELAS ELEC	ELASTOMERIC ELECTRICAL(AL)
ELEV EMCS	ELEVATOR ENERGY MANAGEMENT CONTROL SYSTEM
EMD	ESTIMATED MAXIMUM DEMAND
EMER EMT	EMERGENCY ELECTRICAL METALLIC TUBING
EMV	EMERGENCY MIXING VALVE
ENCL ENT	ENCLOSURE ENTERING
ENTR	ENTRANCE
EOMD EP	END OF MAIN DRIP ELECTRO-PNEUMATIC
EP	EXPLOSION PROOF
EPO EQ	EMERGENCY POWER OFF EQUAL
EQUIP	EQUIPMENT EQUIVALENT
EQUIV ER	EXISTING (TO BE ) RELOCATED
ER ERA	EXHAUST REGISTER ENERGY RECOVERY AIR
ERF	EPOXY RESIN FLOORING
ES ES	EMERGENCY SHOWER EXTRA STRONG
ESP	EXTERNAL STATIC PRESSURE
EST ET	ESTIMATE EXPANSION TANK
EW EWC	EACH WAY ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWT EXC	ENTERING WATER TEMPERATURE EXCAVATE
EXH	EXHAUST
EXIST EXP	EXISTING EXPANSION
EXP	EXPOSED
EXPL EXT	EXPLOSION EXTERIOR
-	
F F	FAHRENHEIT FIRELINE
F	FURNACE
F F	FACE FIRE SERVICE
FA FA	FIRE ALARM FACE
FA	FRESH AIR
FAA FAB	FIRE ALARM ANNUNCIATOR FABRICATE(D)
FACP	FIRE ALARM CONTROL PANEL
FB FC	FACE BRICK FLUID COOLER
FCMU	FLUTED CONCRETE MASONRY UNIT
FCO FCU	FLOOR CLEAN OUT FAN COIL UNIT
FCV FCW	
FCW	FILTERED COLD WATER FLOOR DRAIN
FD FDC	FIRE DAMPER FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FDNDR FDR	FOUNDATION DRAIN FEEDER
FDV	FIRE DEPARTMENT VALVE
FDVC FE	FIRE DEPARTMENT VALVE CABINET FIRE EXTINGUISHER
FEA	FUME HOOD EXHAUST AIR
FEC FF	FIRE EXTINGUISHER CABINET FINISH FLOOR
FH	
FH FHC	FILTER HOUSING FIRE HOSE CABINET
FIG	FIGURE
FIN FIX	FINISHED FIXTURE
FL FLA	FLOOR FULL LOAD AMPS
FLASH	FLASHING
FLEX FLG	FLEXIBLE FLANGE
FLG	FLOORING
FLM FLUOR	FULL LENGTH MIRROR FLUORESCENT
FM	FIRE MAIN
FM FM	FORCE MAIN FACTORY MUTUAL
FMCS	FACILITIES MANAGMENT CONTROL SYSTEM
FME FNPT	FLOW MEASURING EQUIPMENT FEMALE NPT
FO FO	FINISH OPENING FACE OF
FOC	FACE OF CONCRETE
FOF FOF	FUEL OIL FILL FACE OF FINISH
FOM	FACE OF MASONRY
FOR FOS	FUEL OIL RETURN FUEL OIL SUPPLY
FOS	FACE OF STUD
FOV FOW	FUEL OIL VENT FACE OF WALL
FP FP	FIRE PUMP FIREPROOFING
FPB	FAN POWERED VAV TERMINAL
FPD FPI	FIRE PUMP DISCHARGE FINS PER INCH
FPM	FEET PER MINUTE
FR FR	FIRE RESISTANT FIRE RESISTIVE
FR	FRAME
FRP FS	FIBERGLASS REINFORCED PANEL FLOW SWITCH
FS FSD	FLOOR SINK FIRE SMOKE DAMPER
FSEC	FIRE SMOKE DAMPER FOOD SERVICE EQUIPMENT CONTRACTOR
FT FT	FEET FIN TUBE
FT	FLOW TRANSMITTER
FTG FURN	FOOTING FURNISH(ED)
FUT	FUTURE
FV FV	FIELD VERIFY FACE VELOCITY
FVC FWC	FIRE VALVE CABINET FABRIC WALL COVERING
_	
G G	GRILLE NATURAL GAS
GA	GAUGE
GAL GALV	GALLON GALVANIZED
GB	GRAD BAR
GC GCMU	GENERAL CONTRACTOR GLAZED CONCRETE MASONRY UNIT
GCO	GRADE CLEAN OUT
GD GEA	GARBAGE DISPOSAL GREASE EXHAUST AIR
GEN	GENERAL
GEN GFA	GROSS FLOOR AREA
GFCMU GFI, GFCI	GROUND-FACE CONCRETE MASONRY UNIT GROUND FAULT CIRCUIT INTERRUPTER
GFRC	GROUND FAULT CIRCUIT INTERRUPTER GLASS FIBER REINFORCED CONCRETE
GHR GHS	
GI	GLYCOL-WATER HEATING RETURN GLYCOL-WATER HEATING SUPPLY
-	GLYCOL-WATER HEATING SUPPLY GALVANIZED IRON
GL GL	GLYCOL-WATER HEATING SUPPLY
GL GL GMU	GLYCOL-WATER HEATING SUPPLY GALVANIZED IRON GLUE LAMINATED GLASS GLASS MASONRY UNIT
GL GL	GLYCOL-WATER HEATING SUPPLY GALVANIZED IRON GLUE LAMINATED GLASS

В

GPH

GPM

GR

GR

GR

GRC

GRC

GRC

GRD

GRGP

GRS

GRV

GS

GV

GV

GW

GVBF

GWB

GWR

GWS

GYP

H1E

H2

HB

HC

HC

HC

HCB

HCR

HCS

HCW

HDBD

HDCP

HDR

HDWD

HDWR

ΗE

HEV

HGR

HID

HM

HOA

HP

HP

HP

HPC

HPR

HPS

HPS

HR

HRO

HROC

HRWR

HRWS

HSPF

HSTR

HS

ΗT

HTG

HTR

HTWR

HTWS

HUM

ΗV

HW

HWC

HWR

HWS

ΗX

ΗZ

IAQ

IAW

BC

IECC

IEEE

IES

IJS

IMC

IMC

IN HG

IN WC

INSUL

INC

INT

IPC

IPS

IW

JAN

JCT

JFB

JST

KCJ

KCP

KD

KH

KHE

KHS

KIT

KO

KS

ΚV

KVA

KW

LA

LAB

LAM

LAT

LAV

LBR

LDG

LG

LIN

LKR

LLH

LLV

LN2 LO2

LOC

LPG

LPR

LPS

LR

LS

LSC

LT

LONG

LINO

1 F

LB(S)

LIGHT

LAWN SPRINKLER

LIFE SAFETY CODE

PLAM

PLAS

PLBG

PLYWD

PLASTER

PLUMBING

PLYWOOD

KWH

KVAR

HVAC

HPNG

HORIZ

HD

FLA

GALLONS PER HOUR GALLONS PER MINUTE	LTD LTG
GUARD RAIL GRADE GRILLE	LV LV
GLASS REINFORCED CONCRETE GALVANIZED RIGID CONDUIT	LVG LW LWT
GLASS REINFORCED CONCRETE GRILLES, REGISTERS AND DIFFUSERS	M
GLASS REINFORCED GYPSUM PLASTER GALVANIZED RIGID STEEL GRAVITY VENTILATOR	MA MA MA
GASOLINE GATE VALVE	MAC MAG
GREASE VENT GREASE VENT BELOW FLOOR GREASE WASTE	MAINT MAN
GREASE WASTE GYPSUM WALL BOARD GEOTHERMAL WATER RETURN	MAS MATL MAU
GEOTHERMAL WATER SUPPLY GYPSUM	MAV MAX
HEIGHT HOOK ONE END	MB MBD
HYDROGEN HOSE BIB	MBH MC MC
HEATING COIL HOLLOW CORE	MCA MCB
HANDICAP HANDICAP BENCH HOT/CHILLED WATER RETURN	MCM MD MDF
HOT/CHILLED WATER SUPPLY HARD COLD WATER	MDO MECH
HAND DRYER HARDBOARD HANDICAP	MEMB MET
HEADER HARDWOOD	MEZZ MFR MFRG
HARDWARE HELIUM	MG MH
HOSE END VALVE HANGER HIGH INTENSITY DISCHARGE	MH MH MIN
HOLLOW METAL HAND-OFF-AUTOMATIC	MISC
HORIZONTAL HORSE POWER HEAT PUMP	ML MLDG
HIGH PRESSURE HIGH PRESSURE STEAM CONDENSATE	MLO MLWK MO
HIGH PRESSURE NATURAL GAS HIGH PRESSURE STEAM RETURN	MOCP MPG
HIGH PRESSURE STEAM SUPPLY HIGH PRESSURE SODIUM HOUR	MPR MPS MR
HOT REVERSE OSMOSIS HOT REVERSE OSMOSIS RECIRCULATION	MR/S MS
HEAT RECOVERY WATER RETURN HEAT RECOVERY WATER SUPPLY HEADSTUD	MS MTD
HEAD STOL HEAT SEASONAL PERFORMANCE FACTOR HIGH STRENGTH	MTG MTL MTWR
HEIGHT HEATING	MTWS MUL
HEATER HIGH TEMPERATURE HOT WATER RETURN HIGH TEMPERATURE HOT WATER SUPPLY	MV MV MW
HUMIDIFIER HEATING VENTILATING UNIT	N
HEATING VENTILATING AND AIR CONDITIONING DOMESTIC HOT WATER DOMESTIC HOT WATER RECIRCULATING	N N2 N2O
HEATING WATER RETURN HEATING WATER SUPPLY	N20 N20 N/A
HEAT EXCHANGER HERTZ (FREQUENCY)	NA NAT
THAT IS INDOOR AIR QUALITY	NC NC NC
IN ACCORDANCE WITH INFRARED BURNER	NEC NEMA
INTERNATIONAL BUILDING CODE INTERCOM INSIDE DIAMETER	NEUT NIC NO
INVERT ELEVATION INTERNATIONAL ENERGY CONSERVATION CODE	NO NO2
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS ILLUMINATING ENGINEERING SOCIETY	NOM NRS
INSIDE FACE ISOLATED GROUND	NS NTS NV
INTAKE HOOD ISOLATION JOINT IN JOIST SPACE	02
INTERNATIONAL MECHANICAL CODE INTERMEDIATE METAL CONDUIT	O to O O&M OA
INCH INCHES OF MERCURY (PRESSURE)	OBSC OC
INCHES OF WATER COLUMN (PRESSURE) INCLUDE(ING) INSULATION	OD OD OF
INTERIOR IRON PIPE	OF OFCI OFF
INTERNATIONAL PLUMBING CODE IRON PIPE SIZE INDIRECT WASTE	OFOI OHP
JANITOR	oht opng opp
JUNCTION BOX JUNCTION JOINT FILLER BOARD	ORD OS&Y
JOIST JOINT	OSD OTCS OV
KEYED CONSTRUCTION JOINT KEENE'S CEMENT PLASTER	OVFL OVHD
KNOCKDOWN KITCHEN HOOD	OW P
KITCHEN HOOD EXHAUST FAN KITCHEN HOOD SUPPLY FAN	P P/T
KITCHEN KNOCKOUT KITCHEN SINK	PA PAN B PAR
KILOVOLT	PB PB
KILOVOLT AMPERES	
KILOVOLT AMPERES KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR	PB PBS PC
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE	
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY	PBS PC PC PCD PCF PCT
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR	PBS PC PCD PCD PCF PCT PCV PCWP
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER	PBS PC PC PCD PCF PCF PCT PCV
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S)	PBS PC PCD PCF PCT PCV PCWP PCWR PCWR PCWS PD PDI
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM	PBS PC PCD PCF PCT PCV PCWP PCWR PCWR PD PD
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM LOCKER LIVE LOAD	PBS PC PCD PCF PCT PCV PCWP PCWR PCWS PD PD PDI PENT PERF PERP PF PG
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM LOCKER LIVE LOAD LONG LENGTH HORIZONTAL LONG LENGTH VERTICAL LIQUID NITROGEN	PBS PC PCD PCF PCT PCV PCWP PCWR PCWS PD PDI PDI PENT PERF PERP PF
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM LOCKER LIVE LOAD LONG LENGTH HORIZONTAL LONG LENGTH VERTICAL LIQUID NITROGEN LIQUID OXYGEN LOCATION	PBS PC PC PCD PCF PCT PCV PCWP PCWR PCWS PD PD PD PDI PENT PERF PERP PF PG PG PH PHC PI PI
KILOVOLT AMPERES REACTIVE KILOWATT KILOWATT HOUR ANGLE LABRATORY COMPRESSED AIR LABORATORY LAMINATED LEAVING AIR TEMPERATURE LAVATORY POUND(S) LUMBER LOADING LINEAR FOOT LENGTH (LONG) LINEAR LINOLEUM LOCKER LIVE LOAD LONG LENGTH HORIZONTAL LONG LENGTH VERTICAL LIQUID NITROGEN LIQUID OXYGEN	PBS PC PCD PCF PCT PCV PCWP PCWR PCWS PD PD PD PDI PENT PERF PERP PF PG PG PH PHC PI

LINED TRANSFER DUCT LIGHTING LOUVER LABORATORY VACUUM LEAVING LONG WAY LEAVING WATER TEMPERATURE THOUSAND MIXED AIR MAKE-UP AIR MEDICAL COMPRESSED AIR MACHINE MAGNETIC MAINTENANCE MANUAL MASONRY MATERIAL MAKEUP AIR UNIT MANUAL AIR VENT MAXIMUM MACHINE BOLT MARKER BOARD THOUSAND BTU PER HOUR MECHANICAL CONTRACTOR MEDICINE CABINET MINIMUM CIRCUIT AMPACITY MAIN CIRCUIT BREAKER METAL COMPOSITE MATERIAL MOTORIZED DAMPER MEDIUM DENSITY FIBERBOARD MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE METAL MEZZANINE MANUFACTURER MANUFACTURING MOTOR GENERATOR MANHOLE METAL HALIDE MOP HOLDER MINIMUM MISCELLANEOUS MISCELLANEOUS MOTORIZED LOUVER MOLDING MAIN LUGS ONLY MILLWORK MASONRY OPENING MAXIMUM OVERCURRENT PROTECTION MEDIUM PRESSURE GAS MEDIUM PRESSURE STEAM RETURN MEDIUM PRESSURE STEAM SUPPLY MIRROR MIRROR WITH SHELF MAGNETIC STARTER MOP SINK MOUNTED MOUNTING METAL MEDIUM TEMP HOT WATER RETURN MEDIUM TEMP HOT WATER SUPPLY MULLION MEDICAL VACUUM MERCURY VAPOR MARKER WALL NITROGEN NORTH LABORATORY NITROGEN NITROUS OXIDE NITROUS OXIDE NOT APPLICABLE NOT APPLICABLE NATURAL NORMALLY CLOSED NOISE CRITERIA NURSE CALL NATIONAL ELECTRIC CODE NATIONAL ELECTRICAL MANUFACTURERS ASSN. NEUTRAL NOT IN CONTRACT NORMALLY OPEN NUMBER NITROGEN DIOXIDE NOMINAL NON RISING STEM NEUTRAL SENSOR NOT TO SCALE NITROGEN VENT OXYGEN OUT TO OUT OPERATION AND MAINTENANCE OUTSIDE AIR OBSCURE ON CENTER OUTSIDE DIAMETER OVERFLOW DRAIN OUTSIDE FACE OWNER FURNISHED CONTRACTOR INSTALLED OWNER FURNISHED OWNER INSTALLED OWNER FURNISHED OWNER INSTALLED OVERHEAD POWER OVERHEAD TELEPHONE OPENING OPPOSITE OVERFLOW ROOF DRAIN OUTSIDE SCREW AND YOKE OVERFLOW STORM DRAIN OPEN TO CEILING SPACE OIL VENT OVERFLOW OVERHEAD OIL WASTE POLE(S) PUMP PRESSURE/TEMPERATURE TEST PORT PUBLIC ADDRESS PANIC BOLT PARALLEL PULL BOX PUSH BUTTON PARTICLE BOARD PUSH BUTTON STATION PRECAST CONCRETE PUMPED CONDENSATE PAPER CUP DISPENSER POUNDS PER CUBIC FOOT PORCELAIN CERAMIC TILE PRESSURE CONTROL VALVE PROCESS COOLING WATER PUMP PROCESS COOLING WATER RETURN PROCESS COOLING WATER SUPPLY PRESSURE DROP PUMP DISCHARGE PLUMBING & DRAINAGE INSTITUTE PENTHOUSE PERFORATED PERPENDICULAR POWER FACTOR PRESSURE GAUGE PROPANE GAS PHASE PRE-HEAT COIL POINT OF INTERSECTION PRESSURE INDICATOR PORTABLE INSTRUMENT CONNECTION POST INDICATOR VALVE PLATE PLACE(S) PLASTIC LAMINATE

