

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

BRANCH CIRCUITS SCHEDULE		
120 OR 277 VOLT 1Ø, 2W. CIRCUITS		
CIRCUIT BREAKER	CONDUCTOR	
20A-1P	2 #12 & 1 #12 GND. - 3/4"	
30A-1P	2 #10 & 1 #10 GND. - 3/4"	
40A-1P	2 #8 & 1 #10 GND. - 3/4"	
50A-1P	2 #6 & 1 #10 GND. - 3/4"	
60A-1P	2 #6 & 1 #10 GND. - 3/4"	
208 VOLT 1Ø, 2W. CIRCUITS		
20A-2P	2 #12 & 1 #12 GND. - 3/4"	
30A-2P	2 #10 & 1 #10 GND. - 3/4"	
40A-2P	2 #8 & 1 #10 GND. - 3/4"	
50A-2P	2 #6 & 1 #10 GND. - 3/4"	
60A-2P	2 #6 & 1 #10 GND. - 3/4"	
208/120 VOLT, 1Ø, 3W. CIRCUITS		
20A-2P*	3 #12 & 1 #12 GND. - 3/4"	
30A-2P*	3 #10 & 1 #10 GND. - 3/4"	
40A-2P*	3 #8 & 1 #10 GND. - 3/4"	
50A-2P*	3 #6 & 1 #10 GND. - 3/4"	
60A-2P*	3 #6 & 1 #10 GND. - 3/4"	
208 OR 480 VOLTS, 3Ø, 3W. CIRCUITS		
20A-3P	3 #12 & 1 #12 GND. - 3/4"	
30A-3P	3 #10 & 1 #10 GND. - 3/4"	
40A-3P	3 #8 & 1 #10 GND. - 3/4"	
50A-3P	3 #6 & 1 #10 GND. - 3/4"	
60A-3P	3 #6 & 1 #10 GND. - 3/4"	
208Y/120 & 480Y/277 VOLT, 3Ø, 4W. CIRCUITS		
20A-3P*	4 #12 & 1 #12 GND. - 3/4"	
30A-3P*	4 #10 & 1 #10 GND. - 3/4"	
40A-3P*	4 #8 & 1 #10 GND. - 3/4"	
50A-3P*	4 #6 & 1 #10 GND. - 1"	
60A-3P*	4 #6 & 1 #10 GND. - 1"	

NOTES:
 1. ALL BRANCH CIRCUIT SIZES ARE BASED ON RACEWAY LENGTH OF 65 FEET FOR 120 VOLT BRANCH CIRCUITS AND 150 FEET FOR 277 VOLT BRANCH CIRCUITS. IF LENGTH EXCEEDS 65 FEET (120 VOLT CIRCUITS) OR 150 FEET (277 VOLT CIRCUITS) THEN USE WIRE SIZE DENOTED BELOW AND INCREASE RACEWAY ACCORDINGLY. REDUCE LARGE CABLE SIZES IN JUNCTION BOX PRIOR TO DEVICE TERMINATION. PROVIDE WIRE REDUCERS AT BREAKERS WHEN REQUIRED.

CIRCUIT LENGTH		
WIRE SIZE	120V CIRCUIT	277V CIRCUIT
#10	65 FT. TO 120 FT.	150 FT. TO 240 FT.
#8	120 FT. TO 180 FT.	ABOVE 240 FT.
#6	ABOVE 180 FT.	-

2. TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE.

GENERAL ABBREVIATIONS			
A	AMPERES	kVA	KILOVOLT AMPERES
ADA	AMERICANS WITH DISABILITIES ACT	kW	KILOWATTS
AFB	ABOVE FINISH FLOOR	LTG	LIGHTING
AFG	ABOVE FINISH GRADE	LPMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
AHJ	AUTHORITY HAVING JURISDICTION	MC	METAL CLAD CABLE
AHU	AIR HANDLING UNIT	MCB	MAIN CIRCUIT BREAKER
AIC	AMPERE INTERRUPTING CAPACITY	MCC	MOTOR CONTROL CENTER
AL	ALUMINUM	MCP	MOTOR CIRCUIT PROTECTOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MISC	MISCELLANEOUS
ARCH	ARCHITECT	MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED
ATC	AUTOMATIC TEMPERATURE CONTROL	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GAUGE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BFG	BELOW FINISH GRADE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
BLDG	BUILDING	N.I.C.	NOT IN CONTRACT
C	CONDUIT	NO	NORMALLY OPEN OR NUMBER
CAT	CATALOG	NTS	NOT TO SCALE
CB	CIRCUIT BREAKER	P	POLE
CBM	CERTIFIED BALLAST MANUFACTURERS	PB	PUSHBUTTON
CKT	CIRCUIT	PNL	PANEL
CL	CENTERLINE	POS	PROVIDED UNDER OTHER SECTIONS
CLF	CURRENT LIMITING FUSE	PT	POTENTIAL TRANSFORMER
COL	COLUMN	PVC	POLYVINYL CHLORIDE
CPT	CONTROL POWER TRANSFORMER	PWR	POWER
CU	COPPER	QTY	QUANTITY
CUH	CABINET UNIT HEATER	REQ'D	REQUIRED
DDL	DIRECT DIGITAL CONTROL	RMC	RIGID METAL CONDUIT
DWG	DRAWING	RMS	ROOT MEAN SQUARED
EC	ELECTRICAL CONTRACTOR	RNMC	RIGID NON-METALLIC CONDUIT
EF	EXHAUST FAN	RTU	ROOF TOP UNIT
EM	EMERGENCY	SP	SPARE
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EPO	EMERGENCY POWER OFF	SYM	SYMMETRICAL
EWC	ELECTRIC WATER COOLER	TEL	TELEPHONE
F	FUSE	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
FA	FIRE ALARM	UG	UNDERGROUND OR UNDERGRADE
FCU	FAN COIL UNIT	UL	UNDERWRITERS LABORATORIES
FMC	FLEXIBLE METAL CONDUIT	U.O.N.	UNLESS OTHERWISE NOTED
FT	FEET	UH	UNIT HEATER
GFI	GROUND FAULT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND,G	GROUND OR GROUNDING	V	VOLT
GRMC	GALVANIZED RIGID METALLIC CONDUIT	W	WIRE
HOA	HAND, OFF, AUTOMATIC SWITCH	WH	WATER HEATER
HPF	HIGH POWER FACTOR	WP	WEATHERPROOF
IG	ISOLATED GROUND	XFMR	TRANSFORMER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	Δ	DELTA
IMC	INTERMEDIATE METAL CONDUIT	Y	WYE
INT	INTERLOCK	Ø	PHASE
kcmil	THOUSAND CIRCULAR MILS		

- ### GENERAL NOTES
- CONDITIONS OF THE CONTRACT AND GENERAL REQUIREMENTS APPLY TO WORK OF THIS SECTION. EXAMINE DRAWINGS AND OTHER SPECIFICATIONS FOR REQUIREMENTS THAT AFFECT WORK OF THIS SECTION REFER TO BASE BUILDING SPECIFICATIONS FOR MORE INFORMATION.
 - PROVIDE ITEMS REFERRED TO IN SINGULAR NUMBER IN CONTRACT DOCUMENTS IN QUANTITIES NECESSARY TO COMPLETE WORK.
 - VISIT SITE AND EXAMINE CONDITIONS UNDER WHICH WORK MUST BE PERFORMED. REPORT ADVERSE CONDITIONS IN WRITING TO ARCHITECT. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS INCLUDING PREPARATORY WORK DONE BY OTHERS.
 - PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT AS SHOWN ON DRAWINGS. COORDINATE ELECTRICAL WORK WITH WORK OF OTHER SECTIONS.
 - ADDRESS QUESTIONS REGARDING DRAWINGS TO ARCHITECT IN WRITING BEFORE AWARD OF CONTRACT. OTHERWISE ARCHITECT'S INTERPRETATION OF MEANING AND INTENT OF DRAWINGS SHALL BE FINAL.
 - GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.
 - PERFORM WORK AS REQUIRED BY CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.
 - MATERIAL AND EQUIPMENT SHALL BE UL, NEMA, ANSI, IEEE, ADA & CBM APPROVED FOR INTENDED SERVICE. MATERIAL AND INSTALLATION SHALL MEET REQUIREMENTS OF NATIONAL AND STATE ELECTRICAL CODE.
 - MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET MUST BE COMPLETE AND CURRENT AND AVAILABLE FOR INSPECTION WHEN REQUESTIONS FOR PAYMENT ARE SUBMITTED.
 - GUARANTEE WORK IN WRITING FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS OR INSTALLATION AT NO COST TO OWNER. CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE AT NO COST TO OWNER.
 - SUBMIT GUARANTEE TO ARCHITECT BEFORE FINAL PAYMENT.
 - STATEMENT OF GUARANTEE REQUIREMENTS SHALL NOT BE INTERPRETED TO LIMIT OWNER'S RIGHTS UNDER LAW AND THIS CONTRACT.
 - SUBMIT SHOP DRAWINGS AND PRODUCT DATA WITHIN 30 DAYS AFTER AWARD OF CONTRACT. CHECK, STAMP AND MARK WITH PROJECT NAMES SUBMITTALS BEFORE TRANSMITTING TO ARCHITECT. INDICATE DEVIATIONS FROM CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE PROVIDED FOR ALL EQUIPMENT SHOWN ON THE DRAWINGS.
 - SCHEDULE AT LEAST TEN WORKING DAYS, EXCLUSIVE OF TRANSMITTAL TIME FOR SUBMITTAL REVIEW.
 - DEVIATION FROM CONTRACT DOCUMENTS, OR PROPOSED SUBSTITUTION OF MATERIALS OR EQUIPMENT FOR THOSE SPECIFIED, SHALL BE REQUESTED IN SEPARATE LETTER. WHETHER DEVIATIONS ARE DUE TO FIELD CONDITIONS, STANDARD SHOP PRACTICE, OR OTHER CAUSE.
 - NOT USED
 - ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE.
 - ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
 - ALL COMPONENTS SHOWN ON THE RISER DIAGRAMS, BUT NOT ON THE PLAN OR VICE VERSA, SHALL BE INCLUDED AS IF SHOWN ON BOTH.
 - EXACT LOCATION OF MECHANICAL EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL DRAWINGS.
 - ALL RACEWAYS RUNNING THROUGH BUILDING EXPANSION JOINTS SHALL BE EQUIPPED WITH EXPANSION FITTINGS.
 - CONDUIT HOMERUNS SHOWN ON THE DRAWING WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. THIS CONTRACTOR SHALL NOT INSTALL MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A RACEWAY UNLESS DONE SO STRICTLY BY THE NATIONAL ELECTRIC CODE.
 - CONTRACTOR SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE ARCHITECT.
 - BRANCH CIRCUIT WIRING MAY NOT BE SHOWN GRAPHICALLY ON DRAWINGS AND MAY BE INDICATED BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT INDICATED GRAPHICALLY. PHASE BALANCE ALL PANELBOARDS IN THE FIELD.
 - ALL NEW WIRING SHALL BE TYPE XHHW-2 RATED 75°C, 600 VOLT. WET OR DRY LOCATIONS. MINIMUM BRANCH CIRCUIT WIRING SHALL BE NO. 12 AWG STRANDED COPPER. BRANCH CIRCUITS LONGER THAN 75 FEET FOR 120 VOLT OR 175 FEET FOR 277V SHALL BE AT LEAST #10 FROM PANEL TO LAST OUTLET.
 - ALL NEW EXPOSED WIRING SHALL BE INSTALLED IN ELECTRIC METALLIC TUBING. ALL WIRING EXPOSED IN ROOMS BELOW 8'-0" SHALL BE INSTALLED IN RIGID STEEL CONDUIT.
 - INTERRUPTIONS TO EXISTING ELECTRIC SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE ARCHITECT OR OWNER. INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTIONS.
 - PROVIDE ALL BUILDING WORK AND AIDS FOR THIS CONTRACT AS DIRECTED BY THE GENERAL CONTRACTOR.
 - ALL FIREPROOFING FOR ELECTRICAL PENETRATION SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
 - ALL RECEPTACLES SHALL HAVE AN ENGRAVED LABEL DETAILING THE CIRCUIT NUMBER AND PANEL TO WHICH THE RECEPTACLE IS CIRCUITED. THE LABEL SHALL BE LOCATED ON THE RECEPTACLE PLATE.
 - NO TYPE MC CABLE SHALL BE USED UNDER ANY CIRCUMSTANCES.
 - ELECTRICAL CONTRACTOR TO PROVIDE ALL STEEL FITTINGS FOR CONDUITS.

- ### GENERAL NOTES
- BEFORE SUBMITTING BID, VISIT SITE AND CAREFULLY EXAMINE SITE TO IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK OF THIS SECTION. NO EXTRA PAYMENT WILL BE ALLOWED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY CONSTRUED BY AN EXPERIENCED OBSERVER. VISIT IS PARTICULARLY IMPORTANT BECAUSE THIS IS RENOVATION WORK.
 - BEFORE STARTING WORK IN A PARTICULAR AREA OF THE PROJECT, VISIT SITE AND EXAMINE CONDITIONS UNDER WHICH WORK MUST BE PERFORMED INCLUDING PREPARATORY WORK DONE UNDER OTHER SECTIONS OR CONTRACTS BY OWNER. REPORT CONDITION THAT MIGHT AFFECT WORK ADVERSELY IN WRITING THROUGH CONTRACTOR TO ARCHITECT. DO NOT PROCEED WITH WORK UNTIL DEFECTS HAVE BEEN CORRECTED AND CONDITIONS ARE SATISFACTORY. COMMENCEMENTS OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS.
 - THE E.C. SHALL FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS FOR ALL TRADES, MAKE ALL EQUIPMENT CONNECTIONS AND COORDINATE WITH OTHER CONTRACTORS.
 - DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN CONTRACT. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT ON PLANS, AND VICE VERSA, SHALL APPLY OR SHALL BE PROVIDED AS THOUGH EXPRESSLY REQUIRED ON BOTH. IT IS NOT INTENDED THAT EVERY JUNCTION BOX, OFFSET, FITTING OR COMPONENT BE SPECIFIED OR SHOWN ON DRAWINGS. HOWEVER, CONTRACT DOCUMENTS REQUIRE PROVISION OF ALL COMPONENTS AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL INSTALLATION, WHETHER OR NOT SPECIFIED.
 - THE E.C. SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
 - WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGHOUT THE CIRCUIT.
 - A GROUNDING CONDUCTOR SHALL BE INCLUDED IN EACH RACEWAY AND SIZED IN ACCORDANCE WITH THE N.E.C.
 - RECONNECT ALL EXISTING CIRCUITING WHICH ORIGINATES OR PASSES THROUGH THE REMOVED BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS. UTILIZE SPARE C/B'S.
 - THE E.C. IS RESPONSIBLE FOR ALL NECESSARY CORE DRILLING, ALSO, THE E.C. SHALL PROVIDE FIRE STOPPING AND WEATHERPROOF SEALANT AROUND THE ANNULAR OF EACH CONDUIT IS CORE DRILLED FOR.
 - BRANCH CIRCUIT WIRING MAY NOT BE GRAPHICALLY SHOWN ON DRAWINGS AND MAY BE SHOWN BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT SHOWN GRAPHICALLY. PHASE BALANCE ALL PANELBOARDS. WIRING IS SHOWN BY CONDUIT RUNS ON DRAWINGS WHERE SPECIFIC ROUTING IS REQUIRED OR FOR SPECIAL REASONS. ONLY ROOMS WITH MULTIPLE SWITCHING HAVE "SWITCH CONTROL LETTERS" ASSIGNED. PROVIDE THIN CONDUCTORS IN AREAS WITH HIGH AMBIENT TEMPERATURES SUCH AS BOILER ROOMS, INCINERATOR ROOMS, MECHANICAL EQUIPMENT ROOMS ETC., FOR SIZES LARGER THAN #10 AWG.
 - ALL NEW CONDUITS SHALL BE SUPPORTED WITH HOT DIPPED GALVANIZED AFTER FABRICATION, THREADED ROD AND UNI-STRUT WITH ALL REQUIRED SUPPORTS AT A MAXIMUM 10'-0" O.C. THE UNI-STRUT SHALL BE PROVIDED FOR FUTURE CONDUITS.
 - ALL CONDUITS SHALL BE SUPPORTED BY USE OF POWER STRUT, RACKS, THREADED ROD, BEAM CLAMPS, POWER TRAP AND ALL NECESSARY ACCESSORIES FOR A COMPLETE WIRING SYSTEM. ALL RACKS SHALL BE PROVIDED WITH DOUBLE TIERS FOR FUTURE CONDUITS.
 - THE CONTRACTOR(S) SHALL INFORM AND SCHEDULE AND CONTINUE TO UP DATE THE OWNER, IN WRITING AND WITH AMBLE NOTICE, AS TO THE IMPLICATIONS OF DEMOLITION, SERVICE INTERRUPTIONS, SYSTEM AND BUILDING SHUT DOWNS, NEW CONSTRUCTION, INSTALLATION OF NEW WORK, THE INS AND/OR CHANGE OVERS OF NEW SYSTEMS, ETC. THE CONTRACTOR(S) SHALL PREPARE DETAILED "EXISTING CONDITIONS" DRAWINGS (SHOWING ALL SYSTEMS AFFECTED BY OR ADJACENT TO THIS WORK), PHASE PLANS, MULTIPLE TRADE COORDINATION DRAWINGS, AND ANY OTHER DOCUMENTS NECESSARY TO GUIDE WORK AND CONVEY THE IMPLICATIONS OF CONSTRUCTION TO THE OWNER.

UNIVERSITY OF RHODE ISLAND FOOTNOTE

ELEMENTS OF THE WORK ARE TO BE INSTALLED IN A MANNER SUCH THAT AT SUBSTANTIAL COMPLETION THE FOLLOWING ITEMS, NEW OR EXISTING, SHALL BE "FULLY AND REASONABLY ACCESSIBLE": ALL HVAC CONTROL BOXES, ALL JUNCTION BOXES, ALL VALVES (OF EVERY SHAPE, SORT AND FUNCTION), ALL DDC CONTROL BOXES, ALL ELECTRICAL PANELS, ALL FILTERS, ALL BELTS, ALL WATER COILS, ALL DISCONNECT SWITCHES AND ALL MAINTENANCE ACCESS ELEMENTS, INCLUDING PULL SPACE.