С

G	ENERAL MECHANICAL	N	OTES
1	GENERAL NOTES APPLY TO ALL MECHANICAL DRAWINGS.	21	A SPECIAL INSPECTION BY THE PROJECT AND BALANCE CONTRACTOR IS REQUIRE OF SYSTEMS AND INSTALLATION AND TES
2 3	REFERENCE MECHANICAL DIVISION 21, 22 & 23 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SHOULD ANY CONFLICT OCCUR BETWEEN ANY PORTIONS OF THE		SMOKE AND COMBINATION FIRE/SMOKE D INSPECTION REPORT SHALL BE RECEIVED ARCHITECT/ENGINEER AND BY THE AUTH JURISDICTION INSPECTOR PRIOR TO ISSU
	CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS). THE CONTRACTOR IS DEEMED TO HAVE BASED THEIR BID/PRICE ON THE MORE EXPENSIVE MATERIAL, EQUIPMENT, PRODUCT OR WORK, UNLESS THEY HAVE REQUESTED AND OBTAINED A WRITTEN CLARIFICATION OR DECISION IN REGARD TO THE		INSPECTION APPROVAL OR OCCUPANCY CONDITIONAL OCCUPANCY APPROVAL. R SECTION "TESTING, ADJUSTING, AND BAL ADDITIONAL REQUIREMENTS. ALL MATER PLENUMS SHALL COMPLY WITH PROJECT
4	CONFLICT FROM THE ARCHITECT/ENGINEER. MECHANICAL PLANS INDICATE THE GENERAL DESIGN AND		BE NON-COMBUSTIBLE OR HAVE A UL TES INDEX OF NOT MORE THAN 25 AND A SMO OF NOT MORE THAN 50. WHERE CEILING RETURN, SUPPLY OR RELIEF AIR PLENUM
	ARRANGEMENT OF PIPES, DUCTS, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING AND EXISTING CONDITION. LOCATION OF THESE ITEMS MAY BE ADJUSTED CONDITIONAL UPON THE SATISFACTORY	22	GENERAL CONTRACTOR TO PROVIDE FRE ALL LOCATIONS OF THE PLENUM. ALL CONTRACTOR'S ARE RESPONSIBLE F
5	COMPLIANCE WITH ALL OTHER REQUIREMENTS. DO NOT SCALE DRAWINGS. WORK REQUIRED BY THE CONTRACT DOCUMENTS, WHICH		OF ALL DIMENSIONS AND FIELD CONDITIC OR INSTALLING MATERIALS OR EQUIPMEN
0	EXCEED THE MINIMUM REQUIREMENTS OF THE GOVERNING LOCAL STANDARDS, AND REGULATIONS SHALL BE DONE AS SHOWN OR SPECIFIED.	23	BASE FINAL INSTALLATION OF MATERIALS ACTUAL DIMENSIONS AND CONDITIONS A FIELD MEASURE FOR MATERIALS OR EQU EXACT FIT.
6	COORDINATION DRAWING IS TO BE PROVIDED BY THE CONTRACTOR IF THE CONTRACTOR BELIEVES THERE ARE CONGESTED AREAS. NOTE: ENGINEER WILL NOT RESPOND TO SPACE COORDINATION, RFI'S, ETC. WITHOUT CONTRACTOR'S COORDINATION DRAWING SUBMITTAL.	24	THE MOUNTING HEIGHT OF THE THERMOS COMPLIANCE WITH THE ADA STANDARDS DESIGN: REACH UNOBSTRUCTED – THE H MAXIMUM AND THE LOW SHALL BE 15 INC THE FINISH FLOOR. REACH OBSTRUCTED
7	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT TO BE FURNISHED, FOR DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC.		INCHES HIGH AND UP TO 24 INCHES AWAY BE 46 INCHES MAXIMUM. WHERE DIFFERE MECHANICAL AND/OR ELECTRICAL DEVIC MOUNTING HEIGHTS ARE INDICATED SIDE DEVICES SO THAT THERE IS FOUR INCHES
8	THE MECHANICAL DESIGN AND COORDINATION WITH OTHER TRADES SUCH AS, BUT NOT LIMITED TO, ARCHITECTURAL, ELECTRICAL, CIVIL AND STRUCTURAL, IS BASED ON THE CHARACTERISTICS OF EQUIPMENT MANUFACTURED BY THOSE		VERTICAL EDGES OF THE FACEPLATES. M MECHANICAL AND/OR ELECTRICAL DEVIC MOUNTING HEIGHTS ARE LOCATED IN TH DEVICES VERTICALLY THROUGH THEIR C
	COMPANIES SPECIFICALLY LISTED IN THE SCHEDULES AND ON THE DRAWINGS. ANY AND ALL COSTS ASSOCIATED WITH CHANGES DUE TO THE USE OF OTHER MANUFACTURES EQUIPMENT, INCLUDING MANUFACTURERS LISTED IN THE	25	ALL DIMENSIONS SHOWN ON THE DRAWIN INSIDE CLEAR DIMENSIONS. REFER TO SF INSULATION OR LINER REQUIRED FOR DL
	MANUFACTURERS LIST IN THE SPECIFICATIONS, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THESE CHANGES SHALL INCLUDE, BUT NOT BE LIMITED TO, AMPERAGE AND VOLTAGE CHANGES, ACCESS SPACE REQUIREMENTS, PIPING		THAT THE DUCTS SPECIFIED WILL FIT IN T AVAILABLE USING THE ARCHITECTURAL, ELECTRICAL DRAWINGS AS REFERENCE F AND INSTALLATION.
	CHANGES, STRUCTURAL MODIFICATIONS, AND SPACE REQUIRED FOR PLACEMENT OF EQUIPMENT. COORDINATION SHALL OCCUR PRIOR TO FABRICATION, PURCHASE, AND/OR INSTALLATION OF ALL WORK. DISCUSS, COORDINATE AND COOPERATE WITH OTHER TRADES AND COORDINATE THE WORK WITH THEIRS.	26	ALL MECHANICAL AND PLUMBING SYSTEM CONCEALED WITHIN WALLS, UNDERGROU OR IN ARCHITECT AND ENGINEER APPRO
	COORDINATE CEILING CAVITY SPACE CAREFULLY WITH OTHER TRADES. BRING ANY CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER.		ALL CASES UNLESS SPECIFICALLY NOTED DRAWINGS. EXPOSED ITEMS MUST BE LO APPROVED BY THE ARCHITECT AND ENGI SHALL BE INSTALLED AND FINISHED TO P IMPACT. ALL EXPOSED ITEMS ARE TO BE
9	ALL EQUIPMENT SHALL BE DERATED FOR THE ACTUAL ELEVATION OF THE PROJECT SITE TO DELIVER THE REQUIRED CAPACITIES INDICATED ON THE DRAWINGS AND SCHEDULES.	27	PAINTING AND PAINTED TO MATCH THE A UNLESS SCHEDULED FOR AN ACCENT CC
10	THE MECHANICAL CONTRACTOR SHALL LOCATE ALL EQUIPMENT WHICH MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT BE LIMITED TO) VALVES, VIBRATION ISOLATORS, TRAPS,	27	FIELD VERIFY ALL DIMENSIONS BEFORE F
	CLEANOUTS, MOTORS, CONTROLLERS, SWITCH GEAR, AND DRAIN POINTS. MINOR DEVIATIONS FROM DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE REVIEWED BY THE ARCHITECT/ENGINEER PRIOR TO MAKING	29	THE SAME SIZE AS THE DEVICE SERVED, I OTHERWISE.
	THE CHANGE. VERIFY AND COORDINATE THE MAINTENANCE ACCESS AND CODE REQUIRED CLEARANCES FOR ALL MECHANICAL EQUIPMENT. INSTALL ALL WORK AND COORDINATE THE WORK OF OTHER TRADES TO MAINTAIN CODE REQUIRED CLEARANCE AND ACCESS FOR PROPER MAINTENANCE OF	30	EXPANSION LOOPS, ANCHORS, GUIDES, E AS INDICATED OR REQUIRED BY SPECIFIC ALL PIPING BRANCH RUN-OUT TO EQUIPM
11	EQUIPMENT. MECHANICAL EQUIPMENT ACCESS PANELS SHALL NOT BE BLOCKED. PROVIDE A MINIMUM OF 3'-0" OF CLEARANCE IN FRONT	31	PIPE SIZE INDICATED ON THE EQUIPMENT NOTED OTHERWISE.
	OF EQUIPMENT MAINTENANCE ACCESS PANELS. PROVIDE DUCTOWRK AND PIPING OFFSET AS NECESSARY TO MAINTAIN CLEARANCE.		COPPER PIPE WITH WROUGHT COPPER F CONDENSATE DRAIN PIPES AT 1/8" PER F CONDENSATE PIPING SHALL BE ¾"UNLES
12	THE MECHANICAL CONTRACTOR SHALL PROTECT NEW CONSTRUCTION FROM DAMAGE BY ALL TRADES. ALL SUCH DAMAGE CAUSED BY THE CONTRACTOR DURING THE COURSE OF THIS WORK SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.	32	UNLESS SPECIFIED ON STRUCTURAL DRA ALTERATIONS OR MODIFICATIONS TO A S BY CUTTING, DRILLING, BORING, BRACING BE PROHIBITED UNLESS PRIOR WRITTEN STRUCTURAL ENGINEER IS OBTAINED PR WORK.
13	THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROPER REMOVAL AND DISPOSAL OF ALL DEBRIS GENERATED BY CONSTRUCTION OF THIS PROJECT. THE REMOVAL AND DISPOSAL OF ALL CONSTRUCTION DEBRIS SHALL BE IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. THE PREMISES SHALL BE KEPT CLEAN AND FREE FROM ALL WASTE	33	PROVIDE VIBRATION ISOLATORS FOR MO MECHANICAL EQUIPMENT UNLESS SPECI OTHERWISE. REFER TO SCHEDULES, DET SPECIFICATIONS FOR TYPES AND SIZES F PROVIDE ISOLATION AS RECOMMENDED
14	MATERIALS. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE GENERAL CONTRACTOR WITH THE EXACT LOCATIONS AND SIZES OF	34	MANUFACTURER. MULTIMOTOR AND COMBINATION - LOAD I PROVIDED WITH A VISIBLE NAMEPLATE M
	ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS, CONCRETE SLEEVES OR ANY OTHER CONSTRUCTION REQUIREMENTS NEEDED TO ACCOMMODATE THE MECHANICAL EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN		MAKER'S NAME, THE RATING IN VOLTS, FF OF PHASES, MINIMUM SUPPLY CIRCUIT CO THE MAXIMUM RATING OF THE BRANCH – CIRCUIT AND GROUND - FAULT PROTECTI
	SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOCATING CONCRETE SLEEVES IN INTERIOR GRADE BEAMS FOR ALL DUCTS OR PIPING HUNG IN CRAWL SPACE. THIS WORK SHALL BE DONE PRIOR TO POURING OF GRADE BEAMS.	35	SHORT - CIRCUIT CURRENT RATING OF TH CONTROLLERS OR INDUSTRIAL CONTROL MECHANICAL AND PLUMBING EQUIPMENT
15	THE MECHANICAL CONTRACTOR SHALL COORDINATE CUT-OUTS FOR CASEWORK, MILLWORK, OR OTHER EQUIPMENT AS REQUIRED WITH THE GENERAL CONTRACTOR.		ACCESSORIES THAT DO NOT SERVE ELEV ROOMS MAY NOT ENTER OR PASS THROU REFERENCE APPROPRIATE ELEVATOR CO CONSTRUCTION OF ELEVATOR EQUIPMEN
16	MAINTAIN UNOBSTRUCTED ACCESSIBILITY TO ALL DAMPERS. PROVIDE ACCESS DOORS IN WALLS, CEILINGS AND DUCTS AS NEEDED TO PROVIDE ACCESS.	36	MECHANICAL AND PLUMBING EQUIPMENT ACCESSORIES THAT DO NOT SERVE ELEC ROOMS MAY NOT ENTER OR PASS THROU REFERENCE NATIONAL ELECTRICAL COD
17	REFER TO CODE PLAN SHEETS FOR LOCATIONS OF RATED FIRE AND/OR SMOKE SEPARATION WALLS. THE MECHANICAL CONTRACTOR SHALL PROVIDE FIRE, SMOKE OR COMBINATION	37	CONSTRUCTION OF ELECTRICAL ROOMS. MECHANICAL AND PLUMBING EQUIPMENT ACCESSORIES THAT DO NOT SERVE ELEC
	FIRE/SMOKE DAMPERS FOR ALL RATED WALLS/CEILINGS/ASSEMBLIES. COORDINATE THE LOCATION OF FIRE RATED & SMOKE AND RATED WALLS PRIOR TO ORDER AND INSTALLATION OF DAMPERS.	38	ROOMS ARE TO AVOID ENTERING OR PAS SPACE. PROVIDE DUCT MOUNTED VOLUME DAMP
18	WALL OPENINGS FOR FIRE, SMOKE AND COMBINATION FIRE AND SMOKE DAMPERS SHALL BE FRAMED AS REQUIRED BY THE FIRE DAMPER MANUFACTURER'S RECOMMENDATIONS. COORDINATE; PROVIDE/INSTALLED MANUFACTURER REQUIREMENTS WITH		RETURN, EXHAUST AND OUTDOOR AIR BE CONNECTIONS. INCLUDE REMOTE DAMPI ADJUSTABLE COVER IN NON-ACCESSIBLE
19	GENERAL CONTRACTOR. ALL WALL PENETRATIONS AT RATED WALL LOCATIONS REQUIRED FOR PIPES, CONDUIT, DUCTWORK, ETC. SHALL BE SEALED BY THE	39 40	PROVIDE ALL SQUARE OR RECTANGULAR EXCEPT TRANSFER AIR ELBOWS. GRILLES, REGISTERS AND DIFFUSERS AN
	GENERAL CONTRACTOR TO STOP PASSAGE OF FIRE AND / OR SMOKE WITH FIRE SAFING AND APPROVED FIRESTOPPING SEALANT AS DETAILED BY INSTALLED/PROVIDED MANUFACTURERS RECOMMENDATIONS. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL	41	LOCATED IN MOISTURE LADEN ENVIRONM STAINLESS STEEL OR ALUMINUM. DUCTS WATERTIGHT AND SLOPED BACK TO AIR ( BRANCH DUCT RUN-OUTS TO RECTANGU
20	CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR ALL WALL PENETRATIONS FOR CORRECT SIZES. EQUIPMENT SHUT-DOWN OF SYSTEMS WITH A DESIGN AIRFLOW CAPACITY GREATER THAN 2,000 CFM SHALL BE SHUT-DOWN BY		DIFFUSERS, REGISTERS AND GRILLES AR AS THE NECK OF THE DIFFUSER, REGISTE UNLESS NOTED OTHERWISE.
	THE SMOKE DETECTORS OF THE SYSTEM BY DIV. 28, CONNECTED TO THE FIRE ALARM SYSTEM. THIS INCLUDES MULTIPLE AIR HANDLING SYSTEMS THAT SHARE COMMON SUPPLY OR RETURN AIR DUCTS OR PLENUMS WITH A COMBINED DESIGN CAPACITY	42 43	NO FLEXIBLE DUCTS ARE ALLOWED ABOV CEILINGS. REFER TO SPECIFICATIONS FOR REQUIRE
	GREATER THAN 2,000 CFM. THE USE OF THE AREA SMOKE DETECTORS OF THE FULL AREA COVERAGE SYSTEM BY DIV. 28 MAY BE USED IF SPECIFIED IN DIV. 28 AS SUCH. IF NOT, LOCAL DUCT SMOKE DETECTORS ARE TO BE UTILIZED FOR EQUIPMENT SHUT DOWN. THESE DUCT SMOKE DETECTOR SHALL BE LOCATED	44	RESPONSIBILITIES OF THIS CONTRACTOR OF THIS PROJECT. SPIN-IN FITTINGS, BRANCH DUCT RUN-OU
	IN THE MAIN SUPPLY AIR OR RETURN AIR DUCT AS INDICATED ON DRAWINGS OR REQUIRED BY THE PROJECT GOVERNING CODE. DUCT SMOKE DETECTORS SHALL BE PROVIDED BY SPECIAL SYSTEMS CONTRACTOR AND INSTALLED BY THE MECHANICAL		TO ROUND CONNECTIONS OF DIFFUSERS GRILLES ARE SHALL BE BASED ON THE FO UNLESS NOTED OTHERWISE:
	CONTRACTOR. POWER WIRING BY THE ELECTRICAL CONTRACTOR. WIRING TO THE FIRE ALARM SYSTEM BY THE SPECIAL SYSTEM CONTRACTOR. WIRING FROM THE DUCT SMOKE DETECTOR TO THE MECHANICAL EQUIPMENT AND UNIT SHUT-DOWN IS BY THE DIV. 28 CONTRACTOR.		BRANCH AIRFLOW (CFM) BRANCH 0 - 100 101 - 220 221 - 380 381 - 600 601 - 900
PF	<b>ROJECT INFORMATION</b>		APPLICABLE
• PR • CL	OJECT LOCATION: BOULDER, CO. OJECT ALTITUDE: 5,400 FT. ASL (APPROX.) IMATE ZONE: 5b		<ul> <li>2021 IBC - INTERNATIONAL BUILI</li> <li>2021 IEBC - INTERNATIONAL EXIS</li> <li>2021 IMC - INTERNATIONAL MEC</li> </ul>
• co •	OLING DESIGN CRITERIA (UCB DESIGN STANDARD) SUMMER DRY BULB: SUMMER WET BULB: COOLING OCCUPIED SETPOINT: 73° E		2021 IECC - INTERNATIONAL ENEF     2021 NEC - NATIONAL ELECTRIC     2021 IPC - NATIONAL PLUMBING     2021 IPC - INTERNATIONAL EIRE

D

 SUMMER WET BULB: COOLING OCCUPIED SETPOINT: 73° F COOLING UNOCCUPIED SETPOINT: 80° F

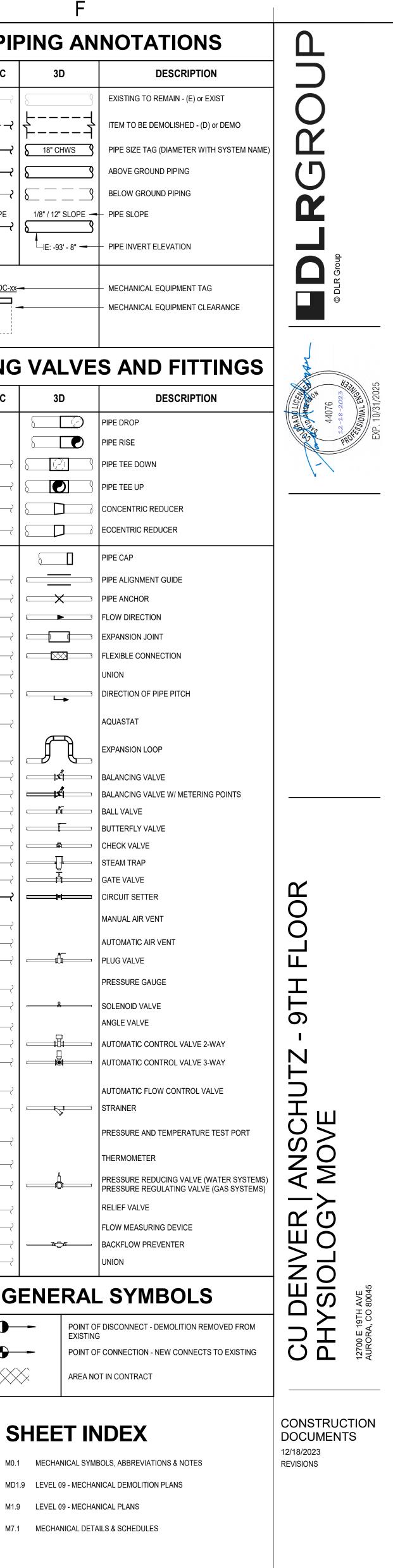
	E			F
ES	HVAC	SYMBOLS	PIPIN	G ANNOTA
AL INSPECTION BY THE PROJECT TESTING ADJUSTING ANCE CONTRACTOR IS REQUIRED FOR THE SHUT-DOWN	SCHEMATIC 3D	DESCRIPTION	SCHEMATIC	3D [
EMS AND INSTALLATION AND TESTING OF ALL FIRE, ND COMBINATION FIRE/SMOKE DAMPERS. THE SPECIAL				
ION REPORT SHALL BE RECEIVED BY CT/ENGINEER AND BY THE AUTHORITY HAVING CTION INSPECTOR PRIOR TO ISSUANCE OF FINAL		DIFFUSER (SUPPLY)		
ION APPROVAL OR OCCUPANCY APPROVAL, INCLUDING ONAL OCCUPANCY APPROVAL. REFER TO SPECIFICATION		GRILLE (RETURN)	~	
"TESTING, ADJUSTING, AND BALANCING" FOR NAL REQUIREMENTS. ALL MATERIALS PLACED IN		GRILLE (EXHAUST)	18" CHWS	B" CHWS 9 PIPE SIZE TAG
S SHALL COMPLY WITH PROJECT GOVERNING CODE TO COMBUSTIBLE OR HAVE A UL TESTED FLAME SPREAD F NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX		WALL REGISTER		S ABOVE GROUN
MORE THAN 50. WHERE CEILING SPACE IS USED AS A , SUPPLY OR RELIEF AIR PLENUM. COORDINATE WITH THE		LINEAR DIFFUSER (SLOT)		
L CONTRACTOR TO PROVIDE FREE RETURN OF AIR FROM ATIONS OF THE PLENUM.			1/8" / 12" SLOPE	
TRACTOR'S ARE RESPONSIBLE FOR FIELD VERIFICATION	AFMS - AF	AIR FLOW MEASURING STATION BACKDRAFT DAMPER		
IMENSIONS AND FIELD CONDITIONS PRIOR TO ORDERING ALLING MATERIALS OR EQUIPMENT.	RD RD RD RD	BAROMETRIC RELIEF DAMPER	└─IE: -93' - 1" └─IE	E: -93' - 8" - PIPE INVERT EL
IAL INSTALLATION OF MATERIALS AND EQUIPMENT ON		DIFFERENTIAL PRESSURE SENSOR DUCT DETECTOR	550	
DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. EASURE FOR MATERIALS OR EQUIPMENT REQUIRING		GRAVITY DAMPER		MECHANICAL E
IT.	м [] м[]-([]	MOTORIZED DAMPER	-	
INTING HEIGHT OF THE THERMOSTATS SHALL BE IN NCE WITH THE ADA STANDARDS FOR ACCESSIBLE		PRESSURE REDUCING DAMPER SECURITY BARS	l	
REACH UNOBSTRUCTED – THE HIGH SHALL BE 48 INCHES MAND THE LOW SHALL BE 15 INCHES MINIMUM ABOVE	SB - SB •	STATIC PRESSURE SENSOR		ALVES AND
SH FLOOR. REACH OBSTRUCTED BY ELEMENTS UP TO 34 HIGH AND UP TO 24 INCHES AWAY FROM THE WALL SHALL CHES MAXIMUM. WHERE DIFFERENT RECESSED	VD r VD r VD	VOLUME DAMPER	FIFING V	
ICAL AND/OR ELECTRICAL DEVICES WITH THE SAME		REMOTE VOLUME DAMPER	SCHEMATIC	3D C
SO THAT THERE IS FOUR INCHES BETWEEN ADJACENT L EDGES OF THE FACEPLATES. WHERE DIFFERENT		FIRE DAMPER COMBINATION FIRE / SMOKE DAMPER	€	
ICAL AND/OR ELECTRICAL DEVICES WITH DIFFERENT IG HEIGHTS ARE LOCATED IN THE SAME AREA, ALIGN		SMOKE DAMPER		PIPE RISE
VERTICALLY THROUGH THEIR CENTERLINES.		ROUND DUCT UP		PIPE TEE DOWN
INSIONS SHOWN ON THE DRAWINGS FOR DUCTS ARE LEAR DIMENSIONS. REFER TO SPECIFICATIONS FOR				
ION OR LINER REQUIRED FOR DUCT SYSTEMS. VERIFY E DUCTS SPECIFIED WILL FIT IN THE CEILING SPACE		RECTANGULAR DUCT UP		
LE USING THE ARCHITECTURAL, STRUCTURAL AND CAL DRAWINGS AS REFERENCE PRIOR TO FABRICATION				CONCENTRIC RE
FALLATION.		OVAL DUCT UP		
HANICAL AND PLUMBING SYSTEMS SHALL BE LED WITHIN WALLS, UNDERGROUND, ABOVE CEILINGS		ROUND DUCT DOWN		PIPE CAP
CHITECT AND ENGINEER APPROVED UTILITY SPACES IN ES UNLESS SPECIFICALLY NOTED OTHERWISE ON THE GS. EXPOSED ITEMS MUST BE LOCATED IN AREAS				PIPE ALIGNMENT
ED BY THE ARCHITECT AND ENGINEER. EXPOSED ITEMS E INSTALLED AND FINISHED TO PROVIDE MINIMAL VISUAL		RECTANGULAR DUCT DOWN	→ ★ →	PIPE ANCHOR
ALL EXPOSED ITEMS ARE TO BE PREPARED FOR G AND PAINTED TO MATCH THE ADJACENT SURFACES		OVAL DUCT DOWN		
SCHEDULED FOR AN ACCENT COLOR.		OVAL DOCT DOWN		
O ARCHITECTURAL REFLECTED CEILING PLAN FOR OCATION OF DIFFUSERS AND GRILLES.				
RIFY ALL DIMENSIONS BEFORE FABRICATING DUCTS.		MITERED ELBOW WITH VANES		UNION
NCH RUNOUTS TO REGISTERS AND GRILLES SHALL BE IE SIZE AS THE DEVICE SERVED, UNLESS NOTED				DIRECTION OF PI
ISE.		MITERED ELBOW WITHOUT VANES		AQUASTAT
CTOR SHALL PROVIDE FOR EXPANSION OF PIPING. USE ON LOOPS, ANCHORS, GUIDES, EXPANSION JOINTS, ETC.			f	
ATED OR REQUIRED BY SPECIFICATIONS.				, <u> </u>
NG BRANCH RUN-OUT TO EQUIPMENT SHALL BE OF THE E INDICATED ON THE EQUIPMENT SCHEDULE, UNLESS		RADIUSED ELBOW		
)THERWISE.				BALANCING VALV
DENSATE DRAIN PIPES ARE TO BE INSULATED TYPE "M" PIPE WITH WROUGHT COPPER FITTINGS. SLOPE		TEE WITH VANES		
SATE DRAIN PIPES AT 1/8" PER FOOT MINIMUM. ALL SATE PIPING SHALL BE ¾"UNLESS NOTED OTHERWISE.				CHECK VALVE
SPECIFIED ON STRUCTURAL DRAWINGS, ANY				STEAM TRAP
IONS OR MODIFICATIONS TO A STRUCTURAL ELEMENT ING, DRILLING, BORING, BRACING, WELDING, ETC. SHALL IIBITED UNLESS PRIOR WRITTEN APPROVAL BY THE		RADIUSED TEE		
JRAL ENGINEER IS OBTAINED PRIOR TO BEGINNING				
VIBRATION ISOLATORS FOR MOTOR DRIVEN	[{	DUCT WITH INSULATION		MANUAL AIR VEN
ICAL EQUIPMENT UNLESS SPECIFICALLY NOTED ISE. REFER TO SCHEDULES, DETAILS AND/OR	<u>آ</u> آ	DUCT WITH INSULATION	<u>}</u>	
CATIONS FOR TYPES AND SIZES REQUIRED. OTHERWISE, E ISOLATION AS RECOMMENDED BY THE EQUIPMENT		DUCT WITH LINING		ービー PLUG VALVE
CTURER.			کـــــــ <del>ک</del>	PRESSURE GAUG
TOR AND COMBINATION - LOAD EQUIPMENT SHALL BE D WITH A VISIBLE NAMEPLATE MARKED WITH THE		DUCT IS FABRIC		SOLENOID VALVE
NAME, THE RATING IN VOLTS, FREQUENCY AND NUMBER ES, MINIMUM SUPPLY CIRCUIT CONDUCTOR AMPACITY, MUM RATING OF THE BRANCH – CIRCUIT, SHORT -		FLEXIBLE DUCT		ANGLE VALVE
AND GROUND - FAULT PROTECTIVE DEVICE, AND THE CIRCUIT CURRENT RATING OF THE MOTOR		TRANSFER DUCT		→Ei======   AUTOMATIC CON
LLERS OR INDUSTRIAL CONTROL PANEL.		DUCT SMOKE DETECTOR		
ICAL AND PLUMBING EQUIPMENT, DUCTS, PIPING, OR ORIES THAT DO NOT SERVE ELEVATOR EQUIPMENT	←	SUPPLY ARROW	· · · · · · · · · · · · · · · · · · ·	AUTOMATIC FLOV
MAY NOT ENTER OR PASS THROUGH THE SPACE. NCE APPROPRIATE ELEVATOR CODE PROVISIONS FOR	↔-	RETURN ARROW	<u>├──</u> ₩	STRAINER
UCTION OF ELEVATOR EQUIPMENT ROOMS.	≪1	EXHAUST ARROW		PRESSURE AND
ICAL AND PLUMBING EQUIPMENT, DUCTS, PIPING, OR ORIES THAT DO NOT SERVE ELECTRICAL EQUIPMENT	UC 100	DOOR UNDERCUT ARROW WITH CFM		THERMOMETER
MAY NOT ENTER OR PASS THROUGH THE SPACE. NCE NATIONAL ELECTRICAL CODE PROVISIONS FOR	D-1 -	DIFFUSER, REGISTER OR GRILLE TAG		
UCTION OF ELECTRICAL ROOMS.	12"x12"	─ NECK SIZE ( 00"x00" - SQ / RECT ) ( 0"ø ROUND ) ─ AIR FLOW (CUBIC FEET PER MINUTE)		PRESSURE REGU
ICAL AND PLUMBING EQUIPMENT, DUCTS, PIPING, OR DRIES THAT DO NOT SERVE ELECTRONICS EQUIPMENT				RELIEF VALVE
ARE TO AVOID ENTERING OR PASSING THROUGH THE		(WIDTH x DEPTH) SIZE INDICATED FREE AREA		
DUCT MOUNTED VOLUME DAMPERS IN ALL SUPPLY,		MECHANICAL EQUIPMENT TAG		BACKFLOW PRE
, EXHAUST AND OUTDOOR AIR BRANCH DUCTWORK TIONS. INCLUDE REMOTE DAMPER OPERATOR WITH \BLE COVER IN NON-ACCESSIBLE CEILING AREAS.		MECHANICAL EQUIPMENT CLEARANCE		
	D <sub>2</sub>	CARBON DIOXIDE SENSOR - WALL MOUNTED	GEN	ERAL SYMI
ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES TRANSFER AIR ELBOWS.	© <sub>02</sub>	CARBON DIOXIDE SENSOR - CEILING MOUNTED		
, REGISTERS AND DIFFUSERS AND CONNECTED DUCTS	© ©	CARBON MONOXIDE SENSOR - WALL MOUNTED CARBON MONOXIDE SENSOR - CEILING MOUNTED		POINT OF DISCONNECT - D EXISTING
) IN MOISTURE LADEN ENVIRONMENTS ARE TO BE SS STEEL OR ALUMINUM. DUCTS SHALL BE WELDED IGHT AND SLOPED BACK TO AIR OPENING.	₽	HUMIDISTAT - WALL MOUNTED		POINT OF CONNECTION - N
	Θ	HUMIDISTAT - CEILING MOUNTED		AREA NOT IN CONTRACT
DUCT RUN-OUTS TO RECTANGULAR CONNECTIONS OF RS, REGISTERS AND GRILLES ARE TO BE THE SAME SIZE IECK OF THE DIFFUSER, REGISTER OR GRILL IT SERVES,	₽ <u>6</u> 2 ® <sub>02</sub>	NITROGEN DIOXIDE SENSOR - WALL MOUNTED NITROGEN DIOXIDE SENSOR - CEILING MOUNTED		
NOTED OTHERWISE.	₩ <sub>02</sub> ₽	PRESSURE SENSOR - WALL MOUNTED		
IBLE DUCTS ARE ALLOWED ABOVE HARD INACCESSIBLE	®	PRESSURE SENSOR - CEILING MOUNTED	SHE	ET INDEX
O SPECIFICATIONS FOR REQUIREMENTS AND	<u>ି</u> ତ	TEMPERATURE SENSOR - WALL MOUNTED TEMPERATURE SENSOR - CEILING MOUNTED	M0.1 MEC	CHANICAL SYMBOLS, ABBREVIATIO
SIBILITIES OF THIS CONTRACTOR FOR COMMISSIONING PROJECT.	Ф	THERMOSTAT - WALL MOUNTED	MD1.9 LEV	EL 09 - MECHANICAL DEMOLITION
TITTINGS, BRANCH DUCT RUN-OUTS AND FLEXIBLE DUCTS	0	THERMOSTAT - CEILING MOUNTED		EL 09 - MECHANICAL PLANS