"FULLY AND REASONABLY ACCESSIBLE" SHALL BE DEFINED AS: CAPABLE OF BEING ACCESSED FOR SERVICE, REPAIR OR REPLACEMENT BY AN AVERAGE SIZED INDIVIDUAL - ON A LADDER IF NECESSARY - AND CAPABLE OF BEING SERVICED OR REMOVED WITHOUT REMOVING, MODIFYING OR DISTORTING OTHER COMPONENTS OF THE WORK.

CONFLICT WITH MEETING THESE REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IN A TIMELY MANNER AND SHALL BE CHANGED AT NO COST TO THE OWNER.

EXISTING EQUIPMENT LEGEND

	SYMBOLS OUT OF FUNCTION DENOTES EXISTING
XM	"XM" ADJACENT TO EQUIPMENT DENOTES EXISTING EQUIPMENT TO REMAIN.
XN	"XN" ADJACENT TO EQUIPMENT DENOTES EXISTING EQUIPMENT TO BE REMOVED AND REPLACED WITH NEW.
XR	"XR" ADJACENT TO EQUIPMENT DENOTES EXISTING TO BE RELOCATED AS SHOWN. CUT BACK AND/OR EXTEND EXISTING BRANCH CIRCUIT WIRING AND CONDUIT AS REQUIRED SO AS TO PROVIDE A COMPLETE OPERATIONAL INSTALLATION.
XD	"XD" ADJACENT TO EQUIPMENT DENOTES EXISTING TO BE REMOVED, CUT BACK AND MAKE SAFE ALL ASSOCIATED BRANCH CIRCUIT WIRING CONDUIT BACK TO POWER SOURCE AND LABEL BREAKER IN PANELBOARD AS SPARE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CIRCUITRY TO DEVICES UNAFFECTED BY DEMOLITION.
XL	"XL" ADJACENT TO EQUIPMENT DENOTES RELOCATED EXISTING AT NEW LOCATION
XS	"XS" ADJACENT TO EQUIPMENT DENOTES EXISTING TO BE REMOVED, STORED AND PROTECTED FOR REUSE. THE EQUIPMENT SHALL BE MOVED TO THE PENTHOUSE BY THE CONTRACTOR.

CIRCUITRY, RACEWAYS AND FEEDERS LEGEND

	HOMERUN TO PANEL "PLRE13", CIRCUIT #1,3,5 (VIA 20A-1P C/B'S). TICKS INDICATE QUANTITY OF #12AWG (CU) CONDUCTORS. GROUNDING CONDUCTORS ARE NOT INDICATED IN TICKS. PROVIDE GROUNDING CONDUCTOR IN ACCORDANCE WITH SPECIFICATIONS.
	HOMERUN TO PANEL "PLRE13", CIRCUIT #2 VIA 60A-3P* CIRCUIT BREAKER. REFER TO "BRANCH CIRCUITS" SCHEDULE FOR CONDUCTOR QUANTITIES AND CONDUIT SIZES. (NOTE - (*) ASTERISK INDICATES NEUTRAL CONDUCTOR REQUIRED IN CIRCUIT).

COMMUNICATION DEVICES LEGEND

	COMBINATION TELEPHONE/DATA OUTLET
	"C" DENOTES MOUNTED ABOVE COUNTER DATA OUTLET

NOTE: ALL TELEPHONE AND TEL./DATA DEVICES SHALL BE PROVIDED WITH 1" C. OR AS NOTED TO CABLE TRAY WITHIN CORRIDOR WITH NYLON PULL CORD. REFER TO SPECIFICATIONS AND SCHEDULE FOR ADDITIONAL INFORMATION

WIRING DEVICES LEGEND

	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE. "2" DENOTES CIRCUIT NUMBER. "E" DENOTES EMERGENCY CIRCUIT.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DOUBLE DUPLEX RECEPTACLE.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT INTERRUPTER. "WP" DENOTES WEATHERPROOF BY INTERMATIC.

LIGHTING EQUIPMENT LEGEND

(REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION)

	LIGHT FIXTURE "4" INDICATES FIXTURE TYPE "13" INDICATES CIRCUIT NUMBER "Ø" INDICATES SWITCH CONTROL
	LIGHTING FIXTURES INDICATED WITH SHADING DENOTES CIRCUITED TO NORMAL/EMERGENCY SUPPLY.
	ILLUMINATED "EXIT" SIGN LIGHTING FIXTURE. CEILING MOUNTED OR WALL MOUNTED PROVIDE DIRECTIONAL ARROWS AS INDICATED ON FLOOR PLANS. DOT "-" DENOTES SIDE WITH FACE.
	EMERGENCY SUPERVISORY BY-PASS RELAY

ENERGY MANAGEMENT LEGEND

	S _b SINGLE POLE TOGGLE SWITCH "b" DENOTES SWITCH CONTROL
	S ³ THREE WAY TOGGLE SWITCH
	DT WATT STOPPER RT-200W

FIRE ALARM SYSTEM LEGEND

	75 AUDIBLE (SPEAKER) AND VISUAL ALARM SIGNAL
	"75" DENOTES CANDELLA RATING MOUSE TONE CHIME
	SMOKE DETECTOR - PHOTOELECTRIC

EQUIPMENT LEGEND

	120/208 VOLT, 3Ø, 4 WIRE PANEL
	277/480 VOLT, 3Ø, 4 WIRE PANEL

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	DESCRIPTION	MANUFACTURER AND CATALOG NUMBER	LAMPS		VOLTAGE	KEYED NOTES
			QTY	TYPE		
D	6" DOWNLIGHT WITH RED SPECTRUM LED	KIRLIN#MRR-08880-634-	-	LED	41.6W 120/ 277	
	SINGLE FACED UNIVERSAL MOUNT EXIT SIGN	KENALL - MTSU-MW--DT	-	LED	120/ 277	
	ASTRONOMICAL PROGRAMMABLE TIME SWITCH	WATTSTOPPER - RT-200-W				

TELEPHONE KEY CONNECTION SCHEDULE (CONTINUATION)

ROOM NO.	CONNECTOR DESIG.	INCHES AFF (Ø)	NO. OF CABLES	USE		COVERPLATE		REMARKS	
				TEL.	DATA	FINISH	MAT.		
									JACK TYPES
480D	URI-01		(3) CAT. 6	1	2	QUAD	STANDARD	IVORY	
480A	URI-02		(1) CAT. 6	1		SINGLE	STANDARD	IVORY	TV
480A	URI-03		(3) CAT. 6	1	2	QUAD	STANDARD	IVORY	



University of Rhode Island
New Center for Chemistry
& Forensic Science

Owner
University of Rhode Island
Kingston, RI 02881
p 401.874.2444

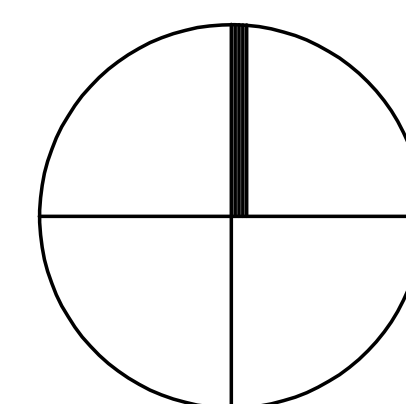
Architect
Wilson Architects Inc.
374 Congress Street
Suite 400
Boston, MA 02210
p 617.336.5990

Consultants
Mechanical / Electrical / Plumbing / Fire Protection
Vanderwell Engineers
274 Summer Street
Boston, MA 02210
p 617.423.7423

Consultants
Structural
Odeh Engineers, Inc.
1223 Mineral Spring Avenue
Providence, RI 02904
p 401.724.1771

Civil
Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02905
p 401.334.4100

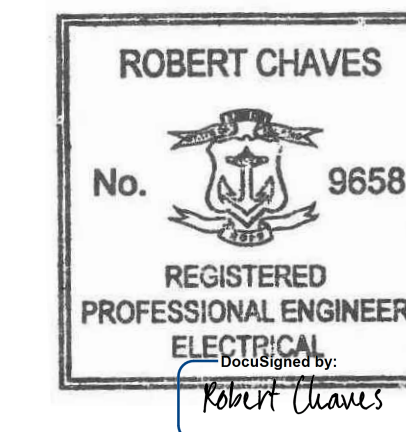
Landscape
Carol R. Johnson Associates, Inc.
115 Broad Street
Boston, MA 02110
p 617.896.2500



#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DOCS			
ISSUES		REVISIONS			

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-336-5990 (f) 617-336-5991

Drawn By: JP
Checked By: JMP
Approved By: JMP



Date Issued 24 MAY 2019
Project Number 4437-001
Drawing Scale N.T.S
ELECTRICAL LEGEND

E0.01

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

SCALE 3/4"=1'-0"

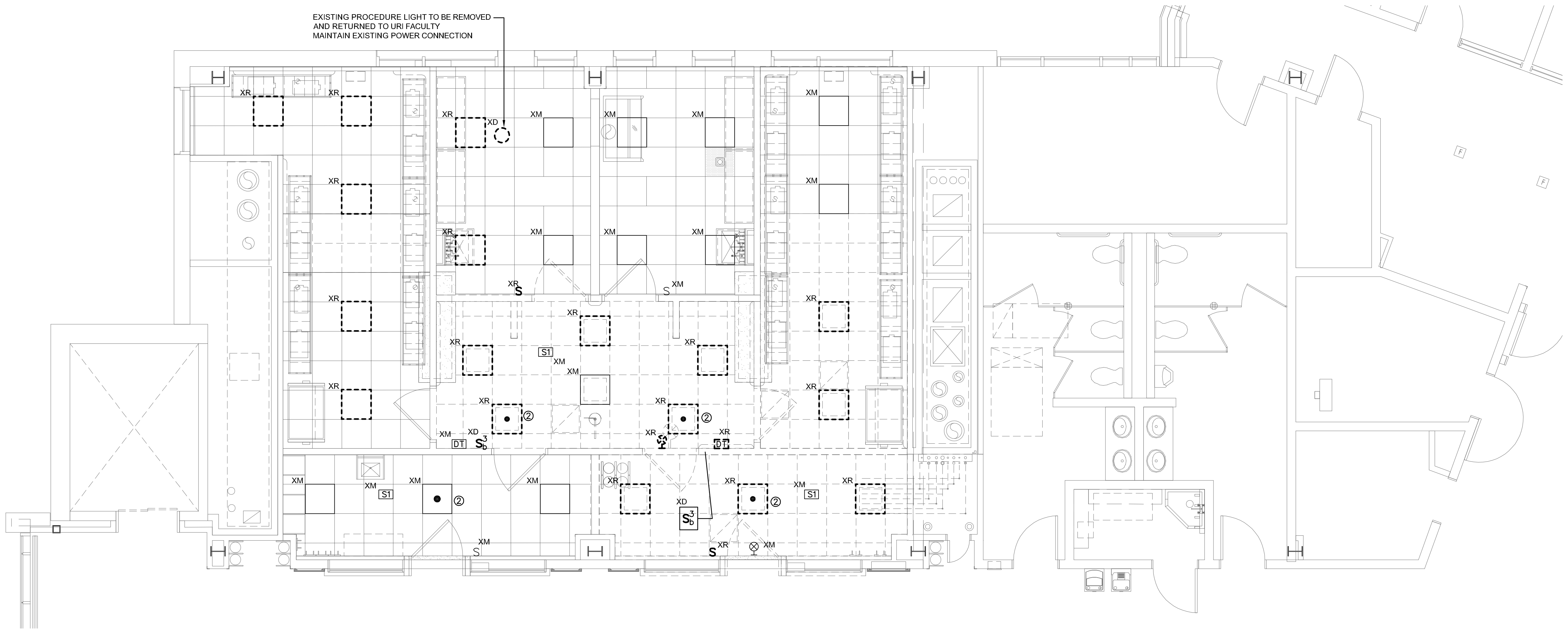
SCALE 1/2"=1'-0"

SCALE 3/8"=1'-0"

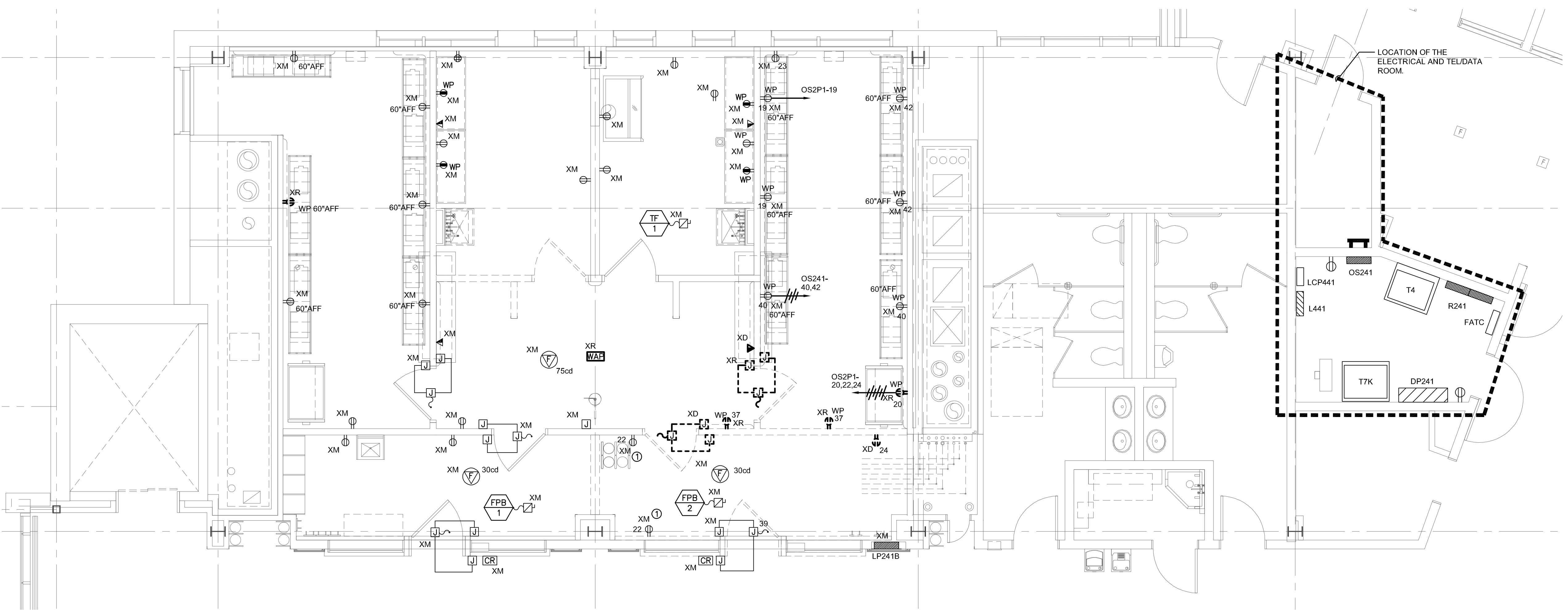
SCALE 1/4"=1'-0"

SCALE 1/8"=1'-0"

SCALE 1/16"=1'-0"