TINGS, BRANCH DUCT RUN-OUTS AND FLEXIBLE DUCTS CONNECTIONS OF DIFFUSERS, REGISTERS AND RE SHALL BE BASED ON THE FOLLOWING SCHEDULE OTED OTHERWISE:

IRFLOW (CFM) BRANCH ROUND DUCT SIZE (IN) 12'

# PLICABLE CODES

C - INTERNATIONAL BUILDING CODE EBC - INTERNATIONAL EXISTING BUILDING CODE INTERNATIONAL MECHANICAL CODE INTERNATIONAL ENERGY CONSERVATION CODE NATIONAL ELECTRIC CODE 2021 IPC - NATIONAL PLUMBING CODE 2021 IFC - INTERNATIONAL FIRE CODE NFPA - NATIONAL FIRE PROTECTION ASSOCIATION



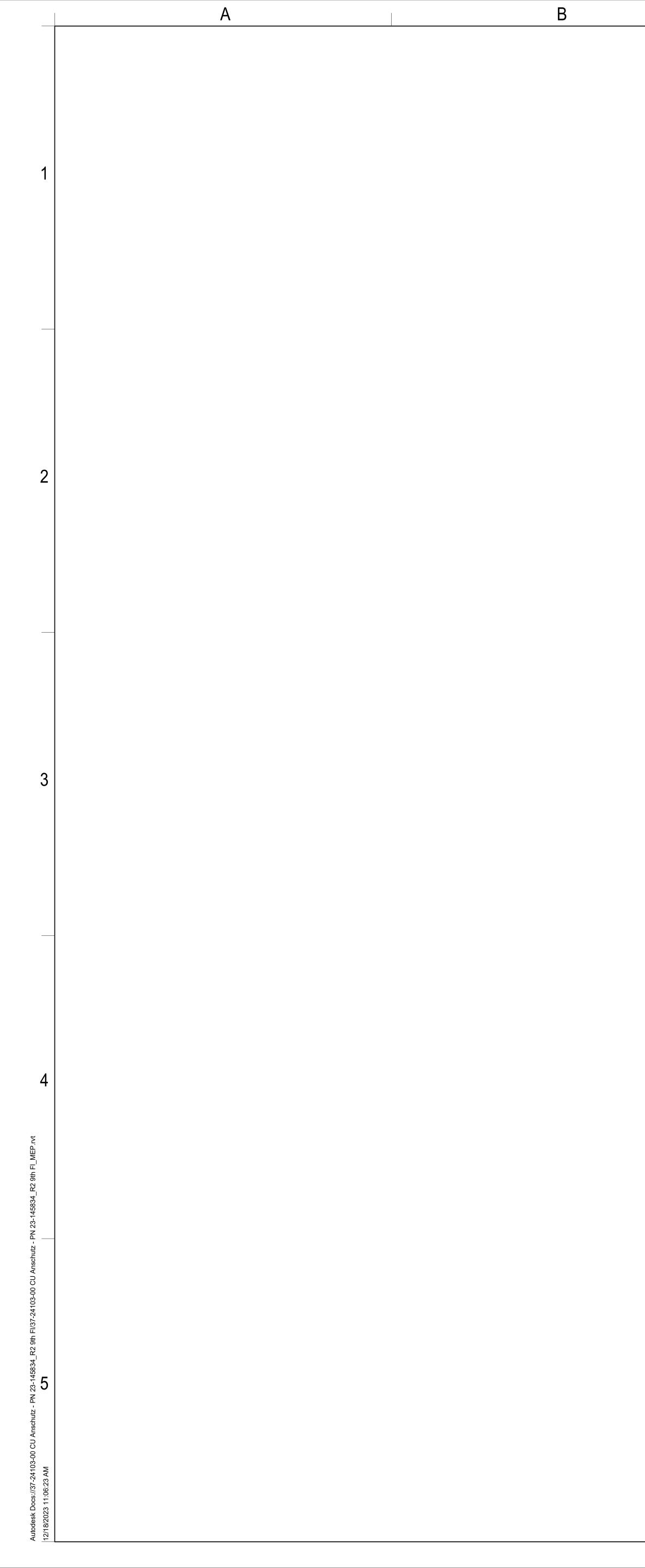
NOTE ALL NOTES ON THIS SHEET ARE

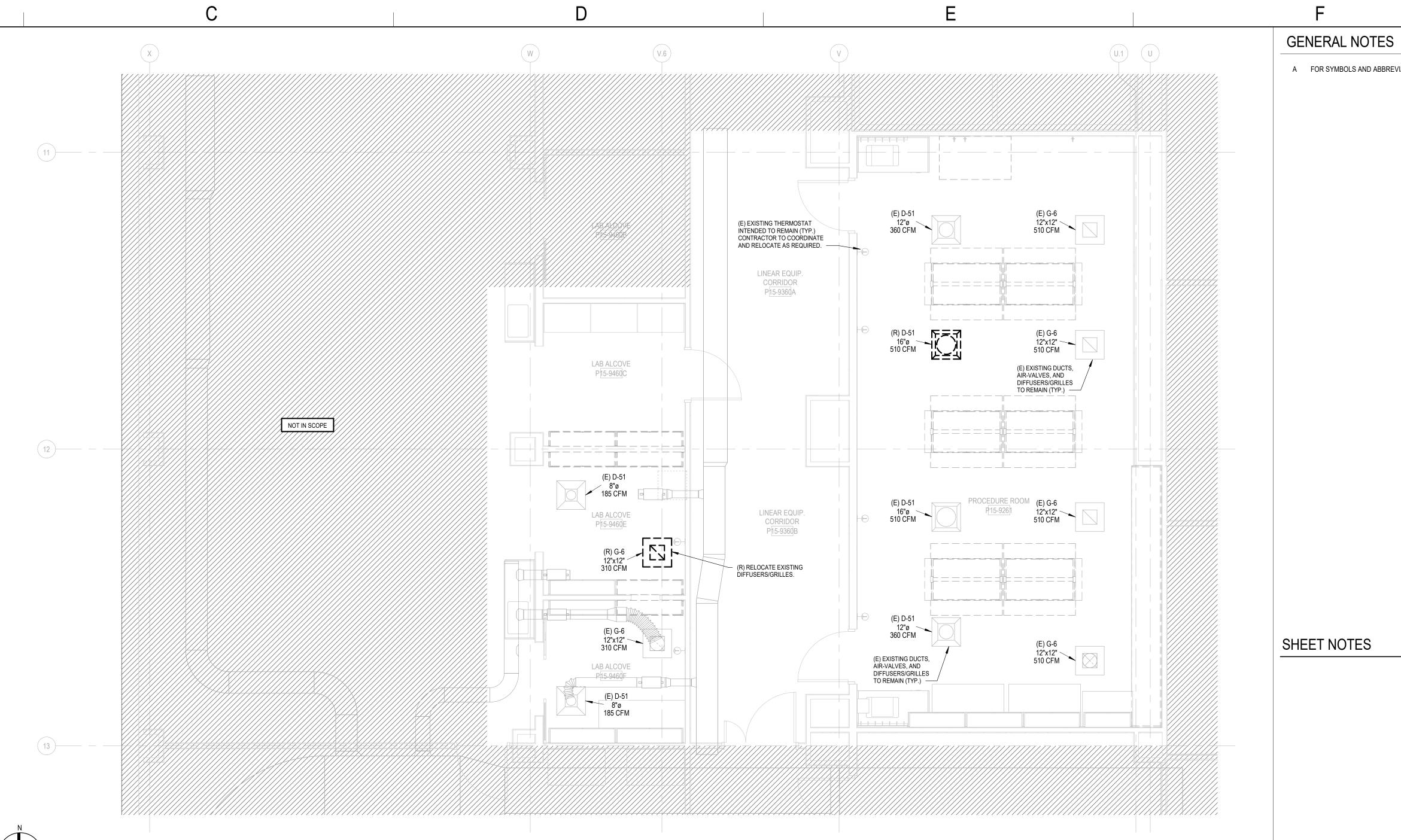
THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE APPLICABLE IN THIS SET OF

PN 23-14584 37-24103-00

MECHANICAL SYMBOLS, **ABBREVIATIONS &** NOTES

M0.1





LEVEL 9 - ENLARGED HVAC DEMOLITION PLAN SCALE: 1/4" = 1'-0"

KE

A FOR SYMBOLS AND ABBREVIATIONS SEE DRAWING M0.1

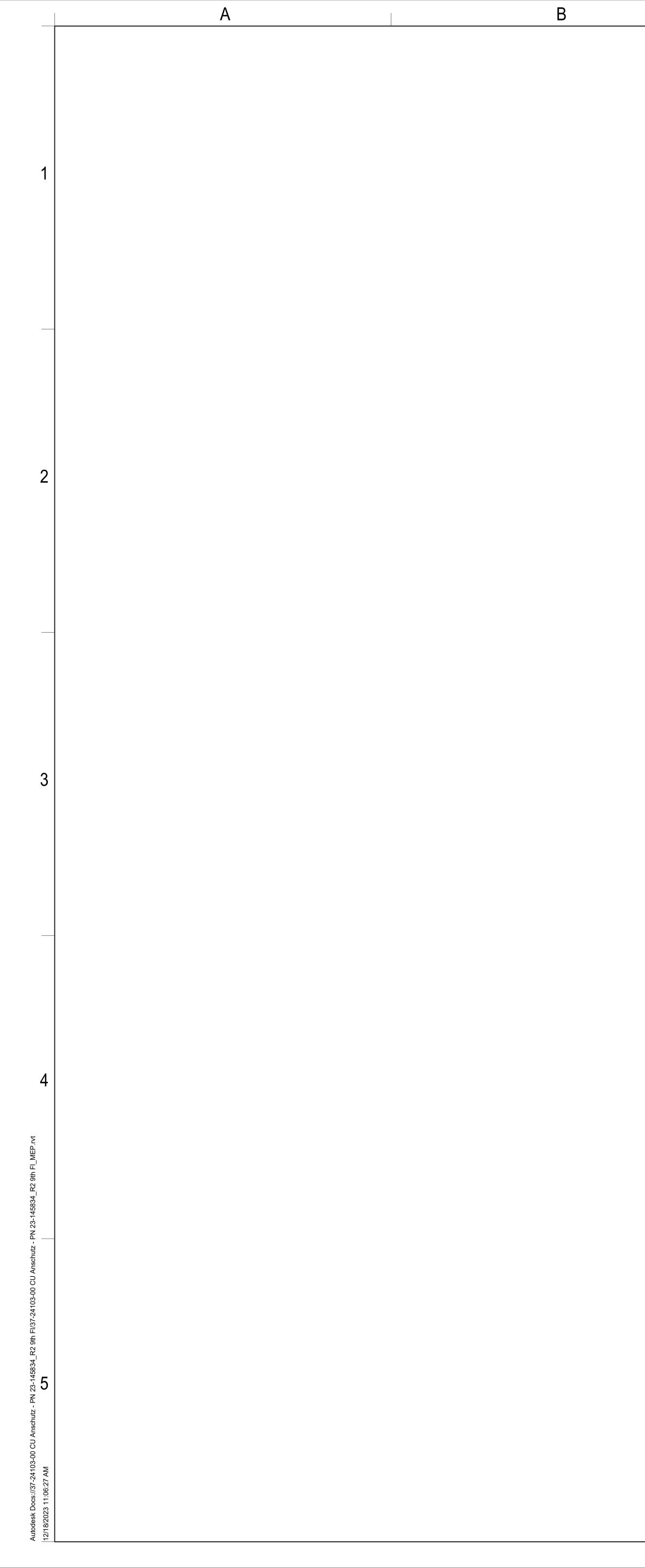


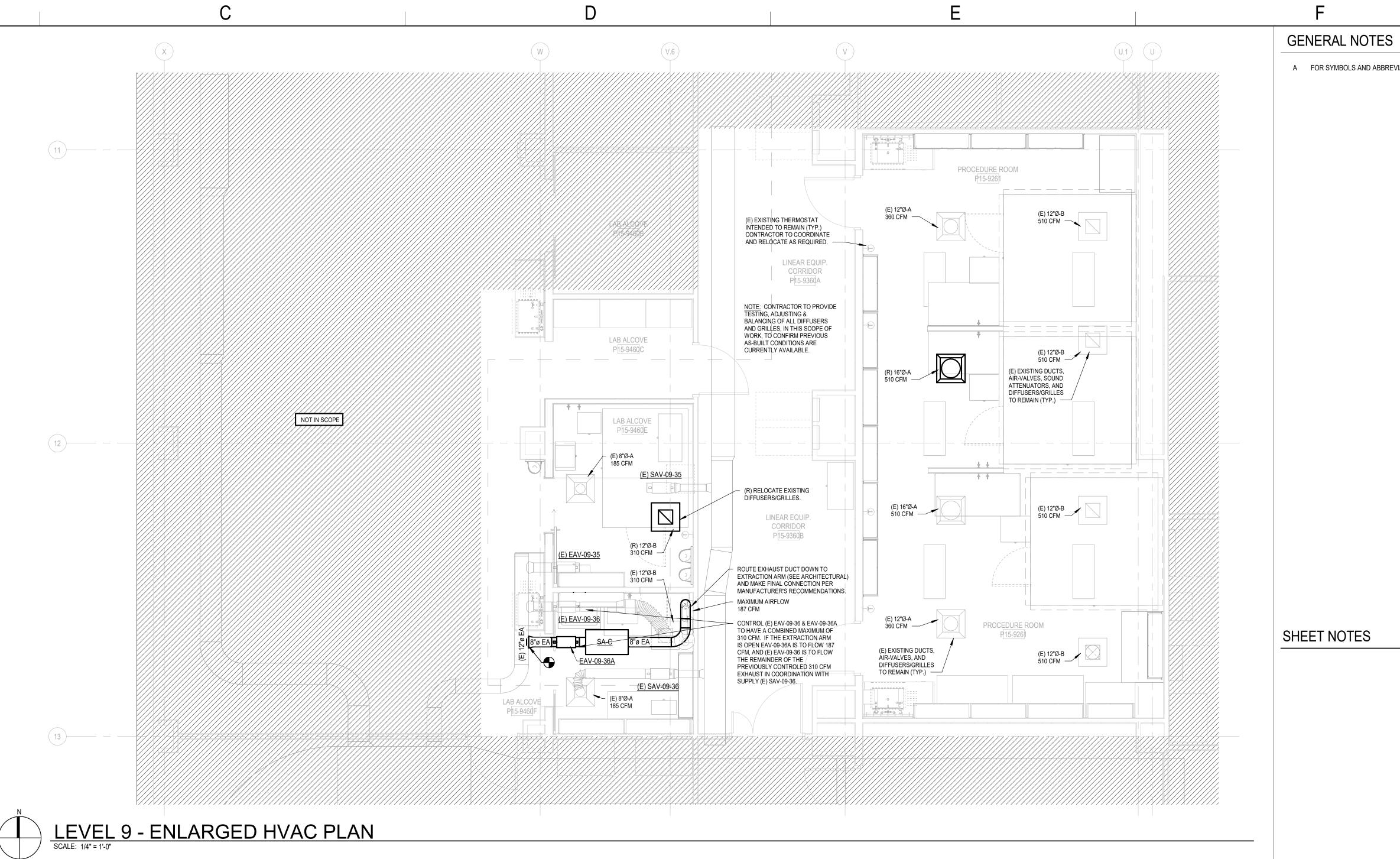
PN 23-14584 37-24103-00

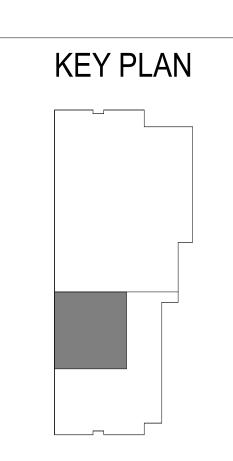
LEVEL 09 -MECHANICAL DEMOLITION

MD1.9









A FOR SYMBOLS AND ABBREVIATIONS SEE DRAWING M0.1

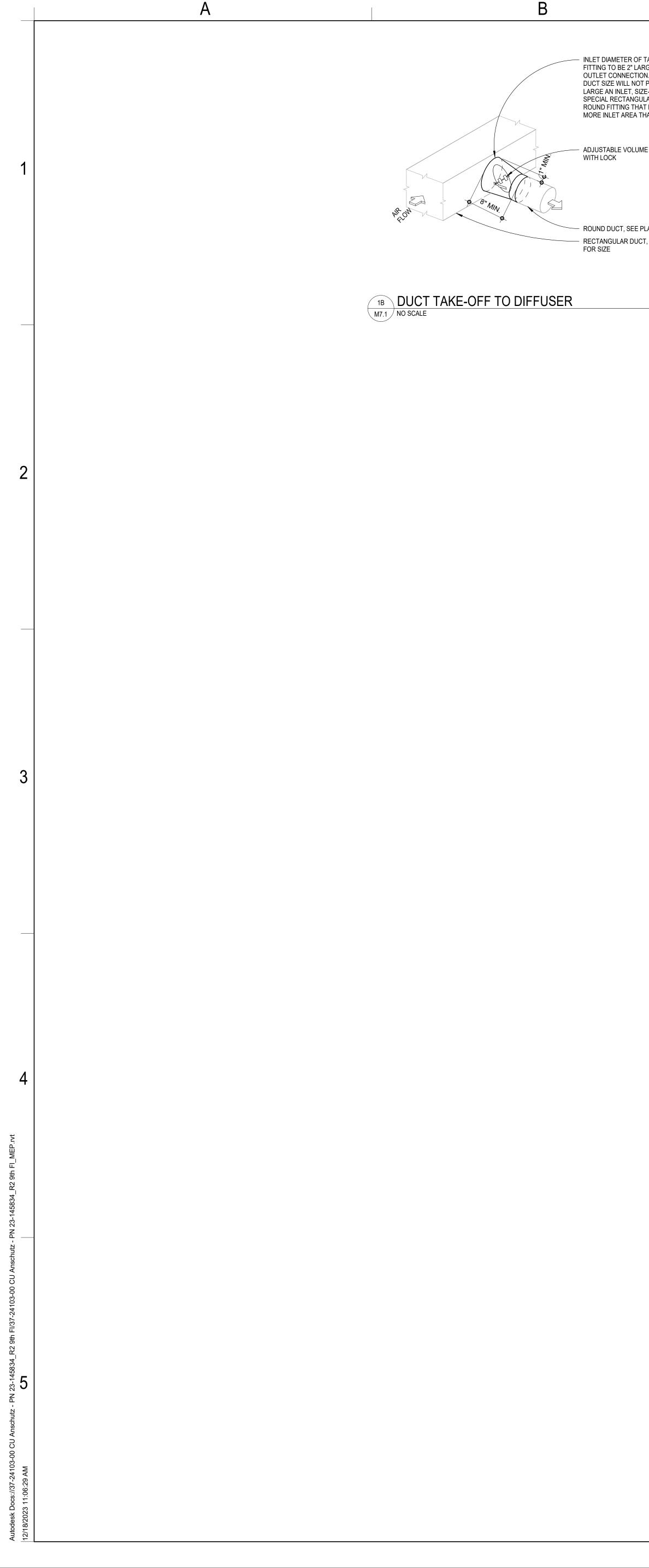


12/18/2023 REVISIONS

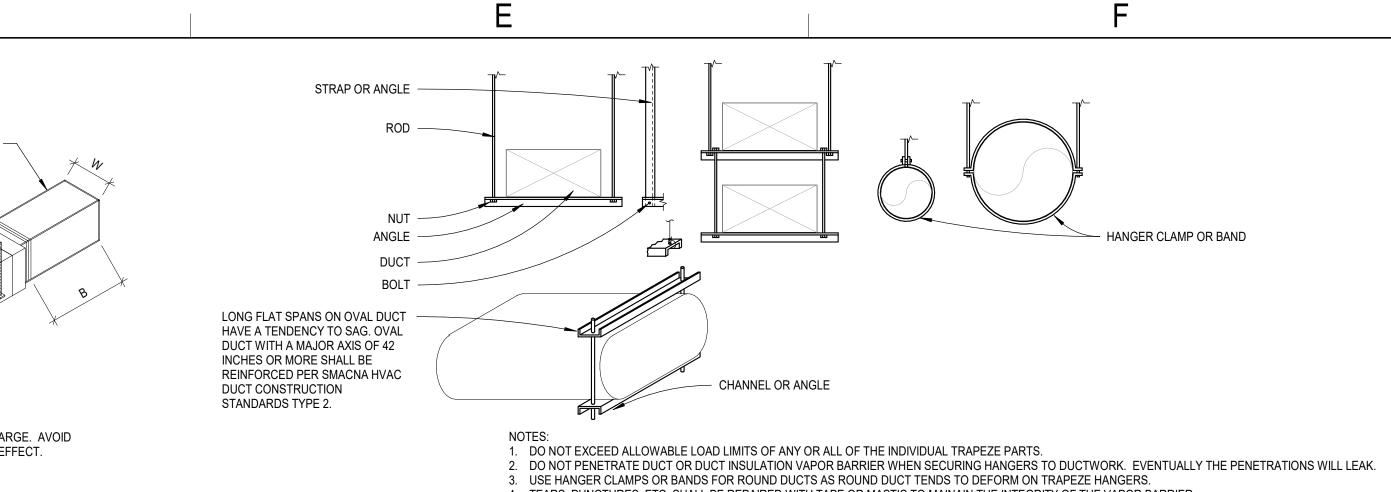
PN 23-14584 37-24103-00

LEVEL 09 -MECHANICAL PLANS

M1.9



	С	D
TAKE-OFF RGER THAN DN. IF MAIN T PERMIT THIS ZE-FABRICATE JLAR TO NT HAS 50% THAN OUTLET.	SINGLE WALL ROUND SHEETMETAL DUCT (RUNOUT DUCT SIZE SHALL BE SAME AS GRILLE NECK DIAMETER UNLESS NOTED OTHERWISE ON PLANS) FLEXIBLE DUCT DRAWBAND ELBOW CL RADIUS TO BE 1-1/2 TIMES DUCT DIAMETER LAY-IN GRILLE	NOTE: INSULATE OVER COIL AND COIL HEADERS TO PREVENT CONDENSATION WHEN IN COOLING MODE. ACCOUSTICALLY LINED DUCT FLEXIBLE CONNECTION HEATING COIL VAV AIR TERMINAL UNIT
IE DAMPER	LAY-IN CEILING	
PLANS FOR SIZE T, SEE PLANS	OPTION - A SINGLE WALL ROUND SHEETMETAL DUCT (RUNOUT DUCT SIZE SHALL BE SAME AS GRILLE NECK DIAMETER UNLESS NOTED OTHERWISE ON PLANS) ELBOW CL RADIUS TO BE 1-1/2 TIMES DUCT DIAMETER DRAWBAND LAY-IN GRILLE G" PLENUM	TRANSITION DUCT AS INDICATED ON PLANS PROVIDE UNIFORM AIRFLOW AT TERMINAL UNIT INLET AND DISCHARM SHARP TURNS OR ENTRANCE CONDITIONS THAT CAUSE SYSTEM EFF INSTALLATION REQUIREMENTS: (STRAIGHT DUCT, NOT TRANSITIONS, TAKE OFFS OR FITTINGS)
	1C GRILLE DETAIL - LAY-IN M7.1 NO SCALE	1D AIR TERMINAL UNITS - MOUNTING M7.1 NO SCALE



TEARS, PUNCTURES, ETC. SHALL BE REPAIRED WITH TAPE OR MASTIC TO MAINAIN THE INTEGRITY OF THE VAPOR BARRIER.
 DO NOT USE ANY STRAP HANGERS WITH SCREWS ON ANY DUCTWORK THAT IS EXTERNALY WRAPPED.

# 1E DUCTWORK HANGERS M7.1 NO SCALE

								CTAVE								MAX.	
				FACE				INSERT						SIZE		PRESS.	
CODE	MANUFACTURER./			VELOCITY				SE POW		-			WDTH	HEIGHT	LENG.	DROP	
(SA)	MODEL NO.	SYSTEM	CFM	(FPM)	63	125	250	500	1K	2K	4K	8K	(IN)	(IN)	(IN)	("WC)	REMARK
02-11	IAC 3LFS	CONFERENCE	4,320	720	9	14	24	27	25	19	16	14	36	24	36	0.30	
		RETURN			45	42	45	43	45	49	44	37					
02-12	IAC 3LFS	CONFERENCE	2,000	667	9	14	24	27	25	19	16	14	24	18	36	0.30	
	140 7150	RETURN	7.000	600	45	42	45	43	45	49	44	37	70	0.4	70	0.70	
02-13	IAC 3LFS	CONFERENCE RETURN	3,000	600	9 45	14 42	24 45	27 43	25 45	19 49	16 44	14 37	30	24	36	0.30	
11-01	IAC 3L	LAB GENERAL	56,000	2,000	45	<u> 4∠</u> 5	40 9	14	20	18	13	8	84	48	36	0.20	
11-01	IAC SE	EXHAUST	36,000	2,000	48	47	47	46	53	52	43	31	04	40	30	0.20	
11-02	IAC 3L	LAB GENERAL	56,000	2,000	4	5	9	14	20	18	13	8	84	48	36	0.20	<u> </u>
	100 50	EXHAUST	50,000	2,000	48	47	47	46	53	52	43	31	04	40	000	0.20	
11-03	IAC 3L	LAB GENERAL	53,200	1.773	4	5	9	14	20	18	13	8	72	60	36	0.20	
		EXHAUST			48	47	47	46	53	52	43	31					
11-04	IAC 3L	LAB GENERAL	53,200	1,773	4	5	9	14	20	18	13	8	90	48	36	0.20	
		EXHAUST			48	47	47	46	53	52	43	31					
R-02	IAC 3L	LAB GENERAL	56,000	2,000	4	5	9	14	20	18	13	8	84	48	36	0.20	
		EXHAUST			48	47	47	46	53	52	43	31					
R-03	IAC 3L	LAB GENERAL	53,200	1,773	4	5	9	14	20	18	13	8	72	60	36	0.20	
		EXHAUST			48	47	47	46	53	52	43	31					
R-04	IAC 5LFM	LAB GENERAL	185,000	1,423	9	13	23	28	27	17	13	12	156	120	60	0.43	
		EXHAUST			50	42	46	44	44	45	39	33					
A	IAC 3TXL	SAV		1,000	13	15	25	14	8	7	6	4	21	21	36	0.20	A
	11.0. 27.0	SUPPLY		4 000	20	20	25	25	23	20	20	20			70	0.70	8" INLE
в	IAC 3TXL	SAV SUPPLY		1,000	4	8	16	16	7	/	5	3	21	21	36	0.32	A 107 INI 5
с	IAC 3TXL	EAV		1,000	20	20	25 25	25 14	23 8	20	20	20 4	21	21	36	0.20	12" INLE
~	IAC STAL	EXHAUST		1,000	20	20	25	25	23	20	20	20	21	21	30	0.20	8" INLE
D	IAC 3TXL	EAV		1.000	4	8	16	16	7	7	5	3	21	21	36	0.32	A
<u> </u>	NO DIAL	EXHAUST		1,000	20	20	25	25	23	20	20	20	- '	- '	000	0.02	12" INLE
E	IAC 3KL	SAV	2,900	1,160	4	5	13	11	7	7	6	4	24	15	36	0.30	A
-		SUPPLY		.,	36	36	38	43	49	46	38	35					
F	IAC 3KL	EAV	2,245	898	4	6	14	12	8	7	7	6	24	15	36	0.25	A
		EXHAUST			38	38	42	47	51	48	41	35					
G	IAC 8TXL	RACK FAN/	165	210	5	8	17	20	13	10	11	8	21	21	36	0.05	A
		EAV			54	47	45	45	49	50	45	34					12" INLE
												00	) <u>₿_3</u> 8A				
ENERAL NO				000									<u></u>				
	WO STRAIGHT DUCT LENGTH UPS				E NOIS			EOD				~					
	S ARE SCHEDULED BASED ON SCH										QUIRIN	G AN					
	NUATOR AND SHALL BE RESPONS ED. PROVIDE MULTIPLE MODULES					IE EQU	PMENT	12 INS	ALLE	J.							

A. PACKLESS, NON-EROSIVE ATTENUATOR. B. STAINLESS STEEL, PACKLESS, NON-EROSIVE ATTENUATOR.

	GRILLE REGISTER DIFFUSER SCHEDULE									
	MANUFACTURER/									
CODE	MODEL NO.	SERVICE	TYPE	ACCESSORIES	FACE SIZE					
А	TITUS PAS	SUPPLY	PERFORATED		24 X 24					
В	TITUS PAR	RETURN / EXHAUST	PERFORATED		12 X 12 OR 24 X 24					
С	TITUS ML	SUPPLY	SLOT	LINED PLENUM	SEE DRAWINGS					
D	TITUS 23R	RETURN / EXHAUST	LOUVERED	O.B.D.	SEE DRAWINGS					
F	TITUS 272FS	SUPPLY	LOUVERED	0.B.D.	SEE DRAWINGS					
G	TITUS 50	RETURN / EXHAUST	EGG CRATE		SEE DRAWINGS					
Н	TITUS 350ZFL	RETURN / EXHAUST	LOUVERED	0.B.D.	SEE DRAWINGS					
1	TITUS TRITEC	SUPPLY	LAMINAR FLOW		24 X 48					
J	TITUS TRITEC	SUPPLY	LAMINAR FLOW		24 X 24					
к	TITUS CT-480	EXHAUST	SLOTTED		SEE DRAWINGS					
L	TITUS SG-SD	SUPPLY/EXHAUST	PERFORATED		SEE DRAWINGS					

GENERAL NOTES 1. SEE PLANS FOR CFM AND NECK SIZE. со<u>в∕</u>з8а 2. MAXIMUM NOISE CRITERIA (NC) SHALL BE 25 UNLESS OTHERWISE NOTED.

3. COLOR TO BE COORDINATED WITH ARCHITECT. 4. MATERIAL IS STEEL UNLESS OTHERWISE NOTED.

MATERIAL IS STELL ONLESS OTHERWISE NOTED.
 PROVIDE BALANCING DEVICE FOR ALL GRD'S UNLESS OTHERWISE NOTED.
 DIFFUSERS SHALL BE 4-WAY THROW UNLESS NOTED OTHERWISE ON PLANS.
 PROVIDE CABLE ACTUATOR (SUCH AS YOUNG REGULATOR) AT ALL LOCATIONS WHERE BALANCING DEVICE IS INACCESSIBLE.

REMARK NOTES A. IN CONFERENCE ROOMS, MAXIMUM NC SHALL BE 20. B. GRILLES WITH 100 CFM OR LESS AND INSTALLED IN GYP CEILING, MAY HAVE 12 X 12 OR 24 X 24 FACE. ALL OTHERS SHALL BE 24 X 24 FACE. C. DIFFUSERS SHALL BE 2-WAY THROW UNLESS NOTED OTHERWISE ON PLANS.

D. DIFFUSERS SHALL BE 1" WIDE, 3-SLOT UNLESS NOTED OTHERWISE ON PLANS. PROVIDE EITHER FACTORY OR FIELD PLENUM.

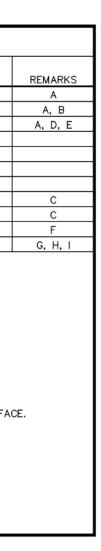
. WHERE SLOT DIFFUSERS ARE SHOWN WALL TO WALL, CONTRACTOR SHALL VERIFY EXACT LENGTHS AND FIELD CUT AS REQUIRED. . CLEAR ANODIZED FINISH.