1 LIGHTING DEMOLITION PLAN
E1.04 1/4" = 1'-0"



2 POWER DEMOLITION PLAN
E1.04 1/4" = 1'-0"

- LIGHTING AND POWER GENERAL DEMOLITION NOTES:**
1. THIS EXISTING FLOOR PLAN HAS BEEN DEVELOPED UTILIZING EXISTING DOCUMENTS AND READILY OBSERVABLE SITE CONDITIONS. ALL DEVICES, RECEPTACLES, LIGHTS, CONDUITS, JUNCTION BOXES, ELECTRICAL EQUIPMENT, EQUIPMENT SIZES, ETC. SHOWN ARE FOR REFERENCE ONLY AND MAY NOT INDICATE CORRECT IDENTIFICATION, AND SIZE; AND TOTAL QUANTITIES OF ITEMS SCHEDULED FOR DEMOLITION. VISIT SITE AND FIELD VERIFY THE NUMBER OF DEVICES WITHIN THE CONSTRUCTION PHASE AREA PRIOR TO THE BID AND REMOVAL. THE DRAWINGS DO NOT LIMIT THE AMOUNT OF DEMOLITION WORK REQUIRED. THE ELECTRICAL CONTRACTOR MUST PERFORM THE DEMOLITION WORK AS INDICATED ON THE DEMOLITION DRAWINGS AND AS REQUIRED FOR THE NEW WORK.
 2. DEMOLITION WORK MUST FOLLOW THE CONSTRUCTION PHASING SEQUENCE AND MUST BE COORDINATED WITH THE GENERAL AND MECHANICAL DRAWINGS AND CONTRACTORS.
 3. REMOVE ALL DEVICES, EQUIPMENT, MATERIAL, AND CIRCUITS IN THEIR ENTIRETY, WHICH INTERFERE WITH THE NEW CONSTRUCTION AS DIRECTED BY THE CONSTRUCTION MANAGER. NO ELECTRICAL OR ELECTRONIC CIRCUIT TRACERS WERE USED TO VERIFY CONFIGURATION OF SYSTEM. ALWAYS FIELD VERIFY SYSTEM PRIOR TO STARTING WORK AT SITE. THE TERM ASSOCIATED CIRCUITRY SHALL MEAN CONDUIT, FITTINGS, SUPPORTS, JUNCTION BOXES, CONDUCTORS, ETC. BACK TO THE RESPECTIVE PANELBOARD (POWER SOURCE) OR TO THE LAST JUNCTION BOX OR DEVICE IF THE REMAINING PORTION OF THE CIRCUIT SERVES EXISTING EQUIPMENT OR AREAS WHICH SHALL REMAIN.
 4. MAINTAIN AND RESTORE, IF INTERRUPTED BY REMOVALS OR IN PATH OF NEW CONSTRUCTION, ALL CIRCUITS, CONDUITS AND FEDERS PASSING THROUGH AND SERVING UNDISTURBED AREAS (SHOWN OR NOT SHOWN). VERIFY CIRCUITS, DEVICES, AND EQUIPMENT SCHEDULED FOR REMOVAL TO ASSURE THAT THEIR REMOVAL WILL NOT ADVERSELY AFFECT ADJACENT AREAS NOT BEING RENOVATED.
 5. ELECTRICAL SUBCONTRACTOR SHALL MAINTAIN POWER TO ALL CIRCUITS ADJACENT TO THE CONSTRUCTION AREA. THIS SHALL INCLUDE ANY CIRCUITS PASSING THROUGH THE CONSTRUCTION AREA OR CIRCUITS BEING POWERED FROM POWER PANELS OR BUS DUCTS WITHIN THE CONSTRUCTION AREA. EXTEND AND RELOCATE THESE CIRCUITS AS REQUIRED TO MAINTAIN SERVICE AND TO AVOID INTERFERENCE WITH THE NEW WORK. SUBCONTRACTOR SHALL NOTIFY REPRESENTATIVE FROM CONSTRUCTION MANAGER SHOULD IT BE NECESSARY TO INTERRUPT POWER TO AREAS ADJACENT TO THIS CONSTRUCTION AREA.
 6. ELECTRICAL SUBCONTRACTOR SHALL VERIFY ALL LIGHTING CIRCUITS WITHIN THE CONSTRUCTION AREA BEFORE DISCONNECTING POWER. CONTRACTOR SHALL PROVIDE NECESSARY WIRING TO MAINTAIN LIGHTING IN AREAS ADJACENT TO THIS CONSTRUCTION AREA WHICH WOULD BE AFFECTED BY THIS DEMOLITION WORK.
 7. IN ANY AREA REQUIRING THE PERFORMANCE OF ANY TRADE'S WORK, THIS CONTRACTOR SHALL CAREFULLY REMOVE AND STORE ANY OR ALL ELECTRICAL ITEMS IN PATH OF WORK, REINSTALLING AND RECONNECTING SAME AS REQUIRED, AFTER COMPLETION OF OTHER TRADE'S WORK IN THAT AREA, IN ACCORDANCE WITH THE PLANS AND/OR AS DIRECTED.
 8. ALL EXISTING CONDUITS STUBBED THROUGH FLOOR SERVING ITEMS TO BE REMOVED AND NOT SHOWN OR NOT REQUIRED TO BE REUSED, SHALL BE CUT OFF FLUSH WITH SLAB LEVEL WITH CONCRETE. EXISTING FLUSH OUTLET BOXES MAY BE REUSED IF AT PROPER HEIGHT, LOCATION AND IN GOOD CONDITION. EXISTING CONCEALED RACEWAYS MAY BE REUSED IF IN GOOD CONDITION; RACEWAYS FOR CIRCUITRY SHOWN ON PLANS SHALL GOVERN.
 9. IN ALL EXISTING OR NEW AREAS SPECIFIED OR SHOWN TO BE PAINTED, THIS CONTRACTOR SHALL REMOVE ALL ELECTRICAL ITEMS AS REQUIRED INCLUDING BUT NOT LIMITED TO LIGHTING FIXTURES, DEVICE PLATES, DEVICES, ETC., REINSTALLING SAME AFTER COMPLETION OF PAINTING. ANY ITEM NOT REMOVED AND PAINTED OVER SHALL BE SUITABLY CLEANED OR REPLACED WITH NEW ITEM BY THIS CONTRACTOR.
 10. INVENTORY MAJOR ELECTRICAL ITEMS THAT ARE REMOVED AND PROVIDE A LIST TO THE OWNER FOR THEIR SELECTION OF ITEMS TO BE RETAINED. ALL ITEMS REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
 11. DISCONNECT, MAKE SAFE AND REMOVE ALL TEMPORARY AND ABANDONED WIRE WITHIN THE SPACE.
 12. BRANCH CIRCUIT WIRING TO DEVICES IN AREAS OF DEMOLITION SHALL BE DISCONNECTED, MADE SAFE AND REMOVED COMPLETELY BACK TO THE PANELBOARD. THE CONTRACTOR SHALL NOT ABANDON BRANCH CIRCUIT WIRING IN EXISTING WALLS AND CEILINGS. MAINTAIN THE CONTINUITY OF BRANCH CIRCUIT WIRING TO ANY AREAS WHICH ARE TO REMAIN BUT ARE AFFECTED BY THE DEMOLITION OR NEW CONSTRUCTION.
 13. EXISTING FIRE ALARM DEVICES SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE FIRE ALARM SYSTEM SHALL BE MAINTAINED AND OPERATIONAL DURING CONSTRUCTION.
- KEYED NOTES:**
- ① ELECTRICAL CONTRACTOR TO REMOVE EXISTING WEATHER PROOF RECEPTACLE COVERS AND PROVIDE NEW FRAME PLATES.
 - ② EXISTING EMERGENCY NIGHT LIGHTS WILL BE REWIRED THRU NEW EMERGENCY BY-PASS RELAY.



University of Rhode Island
 New Center for Chemistry
 & Forensic Science

Owner
 University of Rhode Island
 Kingston, RI 02881

Architect
 Wilson Architects Inc.
 374 Congress Street
 Suite 400
 Boston, MA 02210
 p 401.874.2444
 p 617.338.5990

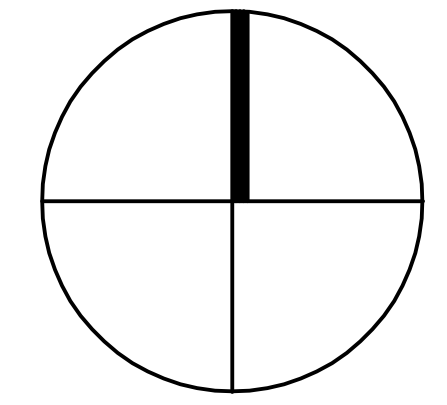
CONSTRUCTION DOCUMENTS

Consultants
 Mechanical / Electrical / Plumbing / Fire Protection
 Vindwail Engineers
 274 Summer Street
 Boston, MA 02210
 p 617.423.7423

Consultants
 Structural
 Oden Engineers, Inc.
 1223 Mineral Spring Avenue
 Providence, RI 02904
 p 401.724.1771

Civil
 Pine Corporation
 8 Backstone Valley Place
 Lincoln, RI 02865
 p 401.334.4100

Landscape
 Carol R. Johnson Associates, Inc.
 115 Broad Street
 Boston, MA 02110
 p 617.896.2500

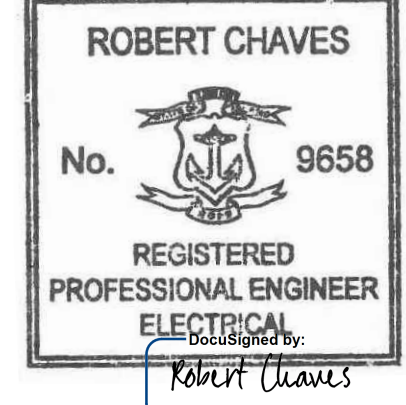


#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DOCS			
ISSUES		REVISIONS			

WILSON HGA

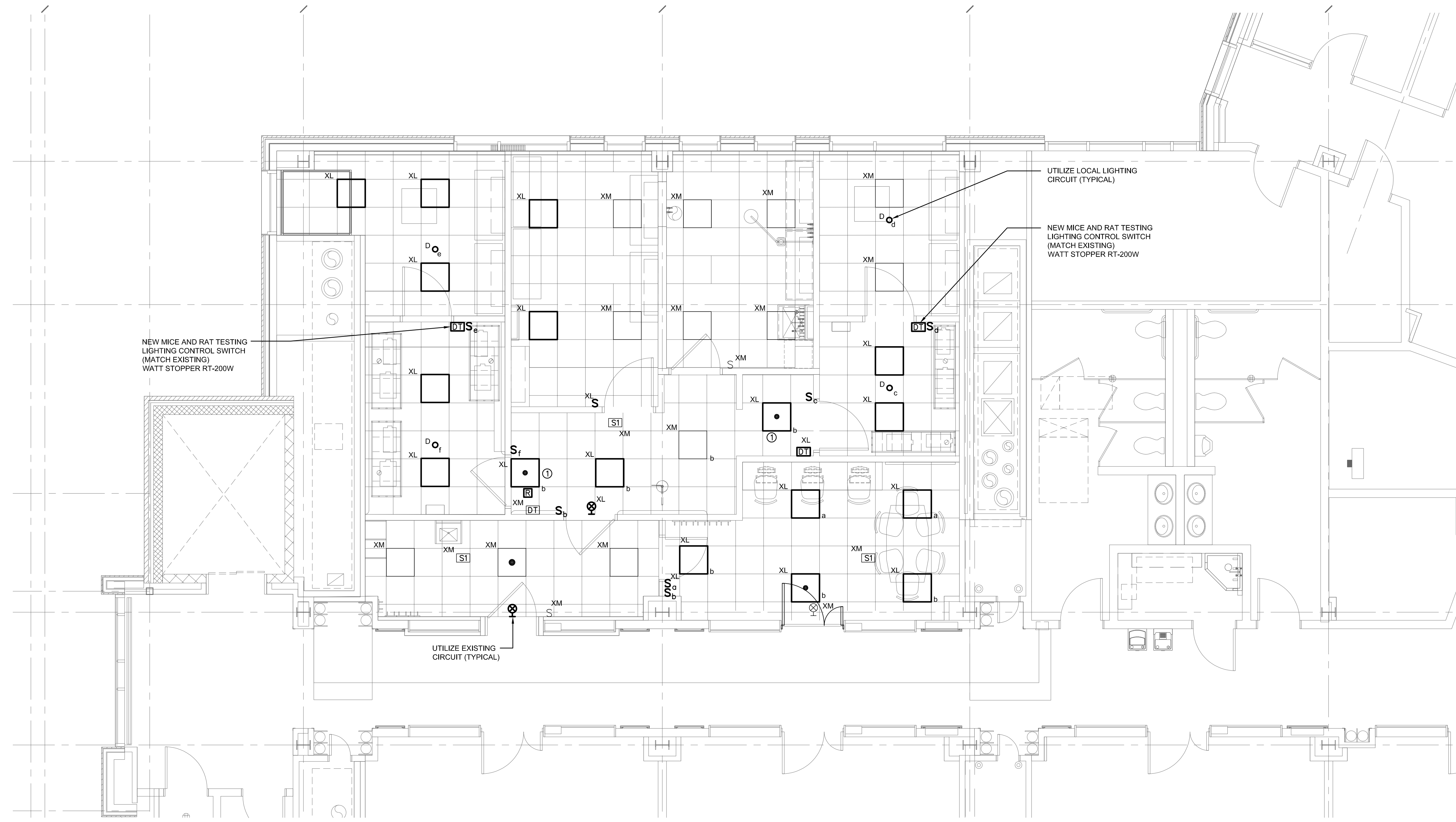
Wilson Architects Inc.
 374 Congress Street, Suite 400 Boston, MA 02210
 (p) 617-338-5990 (f) 617-338-5991

Drawn By: JP
 Checked By: JMP
 Approved By: JMP



Date Issued: 24 MAY 2019
 Project Number: 4437-001
 Drawing Scale: 1/4"=1'-0"
 ELECTRICAL DEMOLITION PLAN
E1.04

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY
SCALE 3/4"=1'-0"
SCALE 1/2"=1'-0"
SCALE 3/8"=1'-0"
SCALE 1/4"=1'-0"
SCALE 3/16"=1'-0"
SCALE 1/8"=1'-0"
SCALE 1/16"=1'-0"



LIGHTING NOTES

1. FOR ELECTRICAL LEGEND AND GENERAL NOTES, REFER TO DRAWING E0.01
2. FOR EXACT LOCATION AND MOUNTING REQUIREMENTS OF ALL LIGHTING FIXTURES, REFER TO ARCHITECT'S PLANS, ELEVATIONS AND DETAILS.
3. ALL EXIT SIGNS THIS DRAWING TO BE WIRED TO "EMERGENCY POWER" PANELS AND SHALL BE CONSTANT ON AND UNSWITCHED.
4. WIRE THE EMERGENCY FIXTURES TO THE EXISTING EMERGENCY CIRCUIT SERVING THE AREA.

KEYED NOTES:

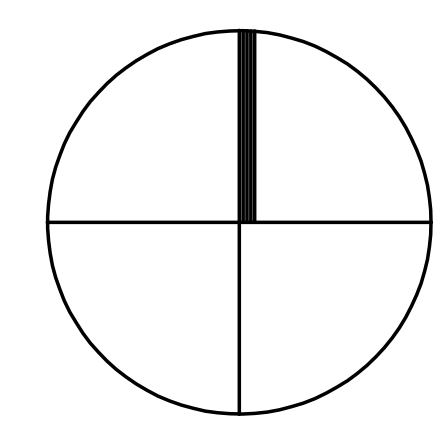
- ① PROVIDE NEW BY-PASS RELAY TO BE UTILIZE FOR (2) CORRIDOR 480 EMERGENCY LIGHT FIXTURES TO BE CONTROLLED BY NEW CORRIDOR SWITCH.



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island Kingston, RI 02881 p 401.874.2444	Architect Wilson Architects Inc. 374 Congress Street Suite 400 Boston, MA 02210 p 617.338.5990	Consultants Mechanical / Electrical / Plumbing / Fire Protection Vanderwell Engineers 274 Summer Street Providence, RI 02904 p 617.423.7423	Consultants Structural Odeh Engineers, Inc. 1223 Mineral Spring Avenue Providence, RI 02904 p 401.724.1771	Civil Pare Corporation 8 Blackstone Valley Place Lincoln, MA 02965 p 401.334.4100	Landscape Carol R. Johnson Associates, Inc. 115 Broad Street Boston, MA 02110 p 617.896.2500
--	--	---	--	--	---

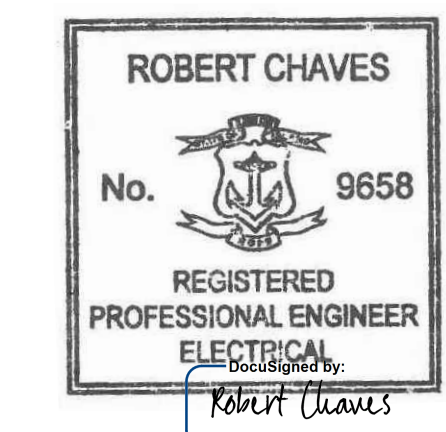


#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DCS			
ISSUES			REVISIONS		

**WILSON
HGA**

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

Drawn By: JP
Checked By: JMP
Approved By: JJP



Date Issued	24 MAY 2019
Project Number	4437-001
Drawing Scale	1/4"=1'-0"
ELECTRICAL LIGHTING PLAN	

E2.04

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

SCALE 1/4"=1'-0"

SCALE 1/2"=1'-0"

SCALE 3/4"=1'-0"

SCALE 1"=1'-0"

SCALE 1 1/2"=1'-0"

SCALE 2"=1'-0"

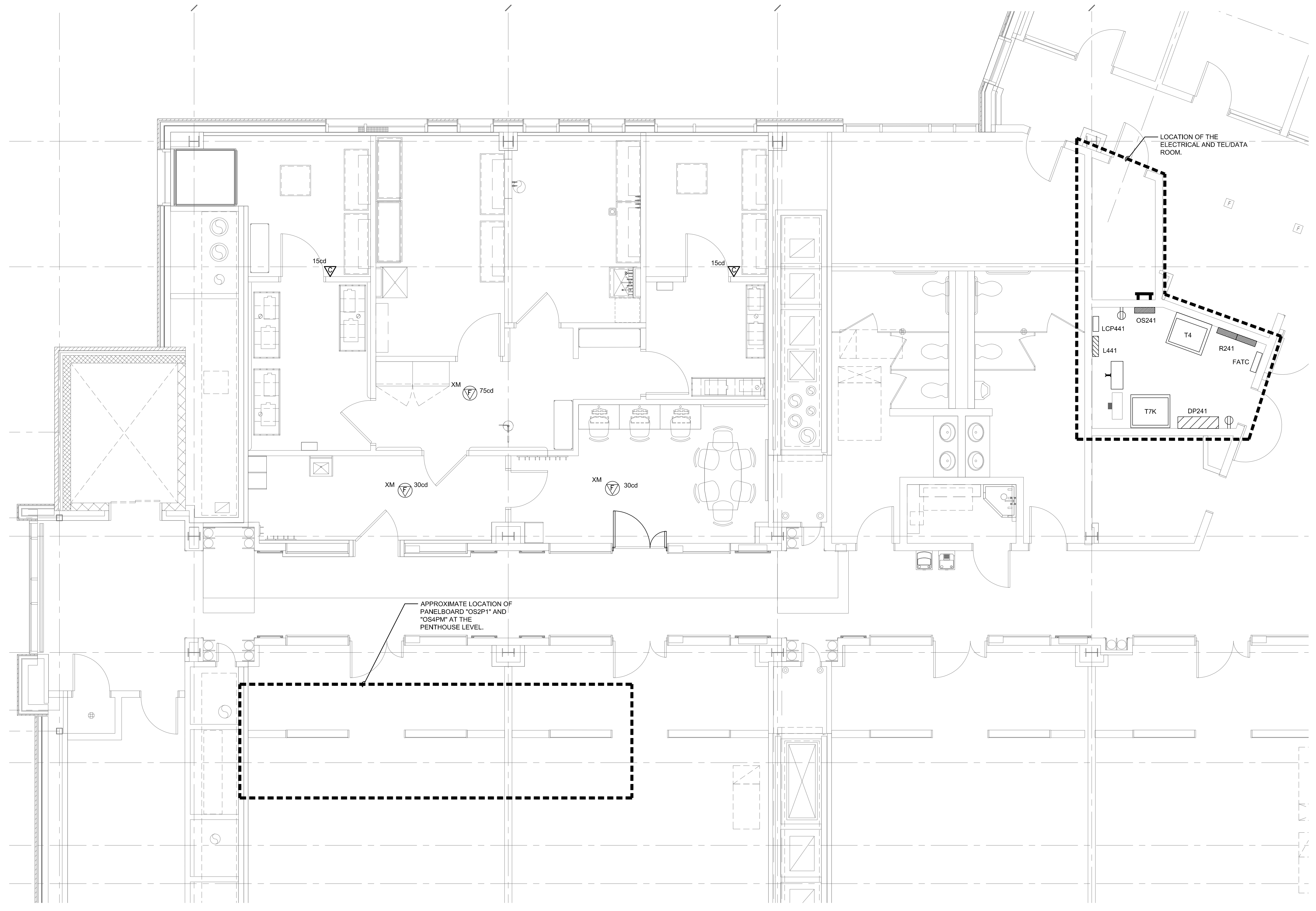
SCALE 3"=1'-0"

SCALE 4"=1'-0"

SCALE 6"=1'-0"

SCALE 12"=1'-0"

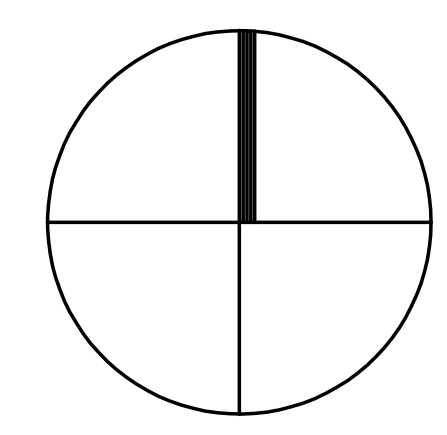
SCALE 20"=1'-0"



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island Kingston, RI 02881 p 401.874.2444	Architect Wilson Architects Inc. 374 Congress Street Suite 400 Boston, MA 02210 p 617.338.5990	Consultants Mechanical / Electrical / Plumbing / Fire Protection Vanderwell Engineers 274 Summer Street Boston, MA 02210 p 617.423.7423	Consultants Structural Odeh Engineers, Inc. 1223 Mineral Spring Avenue Providence, RI 02904 p 401.724.1771	Civil Pare Corporation 8 Blackstone Valley Place Lincoln, RI 02905 p 401.334.4100	Landscape Carol R. Johnson Associates, Inc. 115 Broad Street Boston, MA 02110 p 617.896.2500
--	--	---	--	--	---