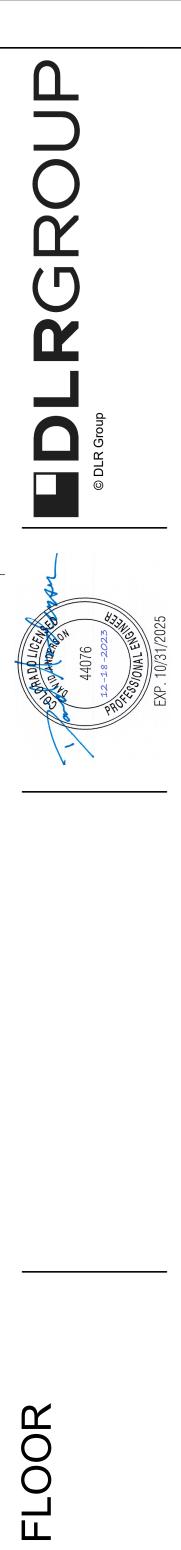
 CLEAR ANODIZED FINISH.
 G. MAXIMUM SECURITY GRILLE WITH 3/16" INCH PERFORATIONS.
 H. PAINT SHALL PASS 100-HOUR ASTM B117 CORROSIVE ENVIRONMENTS SALT SPRAY TEST, 250 HOUR ASTM D870 WATER IMMERSION TEST, AND ASTM D2794 REVERSE IMPACT CRACKING TEST WITH 50 INCH-POUND FORCE. со<u>в^3</u>8А FUTURE WORK. NOT IN CONTRACT.

	NINTH FLOOR LAB AIR VALVE SCHEDULE (PARTIAL)												
							HEATING COIL						
		MANUFACTURER/	DESIGN	AIRFLOW	VALVE C	APACITY						SOUND	
MARK	AREA SERVED	MODEL NO.	MAX	MIN	MAX	MIN	CFM	CAP.	GPM	APD	WPD	ATTENUATOR	NOTES
								MBH		W.C.	FT	DESIGNATION	
(E) SAV-09-35	LAB ALCOVE P15-9460E	(E) SIEMEN SUPPLY AIR TERMINAL	-	-	-	-	-	-	-	-	-	-	1,2,3,4,5,6
(E) EAV-09-35	LAB ALCOVE P15-9460E	(E) SIEMEN EXHAUST AIR TERMINAL	-	-	-	-	-	-	-	-	-	-	1,2,3,4,5,6
(E) SAV-09-36	LAB ALCOVE P15-9460F	(E) SIEMEN SUPPLY AIR TERMINAL	-	-	-	-	-	-	-	-	-	-	1,2,3,4,5,6
(E) EAV-09-36	LAB ALCOVE P15-9460F	(E) SIEMEN EXHAUST AIR TERMINAL	-	-	-	-	-	-	-	-	-	-	1,2,3,4,5,6
EAV-09-36-A	LAB ALCOVE P15-9460F	SIEMEN EXHAUST AIR TERMINAL 08	310	141	1,120	130	-	-	-	-	-	SA-C	1,2,3,4,5
NOTES:													
1. CONTROLS SH/	ALL BE BY SIEMENS, INSTALLE	DAT THE FACTORY.											
2. MOUNT WITH 1/	5 STRAIGHT DUCT DIAMETERS	UPSTREAM OF THE BOX, VERIFY WITH MANU	ACTURER.										
3. EWT = 180 F, LV	VT = 160 F												

PROVIDE 2 WAY, MODULATING CONTROL VALVES ON HEATING COILS.
 PROVIDE SOUND ATTENUATOR FOR VALVE AS SCHEDULED AND SHOWN ON DRAWINGS.

6. EXISTING SAV/EAV TO REMAIN







CONSTRUCTION DOCUMENTS 12/18/2023 REVISIONS

PN 23-14584 37-24103-00

MECHANICAL DETAILS & SCHEDULES

M7.1

		А		В
	(R) Ø A AC	RELOCATED PHASE AMPERE ABOVE COUNTER		<b>NOTES</b> GENERAL NOTES
	AF AIC AL AMP AP AT ATS AV AWG	AMP FRAME (CIRCUIT BREAKER) AMPERE INTERRUPTING CAPACITY ALUMINUM AMPERE WIRELESS ACCESS POINT AMP TRIP (CIRCUIT BREAKER OR FUSE) AUTOMATIC TRANSFER SWITCH AUDIO-VIDEO, AUDIO-VISUAL AMERICAN WIRE GAUGE		<ol> <li>MODIFICATIONS TO EXISTING POWER DISTRIBUTION EQUIPMENT: MATCH EXISTING MANUFACTURER, SWITCH TYPE, FUSE TYPE, BREAKER TYPE AND KAIC RATING FOR A INSTALLED DEVICES.</li> <li>EXISTING PANEL DIRECTORIES AT PANELS AFFECTED BY WORK: PROVIDE UPDATED TYPED PANEL DIRECTORY. CONSULT OWNER FOR INPUT ON LABELING OF ALL EXISTI CIRCUITS.</li> <li>DEVICES AND LIGHT FIXTURES DENOTED 'ER' ARE EXISTING TO BE RELOCATED. NOT A/E IF DEVICES OR FIXTURES ARE DAMAGED.</li> </ol>
1	BAS BJ BKR	BUILDING AUTOMATION SYSTEM BONDING JUMPER BREAKER		GENERAL DEMOLITION NOTES  1 ITEMS INDICATED ON DEMOLITION PLANS ARE BASED ON AS-BUILT DRAWINGS AND FI
	BMS C CAS CATV CB CCTV CE CEM CFCI CG CH CJ CKT CKT BK CL CM	BUILDING MANAGEMENT SYSTEM CONDUIT CASING CABLE TELEVISION CIRCUIT BREAKER CLOSED CIRCUIT TELEVISION COVER ELEVATION CEMENT CONTRACTOR FURNISHED CONTRACTOR INSTALLED CORNER GUARD CHANNEL CONSTRUCTION JOINT CIRCUIT CIRCUIT BREAKER CIRCUIT LINE CEILING MOUNTED CORDUCATED METAL DIPE		<ul> <li>OBSERVATIONS AND ARE INTENDED TO GIVE THE BIDDER A GENERAL REPRESENTATI OF EXISTING CONDITIONS.</li> <li>REMOVE ALL ITEMS SHOWN FULL-TONE OR NOTED ELSEWHERE IN THE DOCUMENTS BE REMOVED OR DEMOLISHED. DEMOLISH ADDITIONAL ITEMS NOT SHOWN ON DRAWINGS, BUT WHICH MUST BE REMOVED TO COMPLETE THE PROJECT.</li> <li>ITEMS SHOWN HALF-TONE ARE EXISTING TO REMAIN.</li> <li>RELOCATE ITEMS DENOTED 'ER'. SEE LIGHTING, POWER AND/OR SPECIAL SYSTEM SHEETS FOR NEW LOCATIONS. 'ER' IS DEFINED AS EXISTING (TO BE) RELOCATED.</li> <li>EXISTING CONDUIT MAY REMAIN IF ALL THE FOLLOWING ARE TRUE: A. IT CAN BE REUSED TO FEED DEVICES INSTALLED UNDER THIS CONTRACT. B. IT DOES NOT INTERFERE WITH OTHER TRADES. C. IT WAS ORIGINALLY INSTALLED MEETING SPECIFICATIONS RELATED TO THIS PRO. D. IT WILL NOT BE EXPOSED IN A FINISHED AREA (UNLESS NOTED OTHERWISE).</li> <li>PROVIDE ELECTRICAL DEMOLITION ASSOCIATED WITH MECHANICAL EQUIPMENT TO E REMOVED. IN ADDITION TO DEVICES SHOWN, REFER TO MECHANICAL AND ARCHITECTURAL DEMOLITION SHEETS TO DETERMINE EQUIPMENT TO BE REMOVED.</li> <li>MAINTAIN FUNCTIONALITY OF ALL EXISTING LOW VOLTAGE SYSTEMS INCLUDING, BUT NOT LIMITED TO, TELECOM CABLING NETWORKS, INTERCOM, CLOCKS, FIRE ALARM, SAFETY AND SECURITY DURING ALL PHASES OF CONSTRUCTION. PROVIDE TEMPORA</li> </ul>
	CMP CO COMP COOR	CORRUGATED METAL PIPE CONDUIT ONLY COMPOSITE COORDINATE		INTERCONNECTIONS AS REQUIRED TO ACCOMMODATE CONSTRUCTION SCHEDULE.
	COORD CSK CT CTL CU CWV	COORDINATE COUNTERSUNK CURRENT TRANSFORMER CONTROL COPPER COMBINATION WASTE AND VENT		<ol> <li>VERIFY ANY NEUTRAL WIRES REQUIRED ON 1Ø OR 3Ø MECHANICAL UNITS FURNISHED UNDER DIVISION 23. IF REQUIRED, PROVIDE NEUTRAL.</li> <li>PROVIDE DEDICATED 120-VOLT CIRCUITS TO ALL HVAC BAS CONTROL DEVICES AND PANELS. COORDINATE QUANTITY WITH DIVISION 23. UTILIZE NEAREST SPARE 120-VOLT, 20/1 BREAKER. LABEL TYPED PANEL DIRECTORY ACCORDING TO LOAD BEING SERVED.</li> </ol>
2	DB DC DISC DP	DECIBEL DIRECT CURRENT DISCONNECT DISTRIBUTION PANELBOARD		<ul> <li>3 IN ADDITION TO DEVICES SHOWN, SEE SCHEDULE SHEETS FOR CONNECTIONS TO ALL MECHANICAL EQUIPMENT.</li> <li>4 LOCATE SWITCHES FOR CONTROL OF FANS IN TWO-GANG BOX WITH LIGHT SWITCH WHERE APPLICABLE.</li> <li>5 PROVIDE #10AWG CONDUCTORS FOR ALL WARM AIR DRYER CIRCUITS. PROVIDE LOCIFICIENT AT ALL DREAMERS SEEN WARM AIR DRYER CIRCUITS.</li> </ul>
	DW ECS EGB EMD EMGB EP ERMS	DISHWASHER EMERGENCY COMMUNICATION SYSTEM ELECTRICAL GROUNDING BUSBAR ESTIMATED MAXIMUM DEMAND ELECTRICAL MAIN GROUNDING BUSBAR EXPLOSION PROOF ENERGY REDUCTION MAINTENANCE SWITCH		LOCKOUT DEVICE AT ALL BREAKERS SERVING WARM AIR DRYERS. GENERAL LIGHTFIXTURE SCHEDULE AND SYMBOLS LEGEND FOR MOUNTING HEIGHTS, UNI NOTED OTHERWISE. PROVIDE #10AWG MINIMUM CONDUCTORS FOR ALL EXTERIOR LIGHTING CIRCUITS.
	EWC FA FAA FACP	ELECTRIC WATER COOLER FIRE ALARM FIRE ALARM ANNUNCIATOR FIRE ALARM CONTROL PANEL		<ol> <li>SEE ARCHITECTURAL BUILDING ELEVATIONS FOR LOCATION OF BUILDING MOUNTED EXTERIOR LIGHT FIXTURES.</li> <li>PROVIDE BEAD OF SILICONE SEALANT AROUND RECESSED BACK BOX PERIMETER AT BUILDING MOUNTED EXTERIOR LIGHT FIXTURE LOCATIONS.</li> <li>CIRCUIT FIXTURES DENOTED WITH 'NL' AS UNSWITCHED NIGHT LIGHTS.</li> </ol>
	FC FLA FS FSD	FOOT CANDLE FULL LOAD AMPS FLOW SWITCH FIRE SMOKE DAMPER		6 FIXTURES DENOTED WITH LOWER CASE LETTERS SHALL BE CONTROLLED BY SWITCH DENOTED WITH THE SAME LOWER CASE LETTER IN EACH ROOM. GENERAL DEVICE BOX NOTES
	G GEN GFI, GFCI GFPE GND	EQUIPMENT GROUNDING CONDUCTOR GENERATOR GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT PROTECTION OF EQUIPMENT EQUIPMENT GROUNDING CONDUCTOR		<ol> <li>SEE SYMBOLS LEGEND THIS SHEET FOR MOUNTING HEIGHTS UNLESS NOTED OTHER ON DRAWINGS.</li> <li>ALL MOUNTING HEIGHTS ARE TO CENTERLINE OF BOXES UNLESS NOTES OTHERWISE</li> <li>PROVIDE BOX EXTENDER FOR FLUSH INSTALLATION OF DEVICES LOCATED IN ARCHITECTURAL CASEWORK THAT IS FLUSH WITH ADJACENT WALL (SUCH AS</li> </ol>
	HH HOA HP	HANDHOLE HAND-OFF-AUTOMATIC HORSE POWER		RECEPTACLES FOR GARBAGE DISPOSERS). 4 FLOOR BOXES: OBTAIN OWNER APPROVAL OF ALL BOX LOCATIONS PRIOR TO ROUGH PROVIDE DEVICE PLATES AT DEVICES AND BLANK PLATES AT ALL UNUSED COMPARTMENTS.
3	IC IG JB KAIC KV KVA	INTERCOM ISOLATED GROUND JUNCTION BOX THOUSAND AMPERE INTERRUPTING CIRCUIT KILOVOLT KILOVOLT AMPERES		<ol> <li>COORDINATE LOCATION OF DEVICE BOXES FOR SWITCHES, RECEPTACLES, AND SYSTEMS DEVICES WITH MARKERBOARDS. ADJUST BOX LOCATIONS TO AVOID MARKERBOARDS.</li> <li>COORDINATE LOCATION OF DEVICE BOXES FOR SWITCHES, RECEPTACLES, AND SYSTEMS DEVICES WITH TACKBOARDS. ADJUST BOX LOCATIONS TO AVOID TACKBOARDS. PROVIDE BOX EXTENDER FOR A FLUSH INSTALLATION WHERE DEVICE MUST BE MOUNTED AT TACKBOARD/TACKWALL.</li> <li>CEILING MOUNTED RECEPTACLES: AT SUSPENDED CEILINGS, ROUTE POWER TO RECEPTACLE VIA FLEXIBLE METALLIC CONDUIT WITH 6-FOOT SERVICE LOOP. FEED FI</li> </ol>
	KW LT LTG MCA MCB	KILOWATT LIGHT LIGHTING MINIMUM CIRCUIT AMPACITY MAIN CIRCUIT BREAKER		<ul> <li>FROM A J-BOX RIGIDLY SUPPORTED A MAXIMUM OF 24-INCHES ABOVE SUSPENDED CEILING OR AT BOTTOM OF STRUCTURE ABOVE, WHICHEVER IS LOWER. LOCATE J-BO DIRECTLY ABOVE RECEPTACLE AND SUPPORT VIA STRUCTURE, OR VIA THREAD ROD UNISTRUT HUNG FROM STRUCTURE ABOVE IN HIGH STRUCTURE APPLICATIONS.</li> <li>8 DEVICES RECESSED IN MULLIONS: BACK BOXES TO BE RECESSED FOR FLUSH INSTALLATION OF DEVICE AND WALLPLATE. EXTEND CONCEALED CONDUIT IN MULLION UP TO WALL ABOVE AND STUB OUT ABOVE ACCESSIBLE CEILING. IN AREAS WITH NO CEILING, EXTEND CONDUIT TOWARDS CABLING SOURCE TO ABOVE NEAREST ACCESSIBLE CEILING.</li> </ul>
	MCC MH MLO MOCP MRTS MSB MTD MTG MTS	MOTOR CONTROL CENTER MANHOLE MAIN LUGS ONLY MAXIMUM OVERCURRENT PROTECTION MOTOR RATED TOGGLE SWITCH MAIN SWITCHBOARD MOUNTED MOUNTING MAIN TRANSFER SWITCH		
	N NC NF NL NO	NEUTRAL NORMALLY CLOSED NON-FUSED NIGHT LIGHT NORMALLY OPEN		
4	OFCI OS&Y	OWNER FURNISHED CONTRACTOR INSTALLED OUTSIDE SCREW AND YOKE		
	P PA PB PH PIV PNL PWR	POLE(S) PUBLIC ADDRESS PULL BOX PHASE POST INDICATOR VALVE PANEL POWER		
_R2 9th FI_MEP.rvt	RCP RECPT REF RESP	REFLECTED CEILING PLAN RECEPTACLE REFERENCE RESPONSIVE		
utz - PN 23-145834_R2	SCCR SD SEC SPD SWBD	SHORT CIRCUIT CURRENT RATING SMOKE DAMPER SECONDARY SURGE PROTECTION DEVICE SWITCHBOARD		
9th Fl/37-24103-00 CU Anschutz	TBB TC TGB TMGB TO TR TS TV	TELECOMMUNICATIONS BONDING BACKBONE TIME CLOCK TELECOMMUNICATIONS GRONDING BUSBAR TELECOMMUNICATIONS MAIN GRONDING BUSBAR TELECOMMUNICATIONS OUTLET TELECOMMUNICATIONS ROOM TAMPER SWITCH TELEVISION		
R2	UG UPS	UNDERGROUND UNINTERRUPTABLE POWER SUPPLY		
z - PN 23-145834	V VA VFD	VOLT VOLT-AMPERE VARIABLE FREQUENCY DRIVE		
0 CU Anschutz	W WA WG WP	WIRE TELECOMMUNICATIONS WORK AREA WIRE GUARD WEATHER-PROOF (NEMA 3R)	<u>* NOTE *</u> ALL NOTES ON THIS SHEET ARE APPLICABLE TO ALL OTHER SHEETS IN THIS SET.	N
esk Docs://37-24103-00 2023 1:16:03 PM	XFMR	TRANSFORMER	THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE APPLICABLE IN THIS SET OF DRAWINGS.	

1	1
L	J
~	/

LIGHTING FIXTURE TAG

# ES

# RAL NOTES

### RAL POWER NOTES

### RAL LIGHTING NOTES

### RAL DEVICE BOX NOTES

XXX-X 🛰 LIGHTING FIXTURES LIGHTING FIXTURE LIGHTING FIXTURE ON EMERGENCY SYSTEM └────────────────── LIGHTING FIXTURE WALL WASHER (0)

> HO WALL MOUNTED LIGHTING FIXTURE SELF CONTAINED EMERGENCY LIGHTING UNIT MOUNT 94-INCHES AFF. UNO EXIT SIGN, CEILING MOUNTED, DIRECTIONAL ARROW(S) AS INDICATED EXIT SIGN, WALL MOUNTED, DIRECTIONAL ARROW(S) AS INDICATED. MOUNT 94-INCHES AFF, UNO

<u>AREA LIGHTING</u> SITE LIGHTING - POLE WALL MOUNTED AREA LIGHTING FIXTURE IN GRADE LIGHT FIXTURE

LIGHTING CONTROL DEVICES <u>RPx</u> LIGHTING CONTROL PANEL <u>CVx</u> CENTRAL INVERTER R LOW VOLTAGE RELAY PO PHOTOELECTRIC CELL LC LIGHTING CONTACTOR BAT REMOTE EMERGENCY BATTERY PACK

<u>POWER</u> OTHER (\* = SEE ABBREVIATIONS) OTHER (\* = SEE ABBREVIATIONS) OTHER (\* = SEE ABBREVIATIONS) MOUNT 72-INCHES TO TOP 72-INCHES TO TOP SWITCHBOARD SYSTEM GROUND ELECTRODE MUSHROOM SWITCH FUSE AND SWITCH ASSEMBLY EQUIPMENT CONNECTION MULTI-OUTLET ASSEMBLIES

CIRCUIT HOME RUN CONDUIT TURNING DOWN ------- CONDUIT STUB-UP CONDUIT SEAL CONDUIT CONCEALED IN CEILING OR WALLS, POWER CONDUIT CONCEALED IN CEILING OR WALLS, CONDUIT CONCEALED IN FLOOR OR UNDERGROUND, POW CONDUIT CONCEALED IN FLOOR OR UNDERGROUND, EXPOSED CONDUIT, POWER EXPOSED CONDUIT, FRS → FIRE RATED SLEEVE T TRANSFORMER XXX BRANCH CIRCUIT PANELBOARD XXX DISTRIBUTION PANELBOARD MOUNT EQUIPMENT CABINET, AS NOTED ХХХ MOTOR STARTER OR DRIVE DISCONNECT SWITCH COMBINATION STARTER / DISCONNECT SWITCH CT CURRENT TRANSFORMER ENCLOSURE M METER GEN GENERATOR ATS AUTOMATIC TRANSFER SWITCH ⊢① THERMOSTAT MH ELECTRICAL MANHOLE HH ELECTRICAL HAND HOLE M MOTOR CONNECTION, HORSEPOWER AS INDICATED Sf ST MANUAL CONTROLLER WITH THERMAL OVERLOAD S<sub>M</sub> MANUAL CONTROLLER W/O THERMAL OVERLOAD B CIRCUIT BREAKER ENCLOSURE PB PULL BOX **<u>+++++</u>** CABLE TRAY, LADDER TYPE OR RUNWAY \_ \_ \_ \_ CABLE TRAY

MOUNT 18-INCHES AFF, UNO

SWITCH, PUSH BUTTON, TRIPLE

# ELECTRICAL SYMBOLS

LIGHTING

### SWITCHES AND WALL-BOX CONTROLS

### FIXTURE TYPE

XXX-X-RELAY PANEL - RELAY NO. OR LOCAL SWITCH DESIGNATION

### LIGHTING FIXTURE ON EMERGENCY SYSTEM

O CEILING FIXTURE, SURFACE, RECESSED OR PENDANT

- $|\nabla \nabla |$  LIGHTING TRACK, TRACK MOUNTED LIGHT FIXTURES
- WALL MOUNTED LIGHTING FIXTURE

  - HIGH BAY LIGHTING FIXTURE

- POLE MOUNTED AREA LIGHTING FIXTURE ← \_\_\_\_ POLE WITH POLE MOUNTED AREA LIGHTING FIXTURE

BOLLARD LIGHT FIXTURE

### WHERE DENOTED 'AC', MOUNT ABOVE COUNTER \_\_\_\_\_ DIVIDED SURFACE RACEWAY MOUNT 18-INCHES AFF, UNO WHERE DENOTED 'AC', MOUNT ABOVE COUNTER PUSHBUTTON STATION: MOUNT 42-INCHES AFF UNO

- SWITCH, PUSH BUTTON, SINGLE SWITCH, PUSH BUTTON, DOUBLE

# SWITCHES: MOUNT 42-INCHES AFF UNO

- SUPERSCRIPT , SWITCH SHALL CONTROL FIXTURE DENOTED WITH SAME LOWER CASE LETTER SWITCH SYMBOL SUBSCRIPT, SWITCH TYPE - SEE BELOW – LINE THRU SWITCH INDICATES A KEY OPERATED SWITCH
- SWITCH, SINGLE POLE
- SWITCH, DOUBLE POLE SWITCH, 3-WAY
- SWITCH, 4-WAY
- SWITCH, DIMMER
- SWITCH, EMERGENCY
- / SWITCH, LOW VOLTAGE SMC SWITCH, MOMENTARY CONTACT
- S<sub>OS</sub> SWITCH, WALL-BOX OCCUPANCY SENSOR
- S<sub>OS2</sub> SWITCH, WALL-BOX OCCUPANCY SENSOR, 2-POLE
- SP SWITCH WITH PILOT LIGHT
- SR SWITCH, LOW VOLTAGE, ASSOCIATED WITH RELAY PANEL
- S<sub>T</sub> SWITCH, TIMER
- S<sub>FS</sub> SWITCH, ECO-SYSTEM S<sub>FP</sub> SWITCH, EXPLOSION-PROOF

### CEILING MOUNTED LIGHTING CONTROL DEVICES MAXIMUM MOUNTING HEIGHT OF 10-FEET AFF

OS OCCUPANCY SENSOR VS VACANCY SENSOR

### WALL MOUNTED LIGHTING CONTROL DEVICES:

- MOUNT 94-INCHES AFF, UNO ŌS OCCUPANCY SENSOR

VS

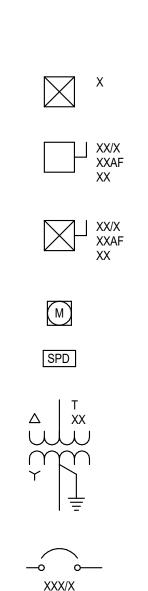
### THEATRICAL LIGHTING DEVICES: THEATRICAL LIGHTING LCD STATION LCD

VACANCY SENSOR

- MOUNT 50-INCHES AFF, UNO THEATRICAL LIGHTING ENTRY STATION
- MOUNT 42-INCHES AFF, UNO THEATRICAL OUTLET BOX
- TO MOUNT 18-INCHES AFF, UNO
- THEATRICAL NETWORK OUTLET ΤN MOUNT 18-INCHES AFF, UNO
- THEATRICAL CONTROL CONSOLE OUTLET MOUNT 18-INCHES AFF, UNO TC

	<u> </u>						
	RECEPT	ACLES: MOUNT 18-INCHES AFF, UNO					
	DIAGONAL LINE THROUGH SYMBOL OR DENOTED 'AC' INDICATES MOUNT DEVICE ABOVE COUNTER. WHERE INDICATED AS 'MOUNT ABOVE COUNTER' MOUNT BOTTOM OF BOX 2-INCHES ABOVE TOP OF BACKSPLASH OR 6-INCHES ABOVE COUNTERTOP IF NO BACKSPLASH EXISTS.						
	LABELS SHALL BE MACHINE PRINTED, UNO						
WER		DUPLEX RECEPTACLE DUPLEX RECEPTACLE, GFI TYPE DUPLEX RECEPTACLE, MOUNT ABOVE COUNTER DUPLEX RECEPTACLE, GFI TYPE, MOUNT ABOVE COUNTER					
	サーク	DOUBLE DUPLEX RECEPTACLE DOUBLE DUPLEX RECEPTACLE, GFI TYPE DOUBLE DUPLEX RECEPTACLE, MOUNT ABOVE COUNTER DOUBLE DUPLEX RECEPTACLE, GFI TYPE, MOUNT ABOVE COUNTER					
	$\Rightarrow$	DUPLEX RECEPTACLE, FLUSH IN CEILING DOUBLE DUPLEX RECEPTACLE, FLUSH IN CEILING					
		DUPLEX RECEPTACLE, HORIZONTALLY MOUNTED DUPLEX RECEPTACLE, HORIZ. MTD, GFI TYPE DUPLEX RECEPTACLE, HORIZ. MTD, ABOVE COUNTER DUPLEX RECEPTACLE, HORIZ. MTD, GFI TYPE, MOUNT ABOVE COUNTER					
	≡ <sub>R</sub>	WEATHER RESISTANT GFI DUPLEX RECEPTACLE, ROOF MOUNT 18-INCHES ABOVE ADJACENT STRUCTURE WITH A WEATHERPROOF, IN-USE COVER					
	⊫	WEATHER RESISTANT GFI DUPLEX RECEPTACLE, MOUNT 18-INCHES AFF WITH A WEATHERPROOF, IN-USE COVER					
	⇒ EWC	STD DUPLEX RECEPTACLE TO SERVE ELECTRIC WATER COOLER, MOUNT AT HEIGHT PER EQUIPMENT MANUFACTURER'S INSTALLATION GUIDELINES. WIRE TO GFCI BKR IN PANELBOARD.					
	⇒ <sub>TV</sub>	DUPLEX RECEPTACLE TO SERVE TELEVISION, MOUNT AT SAME HEIGHT AND WITHIN 8-INCHES OF ADJACENT TV OUTLET					
	$\rightarrow$	SIMPLEX RECEPTACLE, CEILING MOUNTED L5-20R					
	-	DUPLEX RECEPTACLE, EMERGENCY					
		DOUBLE DUPLEX RECEPTACLE, EMERGENCY					
	=	DUPLEX RECEPTACLE, LOWER SWITCH					
	=	DUPLEX RECEPTACLE, SWITCHED					
		RANGE RECEPTACLE, MOUNT 8-INCHES AFF					
	H	SPECIAL RECEPTACLE, DEEP WELL BOX					
	• •	FLUSH FLOOR OUTLET BOX UNO FLUSH FLOOR BOX WITH DUPLEX RECEPTACLE UNO					
	0- <del>0</del>	MULTI-DEVICE FLOOR BOX WITH DUPLEX RECEPTACLE AND TELECOMMUNICATIONS OUTLETS					
	⊢0) =0)	USB ONLY RECEPTACLE RECEPTACLE WITH USB PORTS					
	J	FLUSH JUNCTION BOX, CEILING MOUNTED					
	⊕ <sub>P</sub>	JUNCTION BOX FOR FUTURE PROJECTOR POWER MOUNT 24-INCHES ABOVE SUSPENDED CEILING MOUNT TIGHT TO CEILING AT EXPOSED STRUCTURE LABEL BOX COVER 'PROJECTOR POWER'					
	<u> </u>	JUNCTION BOX ABOVE SUSPENDED CEILING WITH FLEX CONNECTION					

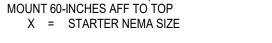
- WITH FLEX CONNECTION ⊢① FLUSH JUNCTION BOX, WALL MOUNTED
- SURFACE JUNCTION BOX, WALL MOUNTED ΗJ
- SURFACE JUNCTION BOX, CEILING MOUNTED
- HAND DRYER, INSTALL HAND DRYER ΗÐ SPECIFIED IN DIV. 11



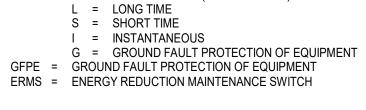
LSIG

XXX/3 XXX

# ONE-LINE DIAGRAM ENCLOSED CONTROLLER (ACROSS-THE-LINE UNO)

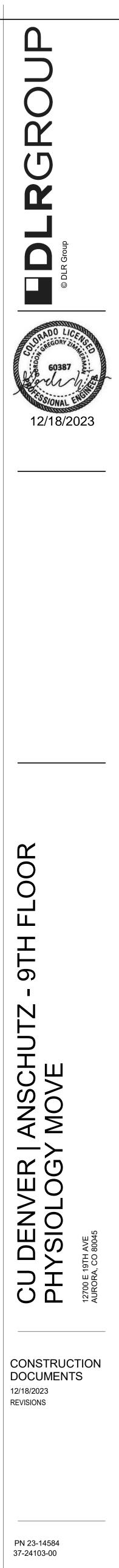


	ENCLOSED SWITCH; MOUNT 60-INCHES AFF TO TOP XX/X = AMP RATING / NO. OF POLES XXAF = FUSE SIZE; AF=AMP FUSE; NF=NO FUSE X = STARTER NEMA SIZE											
	COMBINATION CONTROLLER \ DISCONNECT; MOUNT 60-INCHE XX/X = AMP RATING / NO. OF POLES XXAF = FUSE SIZE; AF=AMP FUSE; NF=NO FUSE XX = ENCLOSURE NEMA RATING; BLANK=NEMA 1; W											
	METER SOCKET/METER											
	SURGE PROTECTION DEVICE											
TRANSFORMER T = TRANSFORMER ID XX = SIZE												
	BREAKER XXX/X = AMP RATING / POLES LSIG = ADJUSTABLE SETTINGS (WHERE NOTED) L = LONG TIME											