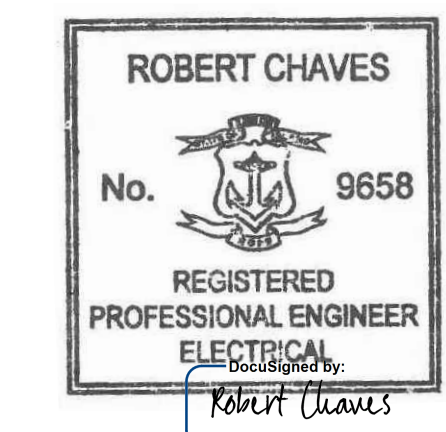


#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DCS			
ISSUES			REVISIONS		

**WILSON
HGA**

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

Drawn By: JP
Checked By: JMP
Approved By: JJP

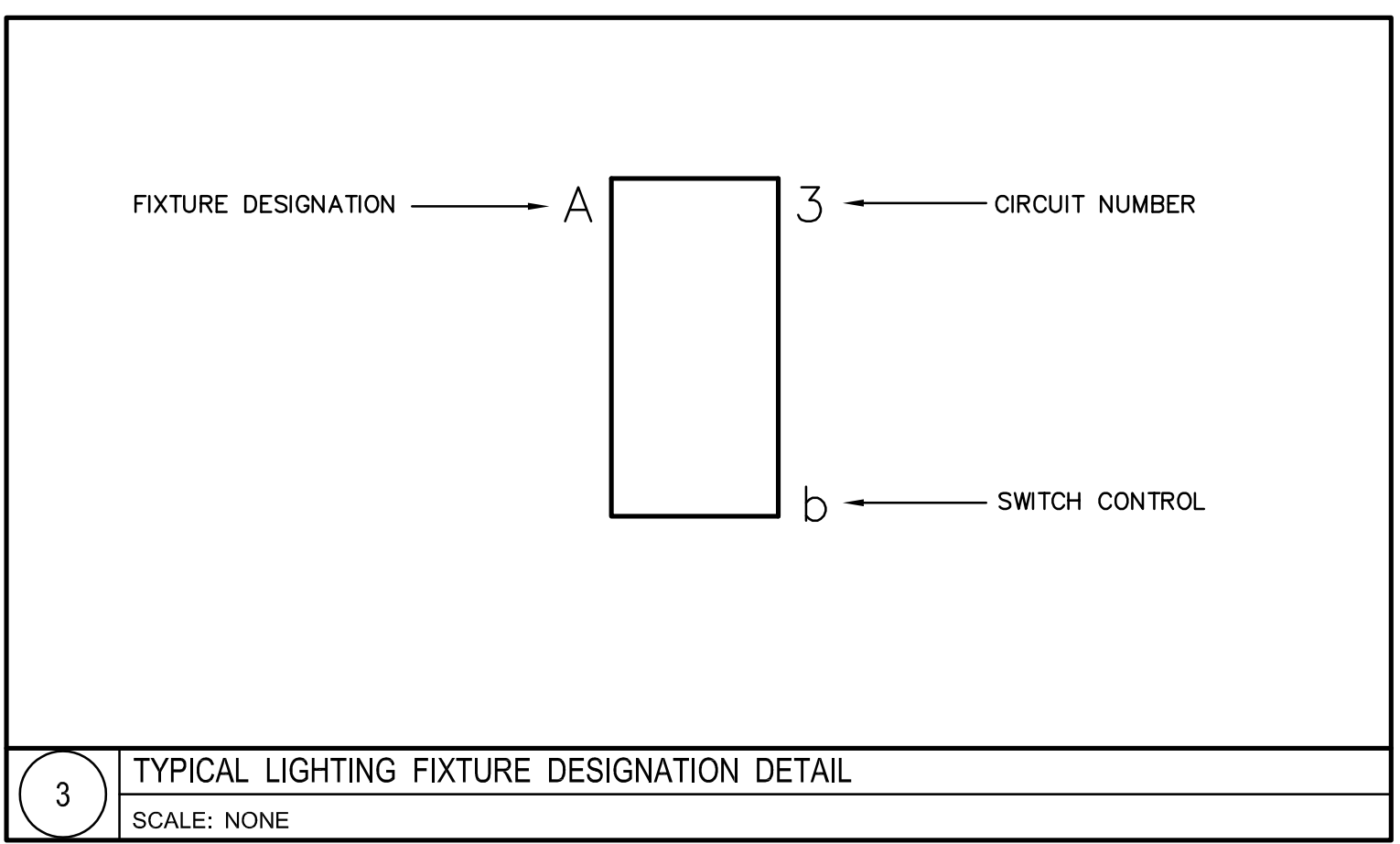
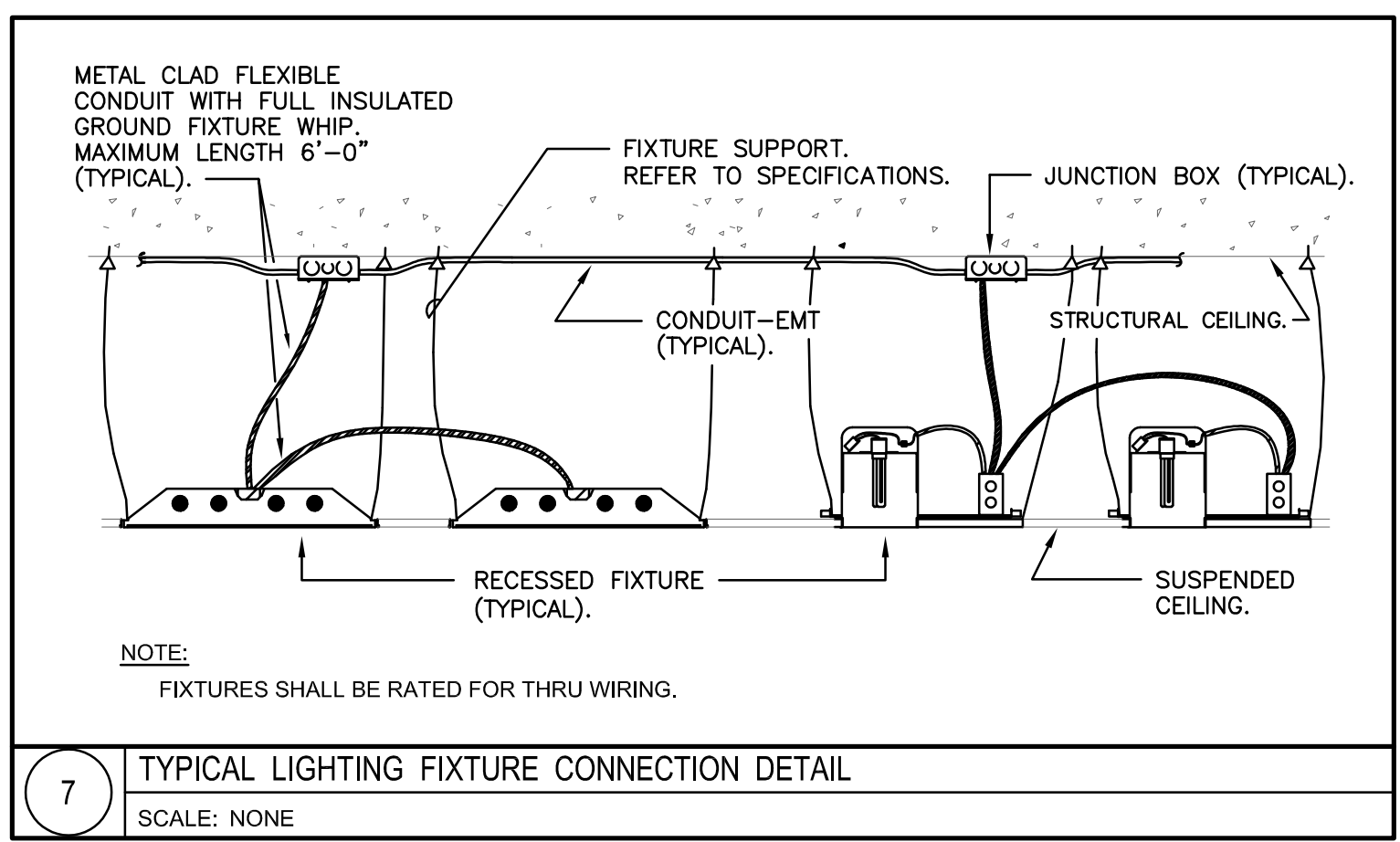
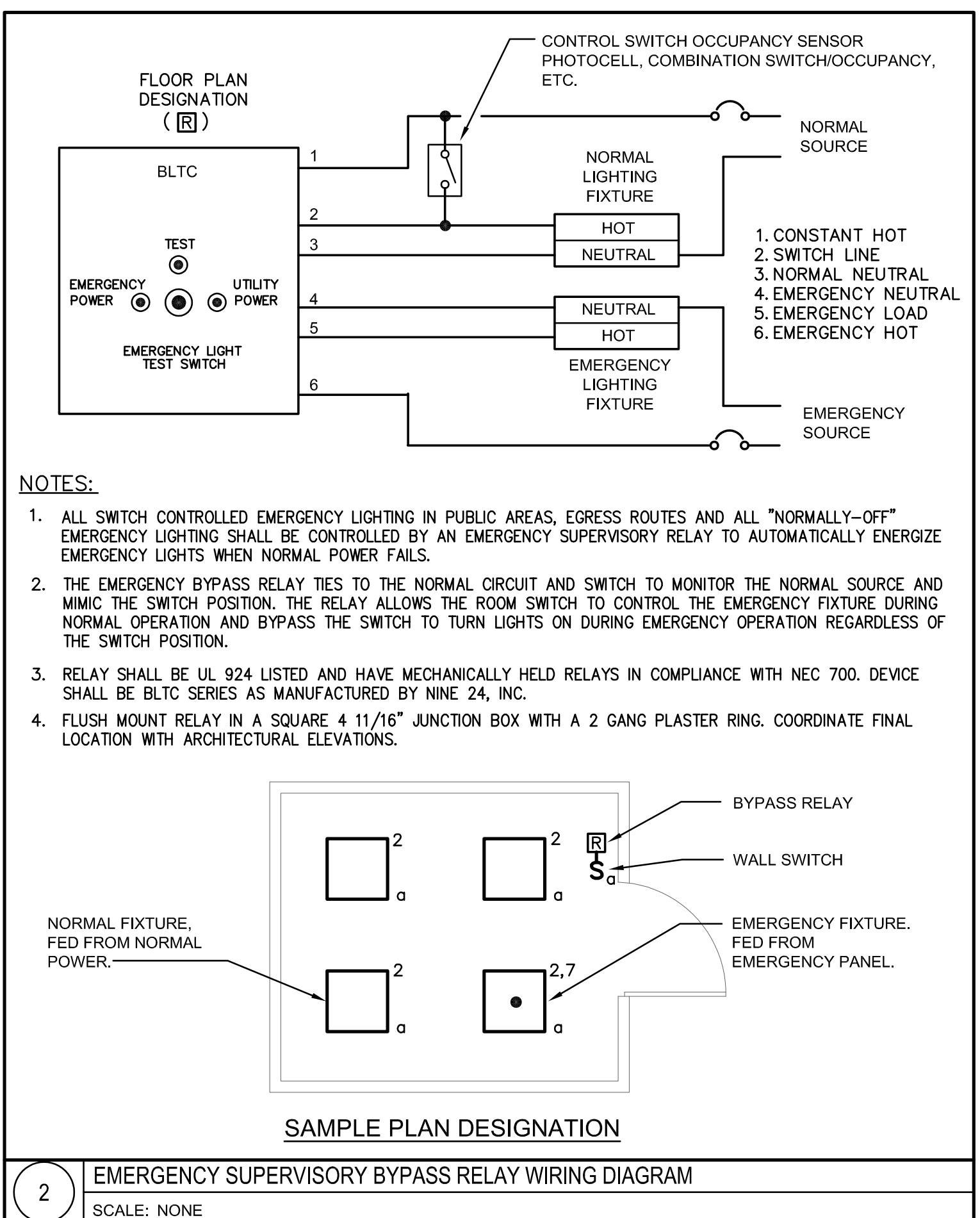
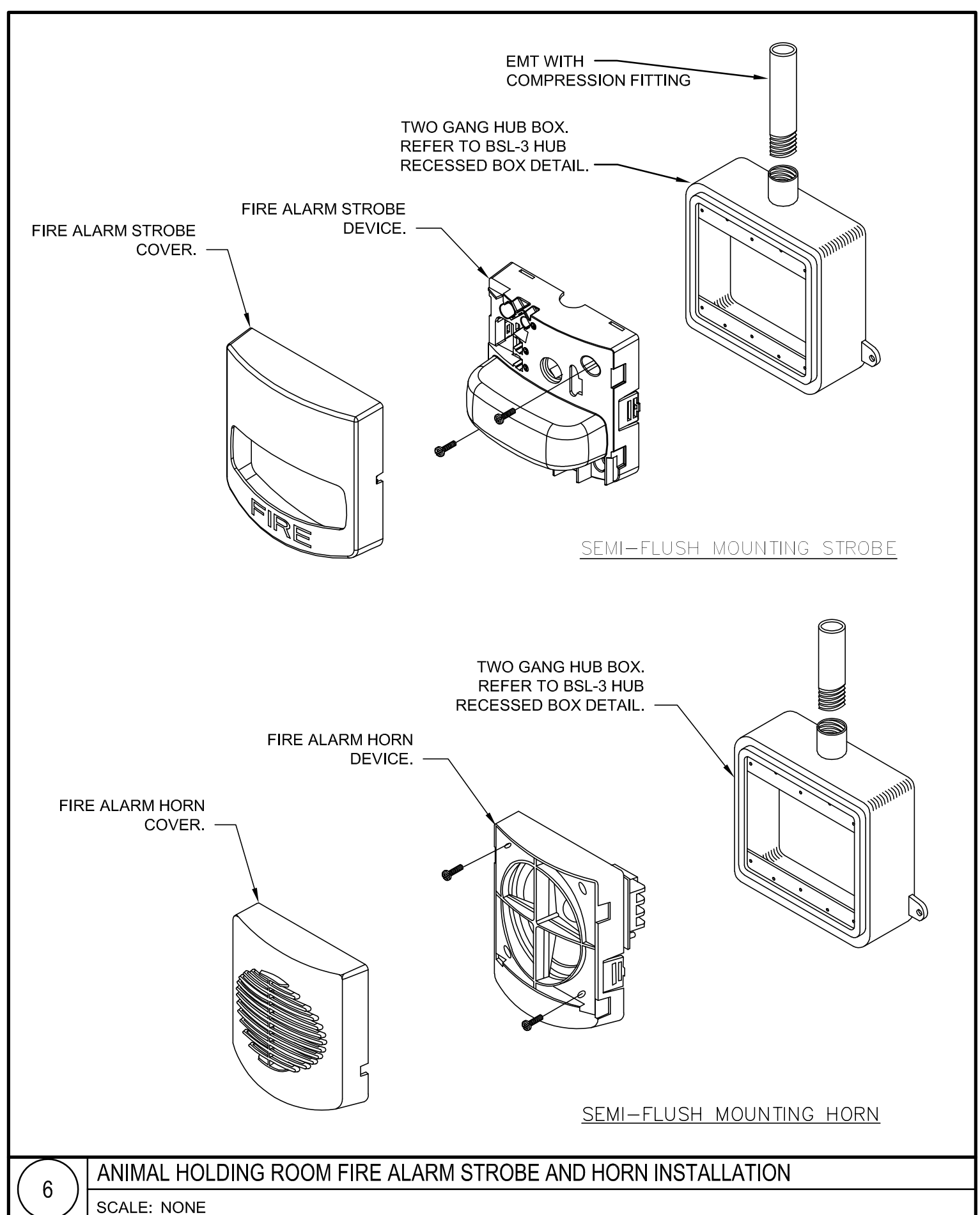
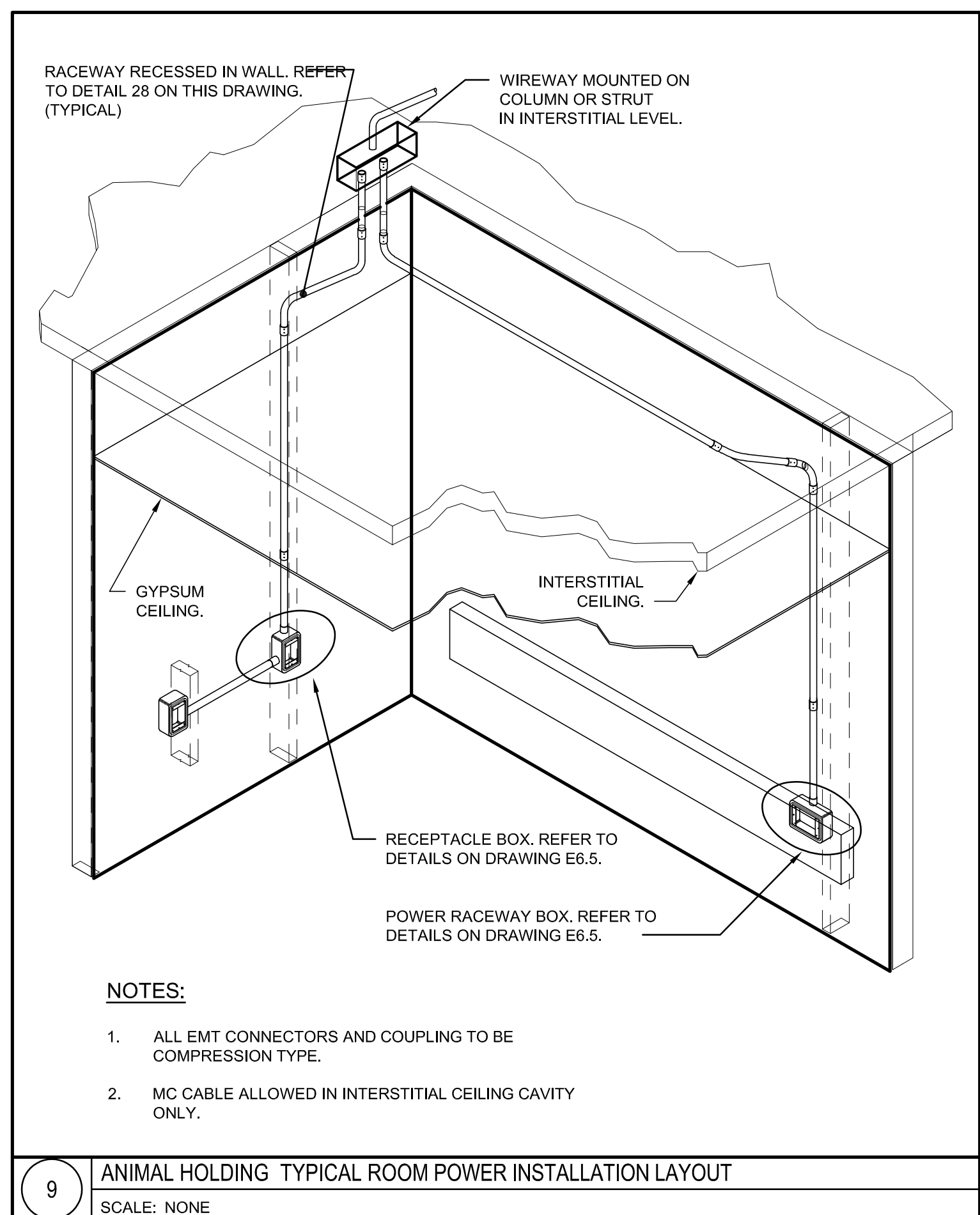
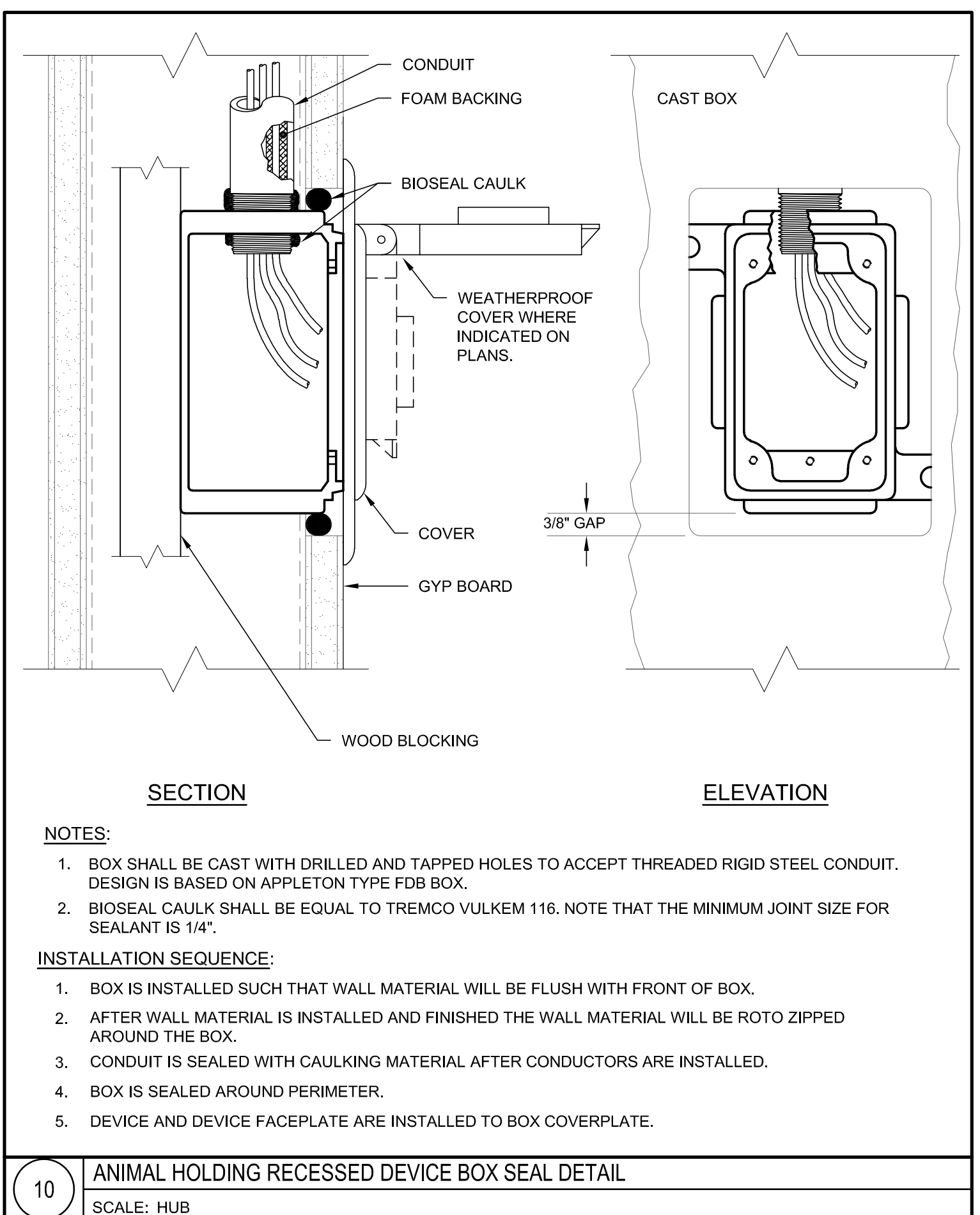
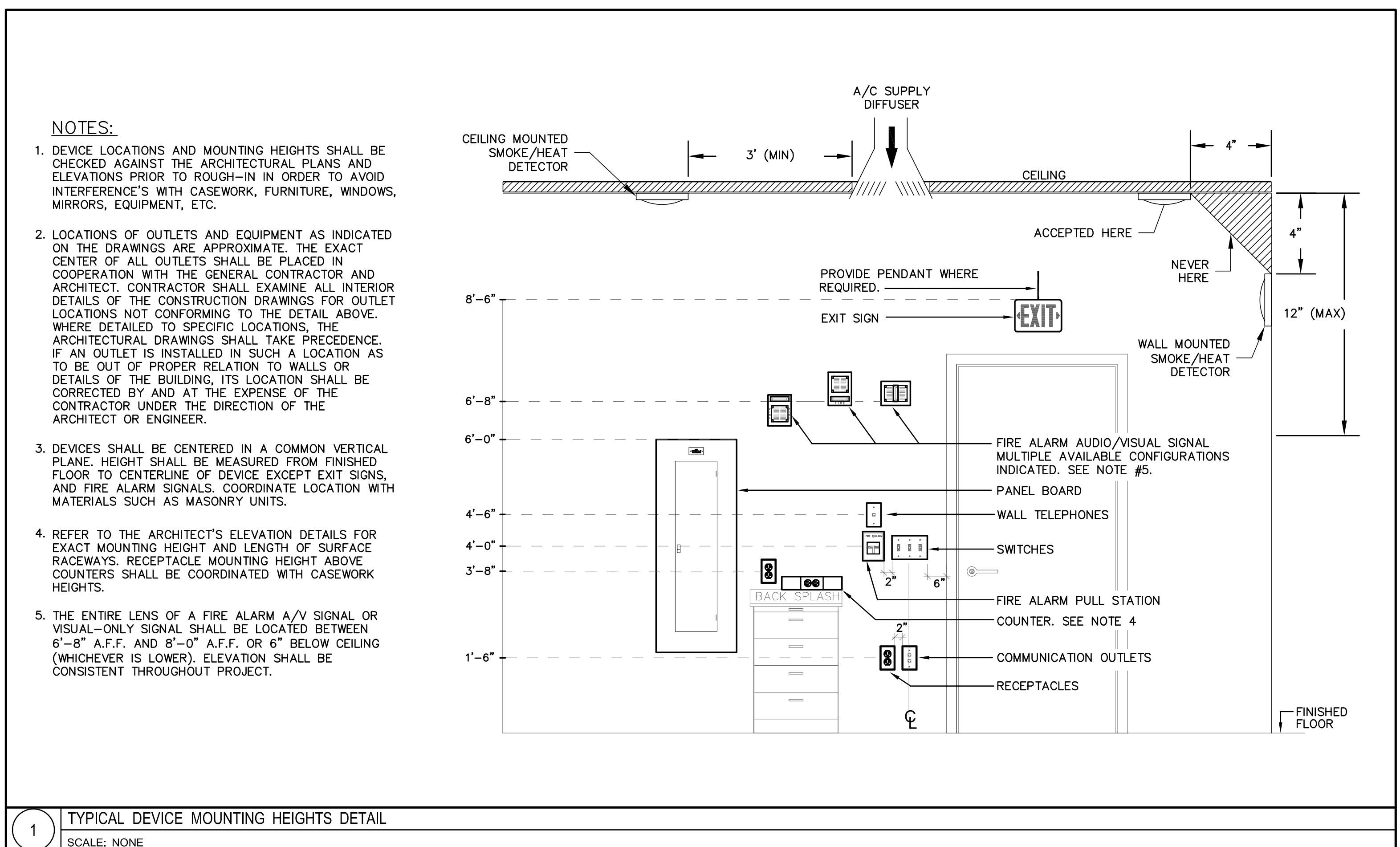
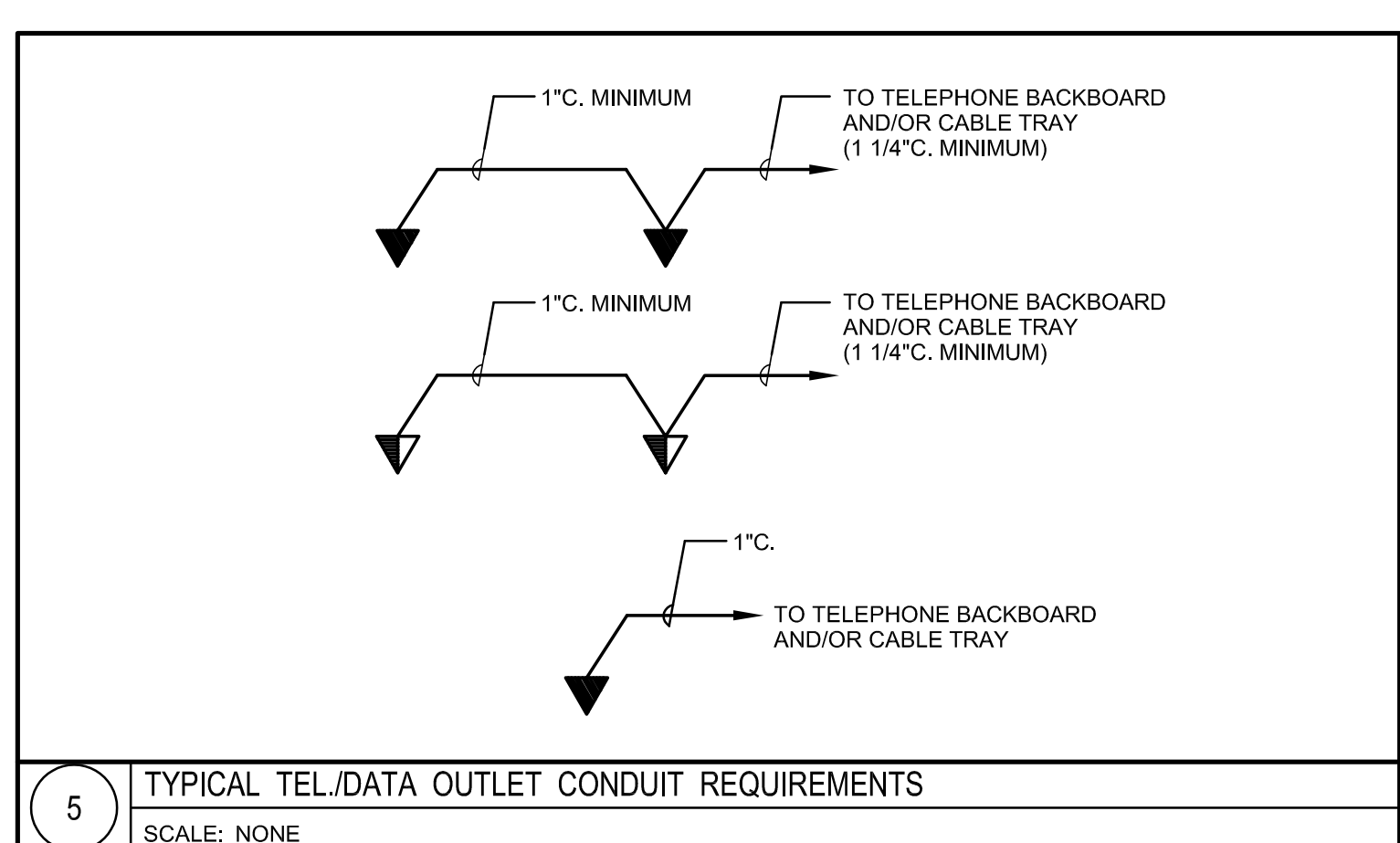
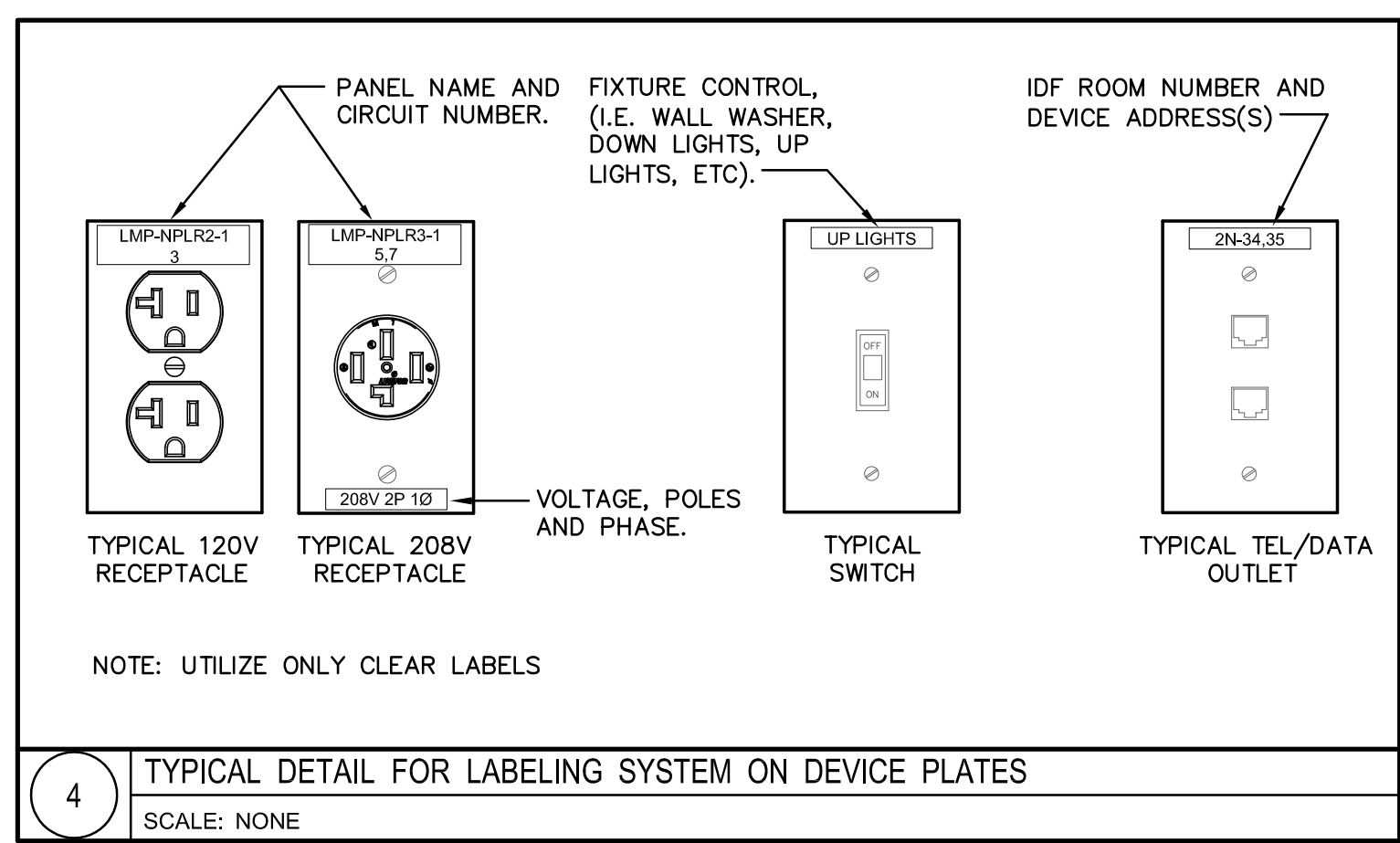
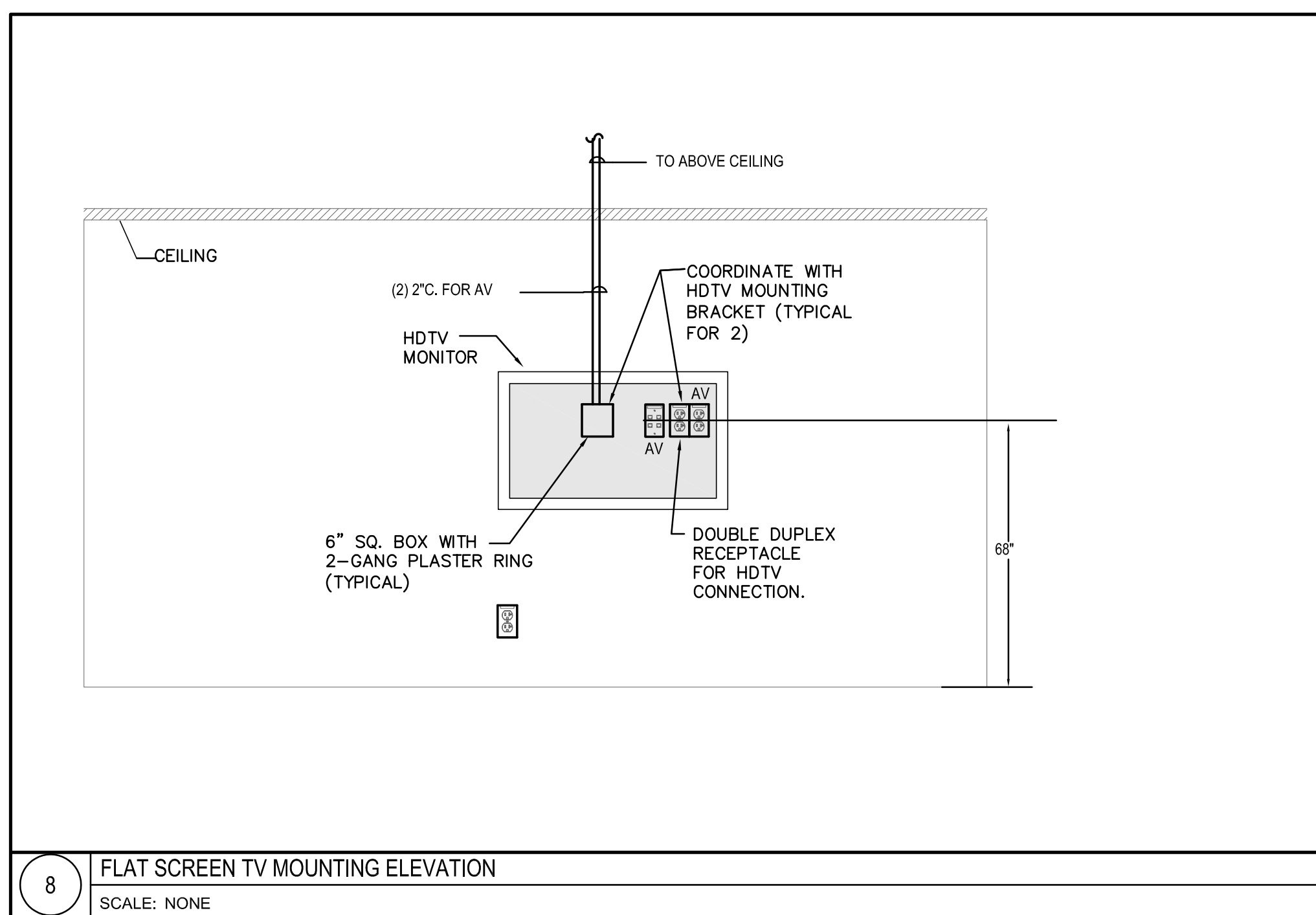


5/28/2019

Date Issued 24 MAY 2019
Project Number 4437-001
Drawing Scale 1/4"=1'-0"
FIRE ALARM PLAN

E4.04

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island
Kingston, RI 02881
p 401.874.2444

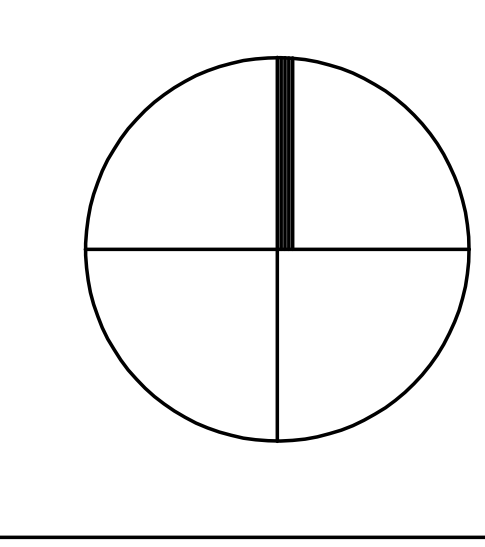
Architect Wilson Architects Inc.
374 Congress Street
Suite 400
Boston, MA 02210
p 617.338.5990

Consultants Mechanical / Electrical / Plumbing / Fire Protection
Vanderwell Engineers
274 Summer Street
Boston, MA 02210
p 617.423.7423

Consultants Structural
Odeh Engineers, Inc.
1223 Mineral Spring Avenue
Providence, RI 02904
p 401.724.1771

Civil Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02905
p 401.334.4100

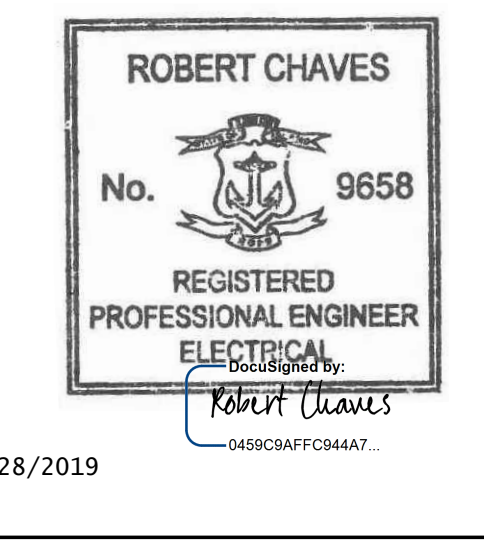
Landscape Carol R. Johnson Associates, Inc.
115 Broad Street
Boston, MA 02110
p 617.896.2500



#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DGCS			
ISSUES		REVISIONS			

WILSON HGA
Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

Drawn By: JP
Checked By: JMP
Approved By: JMP



Date Issued 24 MAY 2019
Project Number 4437-001
Drawing Scale N.T.S
ELECTRICAL DETAILS

E8.01

IF THIS SHEET IS NOT 30 x 42 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

GENERIC HVAC ABBREVIATIONS

(REFER TO CONTROLS LEGEND ABBREVIATIONS FOR ADDITIONAL NOMENCLATURE)

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like °F, °C, AD, ADA, ADJ, ADDL, AFF, AFG, ALT, AP, ARCH, ATC, ATCC, ATCD, ATRC, ATV, AVG, BBD, BDT, BF, BFF, BHP, BLDG, BLR, BOP, BSMT, BTU, BTUH, C, CA, CF, CLG, CO, COL, COMP, CONC, CONN, CONTR, CORR, CUF, CUH, CYL, D, DB, DC, DDC, DDCFP, DIA, DIM, DN, DWG, EA, EFF, ECUH, ELEC, ELEV, EMER, EMS, ENT, EQUIP, EUN, EXH, EXP, FTR, FCV, FFP, FG, FLEX, FLR, FLURD, FP, FPM, FT, FTSEC, FURN, FVNR, G, GA, GAL, GALV, GC, GND, GPH, GPM, GRD, GWB, H, HCPD, HD, HP, HPG, HR, HZ, HK, ID, INSUL, KW, KVA, L, LB, LAB, LF, LVG, M, MAX, MBH, MCA, MCC, MECH, MEZZ, MFR, MH, MIN, MOCOP, MTD, MU, N/A, NC, NO, NOM, NTS, OB, OC, OD, ODP, OFCI, OFOI, OVF, PCF, PD, PH, PLBG, POS, PRESS, PRIM, PSIA, PSID, PSIG, PVC, REP, RET, REED, RECS, RH, RM, RPM, SCCR, SOH, SOV, SPECS, SQ, SQFT, SS, STD, STDBY, STL, SUCT, SUP, TA, TAV, TEFC, TEL, TEMP, TCD, TOP, TYP, UH, VEL, VENT, VERT, VFC, VTR, W, WID, W/O, WB, WF, WGT, X, XM, XN, XR.

ROOM PRESSURIZATION TAG

Legend for Room Pressurization Tags. Includes symbols for Room ID, Control Type, SA, EA, and Pressurization levels (Positive Step 2, Positive Step 1, Neutral, Negative Step 1, Negative Step 2, Negative Step 3, Negative Step 4).

AIR SYSTEM SPECIFIC ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like AC, ACC, ACCU, ACD, ACU, AF, AHU, ALD, ATD, AVS, BDD, BI, BOD, CACU, CC, CD, CFM, CG, DD, DIFF, DWDI, DWSI, DX, EAT, EF, EG, EHC, EPHC, ER, ERHC, ESP, F, FAB, FB, FC, FA, FCU, FD, FLTR, FFI, GE, GH, HC, HEGA, HEPA, HPU, HRU, HV, HU, IH, LAT, LD, LVUR, LVDR, OA, OAI, OBD, OED, PHC, RA, RD, RF, RHC, RL, RLF, RR, RTU, RV, SA, SATT, SCR, SD, SDET, SEF, SF, SFD, SG, SGO, SP, SR, SWDI, SWSI, TE, TF, TG, TR, TSP, UC, VD, VV, VVE, WMS.

HVAC GENERAL NOTES

- GENERAL:
1. HVAC GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL "M" SERIES DRAWINGS.
2. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO INDICATE CAPACITY, SIZE, APPROXIMATE LOCATION AND GENERAL ARRANGEMENT.
3. DRAWINGS ARE NOT FULLY AND CORRECTLY INTERPRETTED WITHOUT REFERENCE TO LEGENDS, DETAILS, SCHEDULES AND SPECIFICATIONS.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE INFORMATION AND HARDWARE TO COORDINATE CONCRETE PADS AND STEEL PLATFORMS REQUIRED FOR MECHANICAL WORK.
6. COORDINATE ROOF AND WALL PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
7. RUN DUCTS AND PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS.
8. INSTALL SENSORS (TEMPERATURE, HUMIDITY, CO2, THERMOSTATS) AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY ARCHITECT.
9. COORDINATE WORK OF THIS SECTION WITH THAT OF OTHER SECTIONS.
10. ACCESS PANELS SHALL BE PROVIDED TO CLEAN COILS AND SERVICE DAMPERS, HEATERS, VALVES AND ALL CONCEALED MECHANICAL EQUIPMENT.
11. ELEMENTS OF THE WORK SHALL BE INSTALLED IN A MANNER SUCH THAT AT SUBSTANTIAL COMPLETION THE FOLLOWING ITEMS, NEW OR EXISTING SHALL BE "FULLY AND REASONABLY ACCESSIBLE".
12. SUPPORT ALL EQUIPMENT, PIPING AND DUCTWORK FROM BUILDING STRUCTURE.
13. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH NATIONAL ELECTRIC CODE AND DIVISION 26.
14. ALL MATERIAL AND EQUIPMENT SHALL BE NEW.
AIR SYSTEM SPECIFIC NOTES:
1. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER CERTIFIED DRAWINGS.
2. SHEETMETAL FITTINGS SHOWN ARE TO BE PROVIDED.
3. REFER TO SPECIFICATIONS FOR DUCTWORK CONSTRUCTION CLASSES, SEAL, AND LEAKAGE CLASSES.
4. EXTERIOR LOUVERS ARE INDICATED FOR LOCATION ONLY.
5. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED TO THE FIRE ALARM SYSTEM BY DIVISION 28.
6. SMOKE DAMPERS SHALL BE UL555 LISTED.
7. REFER TO REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR TERMINAL DEVICES.
8. INTERNAL AIR FLOW DIMENSIONS ARE SHOWN FOR DUCTS.
9. DIFFUSER SIZES SHOWN ARE NECK SIZES.
10. PROVIDE FLEXIBLE CONNECTIONS ON ALL DUCTS.
11. THE INSIDE OF DUCTWORK AND ALL MECHANICAL COMPONENTS VISIBLE THROUGH A GRILLE OR DIFFUSER SHALL BE PAINTED FLAT BLACK.
12. ALL RETURN AIR OPENINGS ABOVE CEILING SHALL BE PROVIDED WITH A 1/2" MESH ALUMINUM SCREEN.
13. INSULATE DUCTWORK; PERFORM TESTS BEFORE INSULATING.
14. ELBOWS IN DUCT SYSTEMS SHALL BE FULL RADIUS (CENTERLINE RADIUS = 1.5 DUCT WIDTH).
15. UNLESS INDICATED OTHERWISE, AND AS A MINIMUM PROVIDE 24"x24" MINIMUM SIZE CLEANOUTS IN KITCHEN EXHAUST DUCTS.
16. MANUAL DAMPERS ARE NOT SHOWN ON THE DRAWINGS.
PIPING SPECIFIC NOTES:
1. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER CERTIFIED DRAWINGS.
2. ALL CONDENSATE DRAIN LINES SHALL BE PIPED FULL SIZE OF THE UNIT DRAIN OUTLET.
3. PERFORM TEST BEFORE INSULATING PIPING.
4. PROVIDE HANGERS, CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES TO PREVENT STRESS ON PIPING.
5. PROVIDE VENTS AT HIGH POINTS IN PIPING SYSTEMS AND DRAIN VALVES AT LOW POINTS.
6. PROVIDE AT LEAST THREE-ELBOW SWING FOR PIPE TAKE-OFFS TO TERMINAL EQUIPMENT AND RISERS.
7. ISOLATION VALVES IN PIPING SYSTEMS ARE NOT SHOWN ON PLANS.
8. PITCH HYDRONIC (WATER) PIPING UPWARD IN DIRECTION OF FLOW, PITCH STEAM AND CONDENSATE PIPING DOWNWARD.
9. REFER TO EQUIPMENT SCHEDULES FOR PIPE RUN-OUT SIZES TO INDIVIDUAL PIECES OF EQUIPMENT.

SPECIFICATIONS

REFER TO BASE BUILDING SPECIFICATIONS DIV 20 - COMMON MECHANICAL/ELECTRICAL REQUIREMENTS AND DIV 23 - HVAC FOR ALL SYSTEMS, BASE BUILDING PROJECT - UNIVERSITY OF RHODE ISLAND, NEW CENTER FOR CHEMISTRY & FORENSIC SCIENCE 17 OCTOBER 2012



University of Rhode Island
New Center for Chemistry & Forensic Science
Owner: University of Rhode Island
Architect: Wilson Architects Inc.

CONSTRUCTION DOCUMENTS

Consultants: Mechanical / Electrical / Plumbing / Fire Protection
Consultants: Structural
Civil: Pare Corporation
Landscape: Carol R. Johnson Associates, Inc.

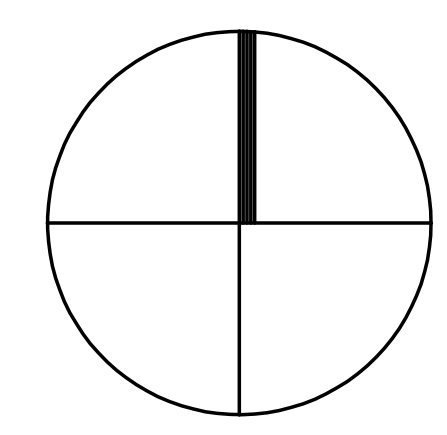
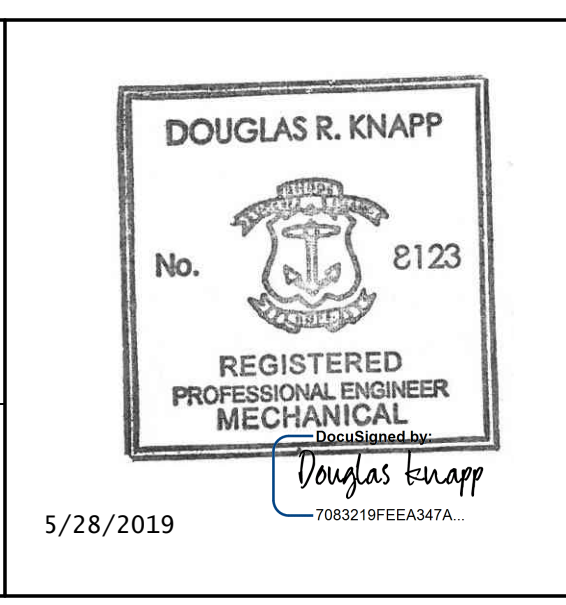