FUSIBLE SWITCH XXX/X = SWITCH AMP RATING / POLES XXX = FUSE SIZE

GROUNDING ELECTRODE SYSTEM

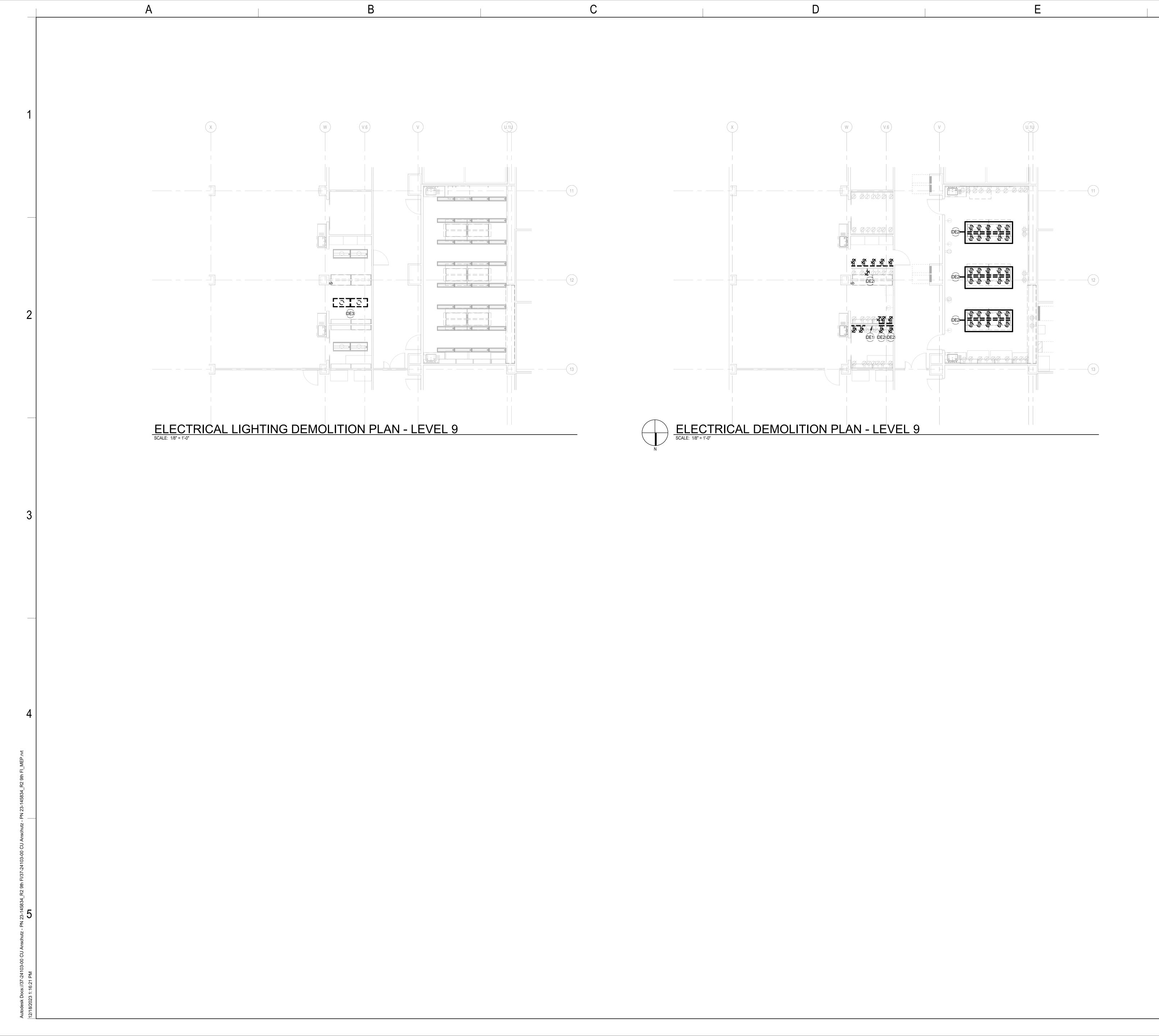


ELECTRICAL SYMBOLS, **ABBREVIATIONS &** NOTES

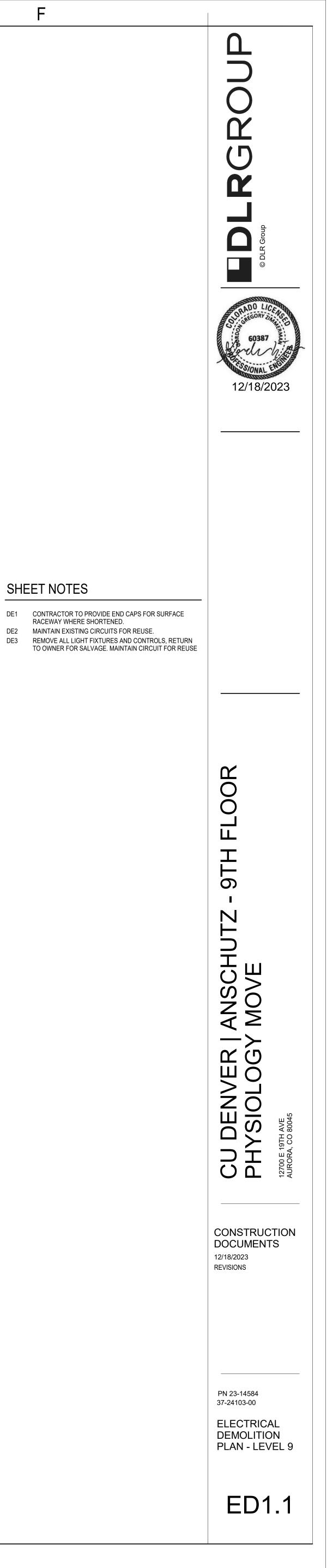
E0.

HES AFF TO TOP

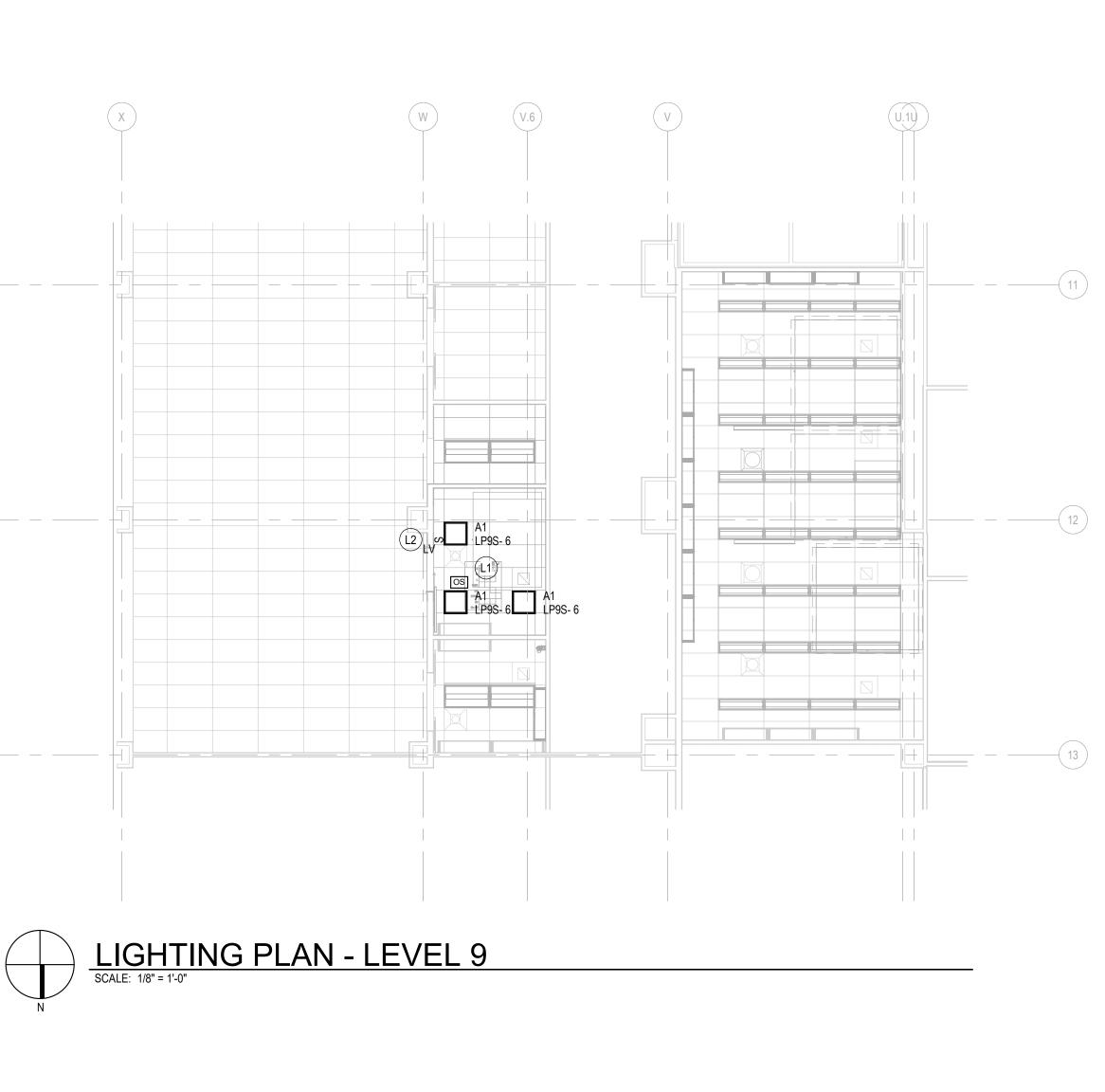
WP=NEMA 3R









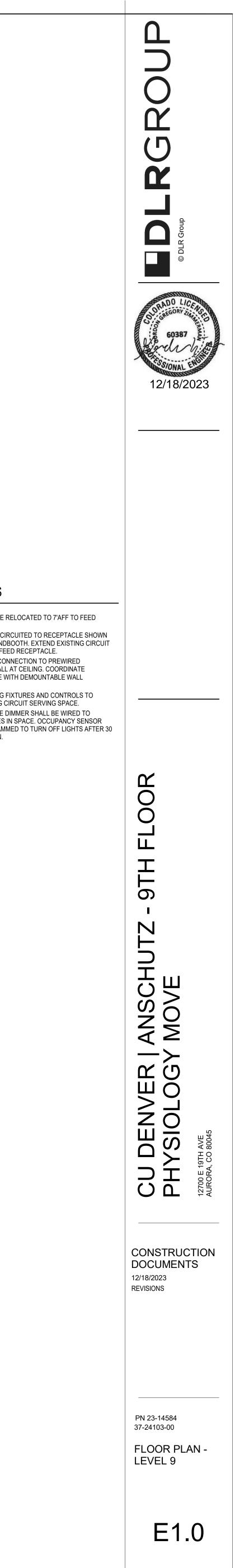


Ε

D

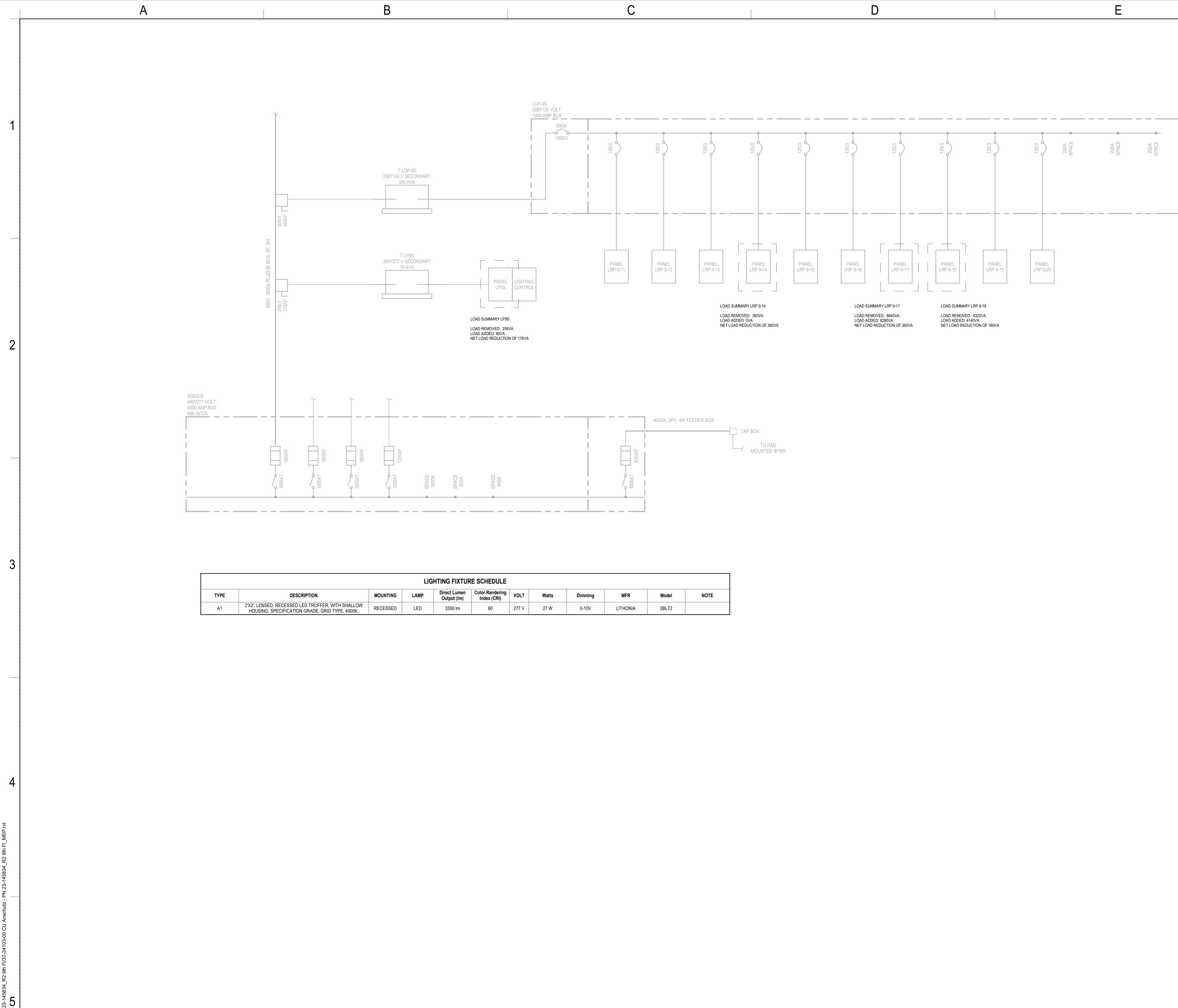
SHEET NOTES

1	RECEPTACLE TO BE I SOUNDBOOTH.
2	SWITCH SHALL BE CI TO CONTROL SOUND AS NEEDED TO REFE
3	PROVIDE POWER CO DEMOUNTABLE WALL CONNECTION TYPE V MANUFACTURER.
.1	CONNECT LIGHTING I
2	NEW LOW VOLTAGE I CONTROL FIXTURES SHALL BE PROGRAMI MIN OF NO MOTION.



E CIRCUITED TO RECEPTACLE SHOWN JNDBOOTH. EXTEND EXISTING CIRCUIT EFEED RECEPTACLE. CONNECTION TO PREWIRED /ALL AT CEILING. COORDINATE PE WITH DEMOUNTABLE WALL

NG FIXTURES AND CONTROLS TO IG CIRCUIT SERVING SPACE. GE DIMMER SHALL BE WIRED TO IES IN SPACE. OCCUPANCY SENSOR AMMED TO TURN OFF LIGHTS AFTER 30

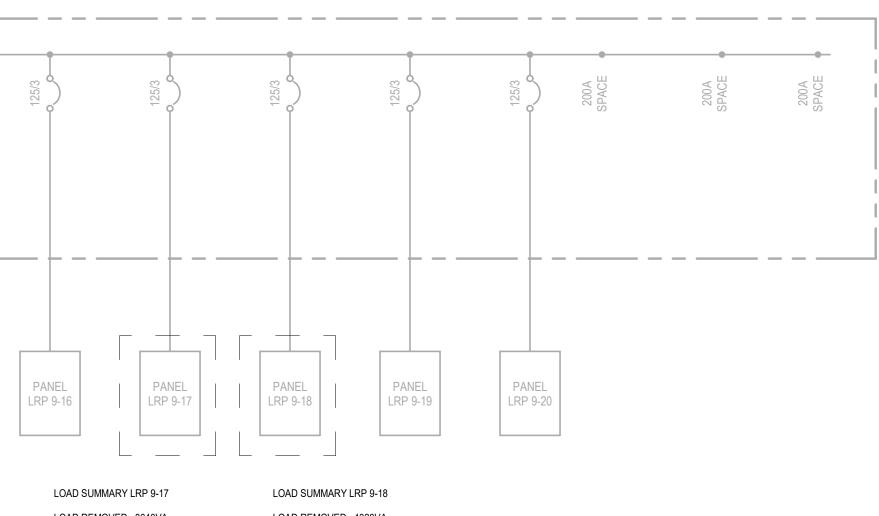


1 One-Line Diagram E5.1 NO SCALE

FIXTURE SCHEDULE											
t Lumen out (Im)	Color Rendering Index (CRI)	VOLT	Watts	Dimming	MFR	Model	NOTE				
00 lm	80	277 V	27 W	0-10V	LITHONIA	2BLT2					

# **GENERAL SINGLE LINE NOTES**

1 PROJECT RESULTS IN A NET REDUCTION OF LOAD ON ALL ELECTRICAL PANELS. 2 ELECTRICAL ONE-LINE DIAGRAM INFORMATION TAKEN FROM EXISTING DOCUMENTATION AND IS EXISTING TO REMAIN AND SHOWN FOR REFRENCE ONLY. ALL CIRCUITING TO BE REUSED.



Ε

LOAD REMOVED: 4320VA LOAD ADDED: 4140VA NET LOAD REDUCTION OF 180VA