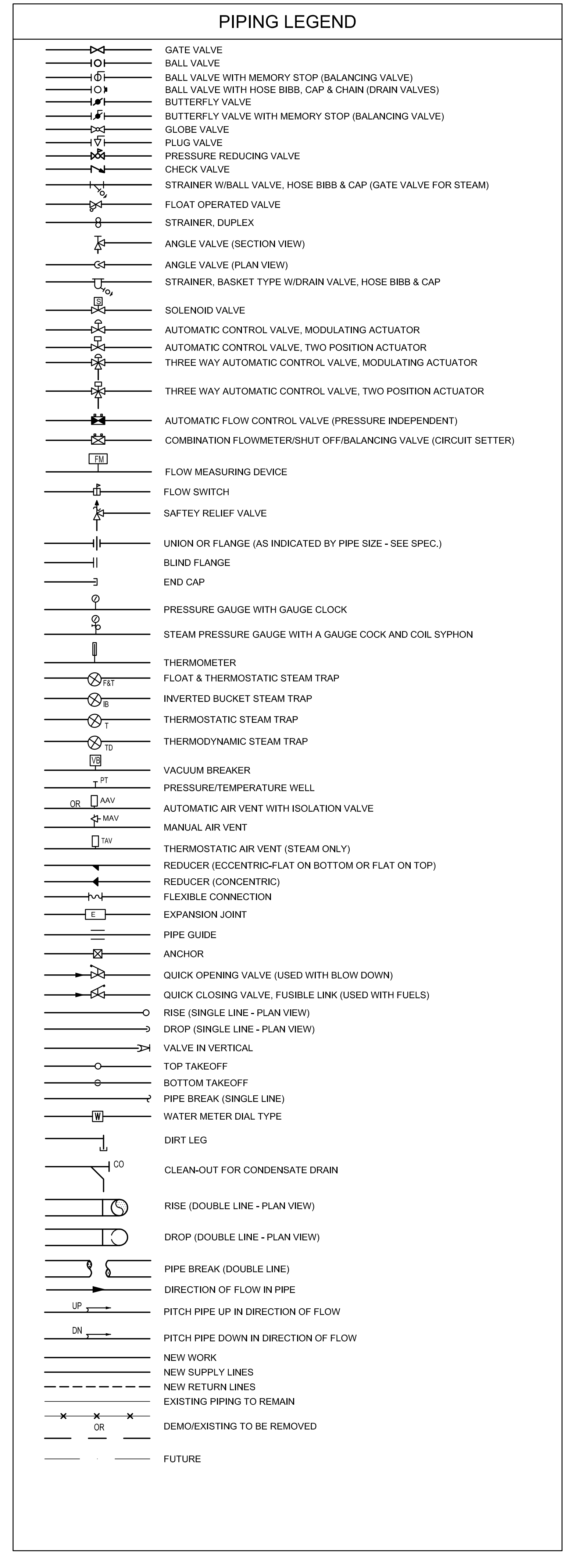
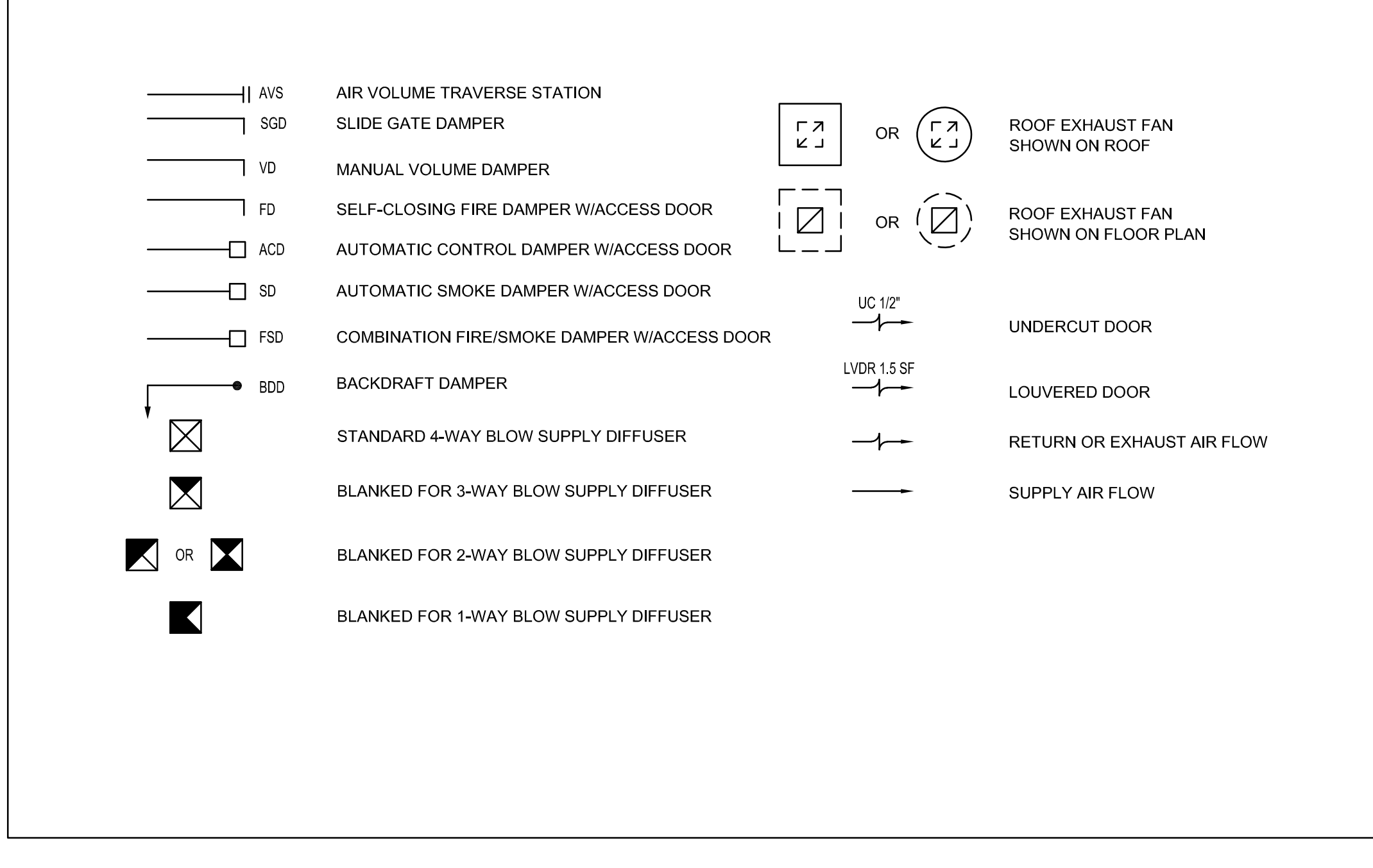
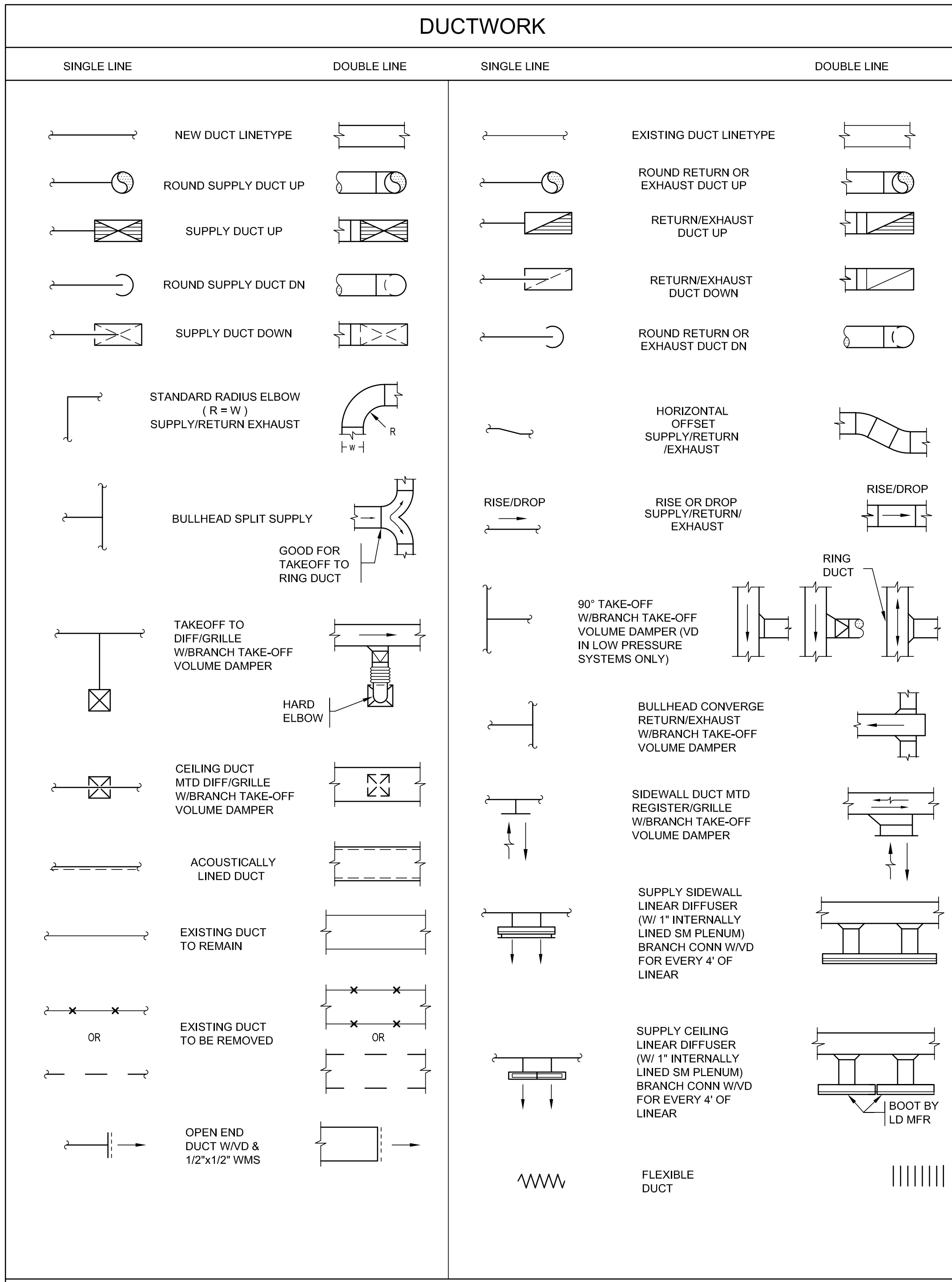
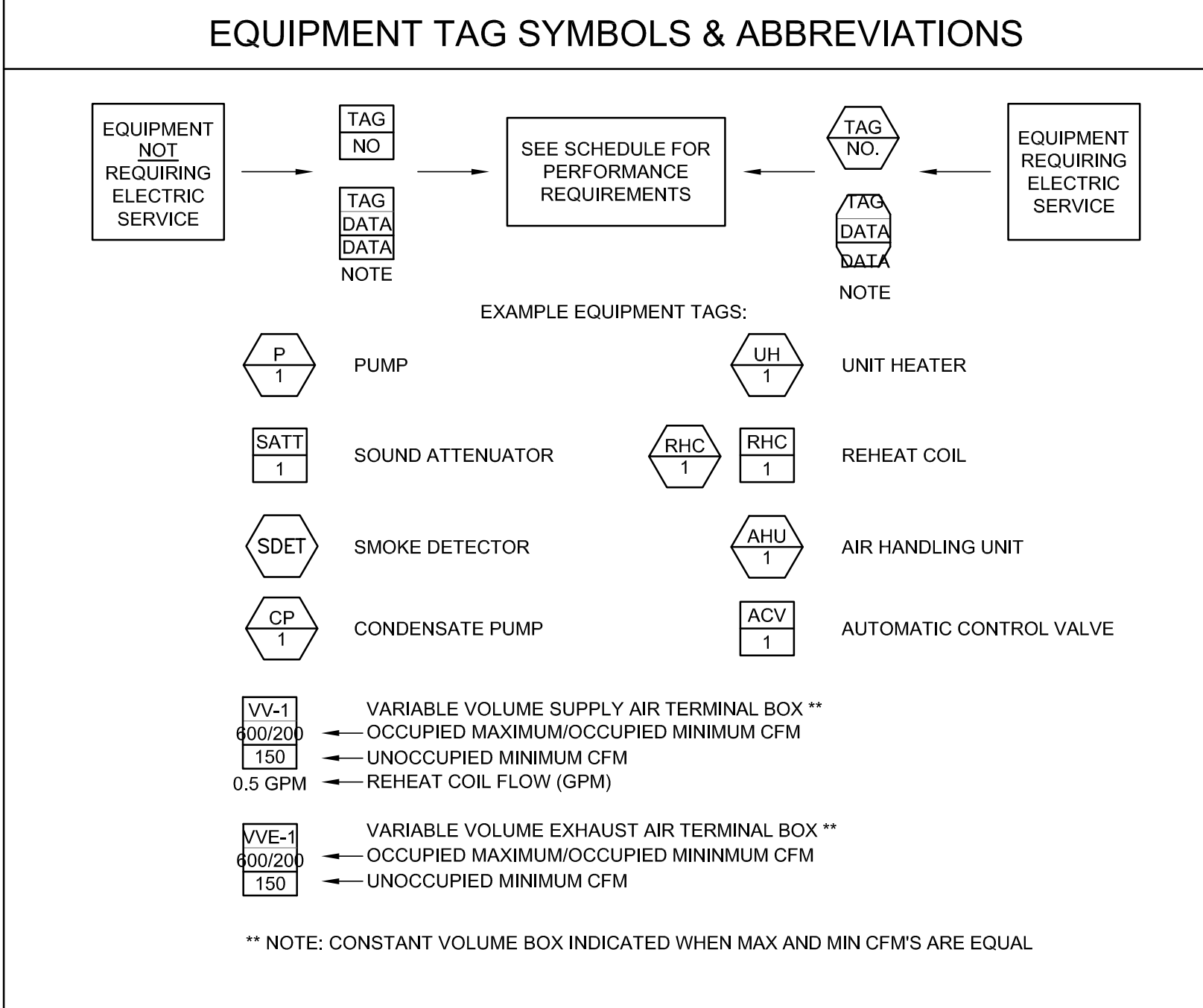
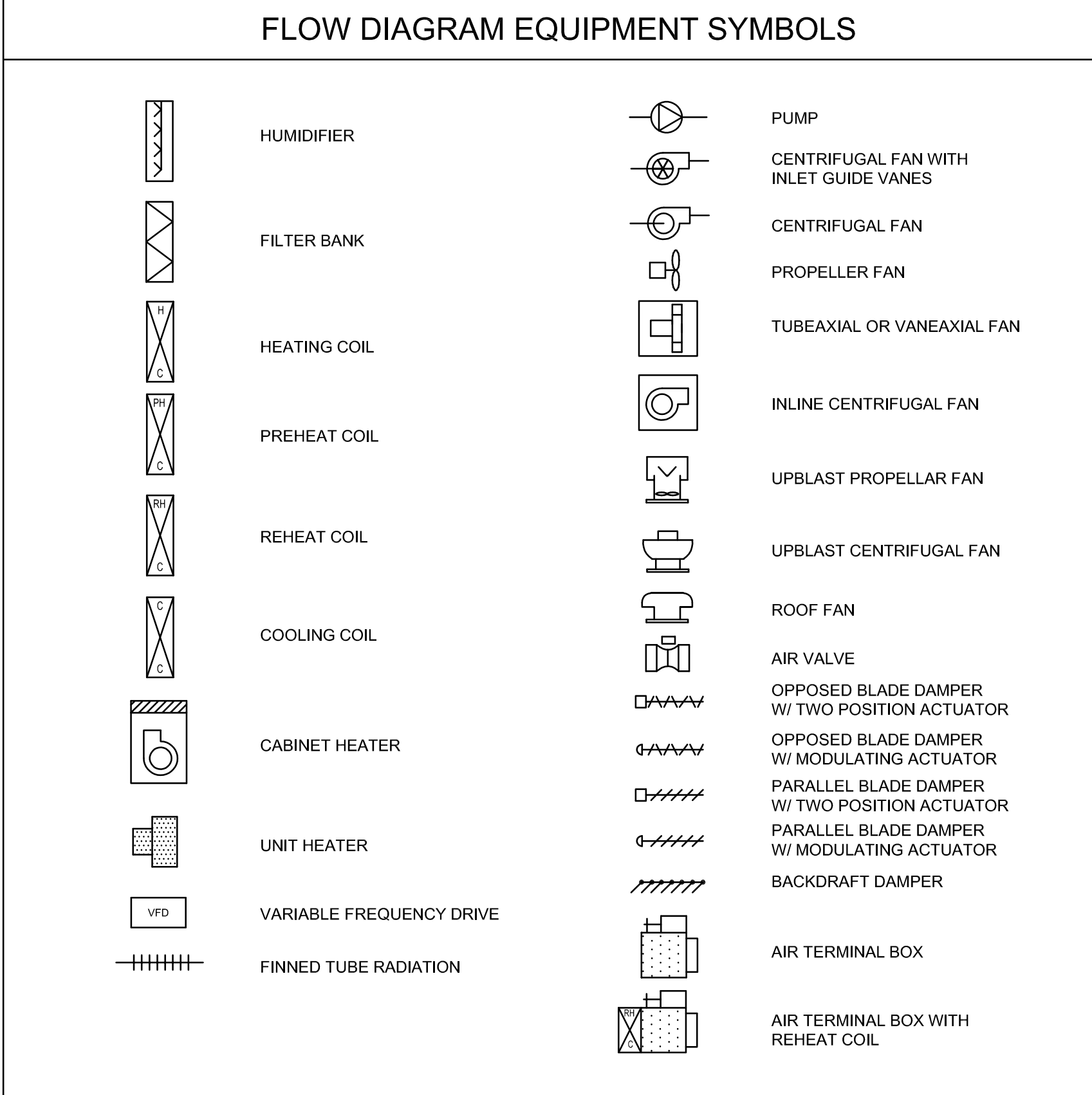
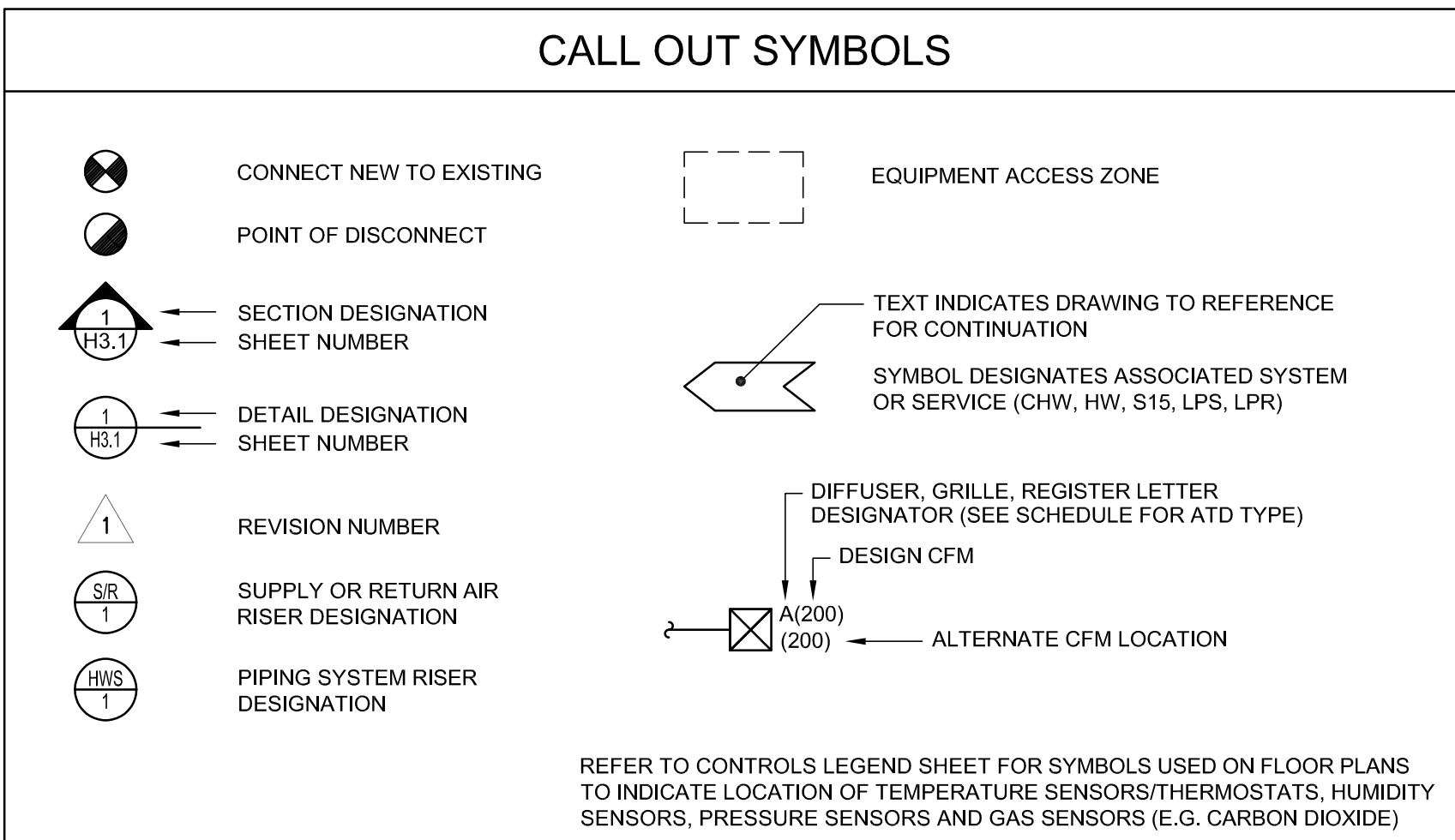
Table with columns: #, DATE, DESCRIPTION, #, DATE, DESCRIPTION. Includes ISSUES and REVISIONS sections.

WILSON HGA
Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(g) 617-338-5980 (f) 617-338-5991
Drawn By: XXX
Checked By: XXX
Approved By: XXX



Date Issued: 24 MAY 2019
Project Number: 4437-001
Drawing Scale: NTS
HVAC LEGEND AND ABBREVIATIONS
M0.01

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner: University of Rhode Island, Kingston, RI 02881, p 401.874.2444

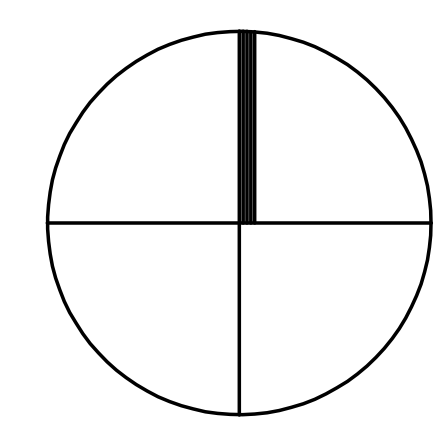
Architect: Wilson Architects Inc., 374 Congress Street, Suite 400, Boston, MA 02210, p 617.338.5990

Consultants: Mechanical / Electrical / Plumbing / Fire Protection: Vanderwell Engineers, 274 Sumner Street, Providence, RI 02904, p 401.423.7423

Consultants: Structural: Odell Engineers, Inc., 1223 Mineral Spring Avenue, Lincoln, RI 02904, p 401.724.1771

Consultants: Civil: Pare Corporation, 8 Blackstone Valley Place, Lincoln, RI 02905, p 401.334.4100

Consultants: Landscape: Carol R. Johnson Associates, Inc., 115 Broad Street, Boston, MA 02110, p 617.896.2500

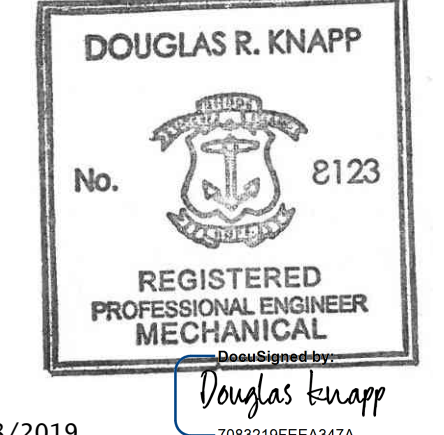


ISSUES	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DCS			



Wilson Architects Inc., 374 Congress Street, Suite 400 Boston, MA 02210, (p) 617-338-5990 (f) 617-338-5991

Drawn By: XXX
Checked By: XXX
Approved By: XXX



Date Issued: 24 MAY 2019
Project Number: 4437-001
Drawing Scale: NTS
HVAC LEGEND

M0.02

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

SCALE 3/4"=1'

SCALE 1/2"=1'

SCALE 3/8"=1'

SCALE 1/4"=1'

SCALE 1/8"=1'

SCALE 1/16"=1'

SCALE 1/32"=1'

SCALE 1/64"=1'

SCALE 1/128"=1'

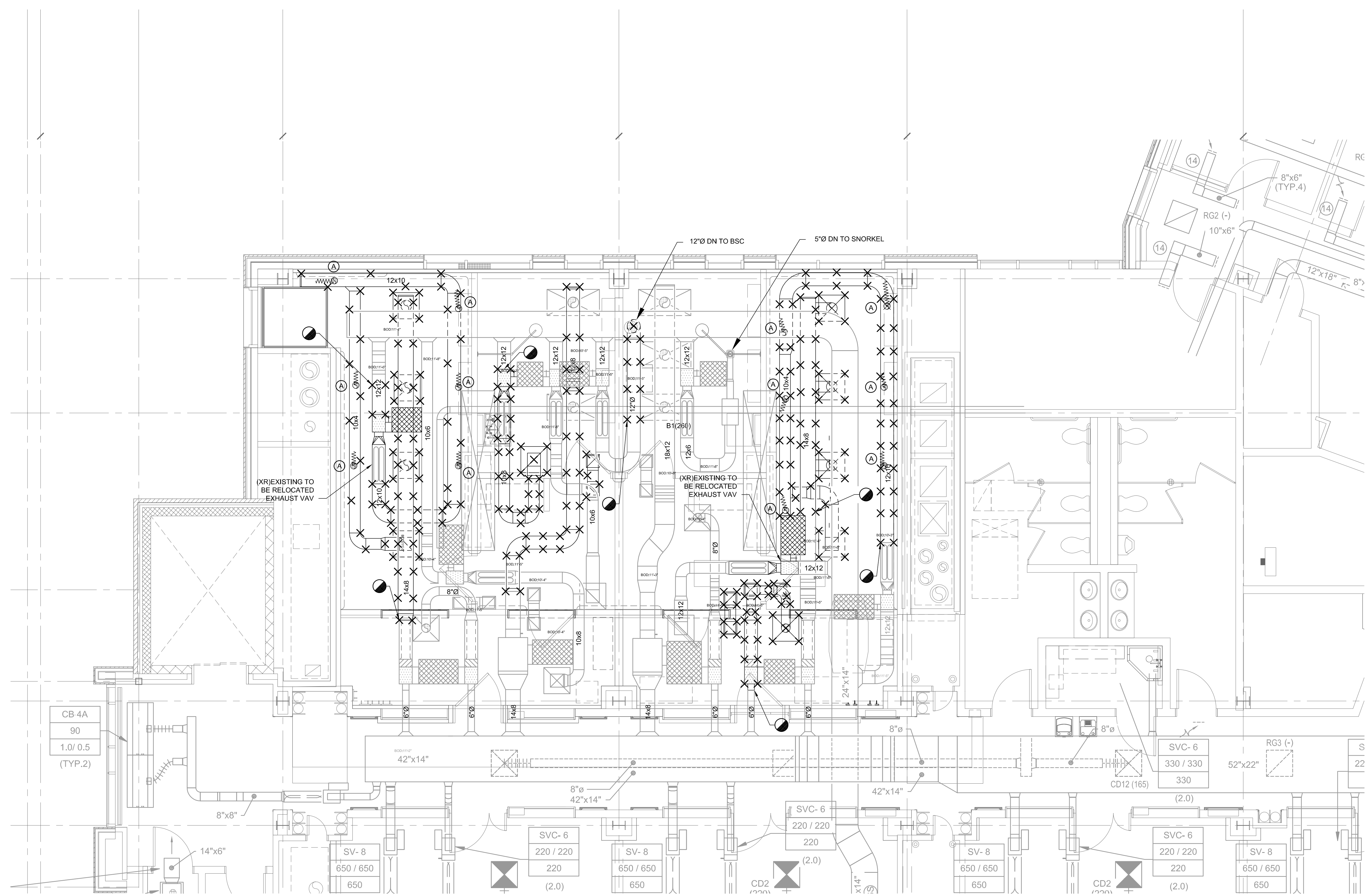
SCALE 1/256"=1'

SCALE 1/512"=1'

SCALE 1/1024"=1'

SCALE 1/2048"=1'

SCALE 1/4096"=1'



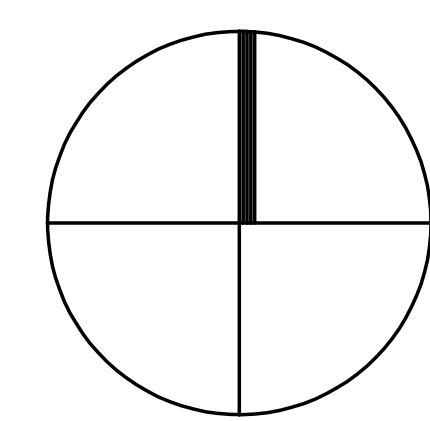
- DEMO GENERAL NOTES**
- DEMOLISH DUCTWORK AND PIPING INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, AND OTHER APPURTENANCES AS INDICATED ON DRAWING. COORDINATE UTILITY SERVICE SHUTDOWN TIME WITH OWNER TO AVOID UNEXPECTED LOSS OF SERVICES. CAP AT LOCATIONS SHOWN OR AT UTILITY MAIN.
 - REFER TO NEW WORK DRAWINGS FOR NEW LOCATIONS OF RELOCATED EQUIPMENT AND DEVICES.
- KEYED NOTES**
- (A) REMOVE EXISTING THIMBLE W/ IRIS DAMPER WHERE SHOWN AND PREPARE FOR RELOCATION.



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island Kingston, RI 02881 p 401.874.2444	Architect Wilson Architects Inc. 374 Congress Street Suite 400 Boston MA 02210 p 617.338.5990	Consultants Mechanical / Electrical / Plumbing / Fire Protection Vanderwell Engineers 274 Sumner Street Boston, MA 02210 p 617.423.7423	Consultants Structural Odeh Engineers, Inc. 1223 Mineral Spring Avenue Providence, RI 02904 p 401.724.1771	Civil Pare Corporation 8 Blackstone Valley Place Lincoln, RI 02865 p 401.334.4100	Landscape Carol R. Johnson Associates, Inc. 115 Broad Street Boston, MA 02110 p 617.896.2500
--	---	---	--	--	---

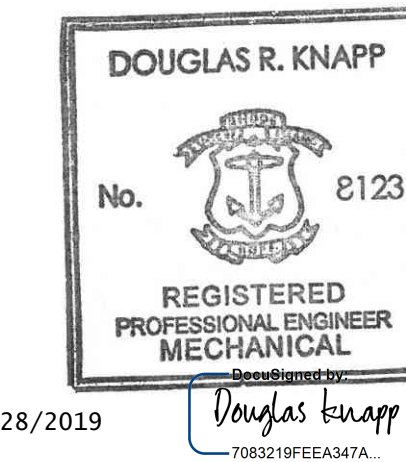


#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DGCS			
ISSUES			REVISIONS		

WILSON HGA

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

Drawn By: XXX
Checked By: XXX
Approved By: XXX



Date Issued: 24 MAY 2019
Project Number: 4437-001
Drawing Scale: 1/4" = 1'-0"
HVAC DUCTWORK DEMOLITION PLAN

M1.01

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

SCALE 3/4"=1'-0"

SCALE 1/2"=1'-0"

SCALE 3/8"=1'-0"

SCALE 1/4"=1'-0"

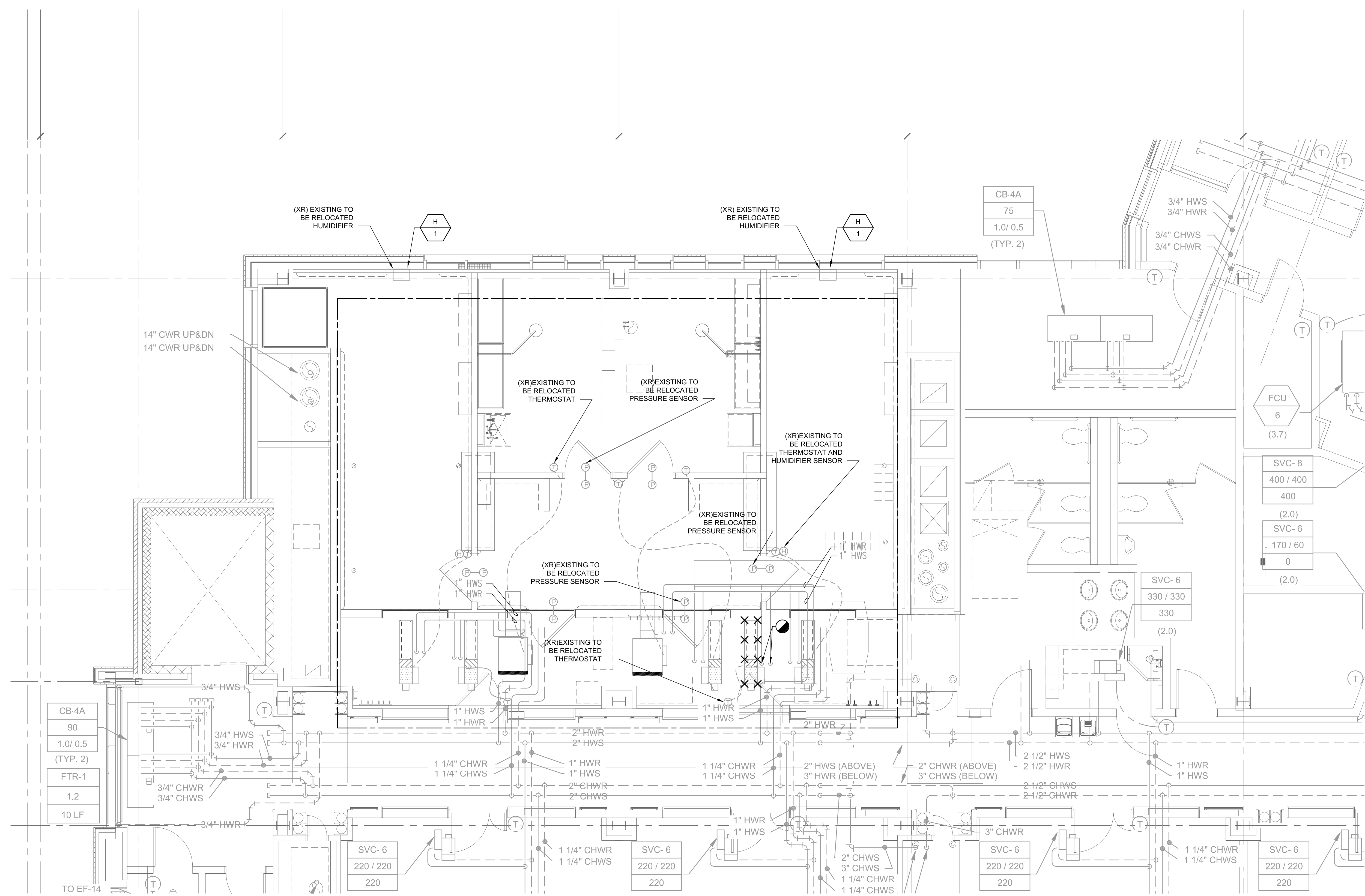
SCALE 3/16"=1'-0"

SCALE 1/8"=1'-0"

SCALE 1/16"=1'-0"

SCALE 1/32"=1'-0"

SCALE 1/64"=1'-0"



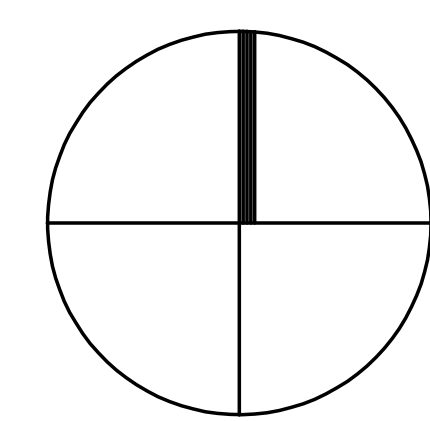
- GENERAL DEMO NOTES**
1. DEMOLISH DUCTWORK AND PIPING INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, AND OTHER APPURTENANCES AS INDICATED ON DRAWING. COORDINATE UTILITY SERVICE SHUTDOWN TIME WITH OWNER TO AVOID UNEXPECTED LOSS OF SERVICES. CAP AT LOCATIONS SHOWN OR AT UTILITY MAIN.
 2. REFER TO NEW WORK DRAWINGS FOR NEW LOCATIONS OF RELOCATED EQUIPMENT AND DEVICES.



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island Kingston, RI 02881 p 401.874.2444	Architect Wilson Architects Inc. 374 Congress Street Suite 400 Boston, MA 02210 p 617.338.5990	Consultants Mechanical / Electrical / Plumbing / Fire Protection Vanderwell Engineers 274 Sumner Street Boston, MA 02210 p 617.423.7423	Consultants Structural Odeh Engineers, Inc. 1233 Mineral Spring Avenue Providence, RI 02904 p 401.724.1771	Civil Pare Corporation 8 Blackstone Valley Place Lincoln, RI 02865 p 401.334.4100	Landscape Carol R. Johnson Associates, Inc. 115 Broad Street Boston, MA 02110 p 617.896.2500
--	--	---	--	--	---

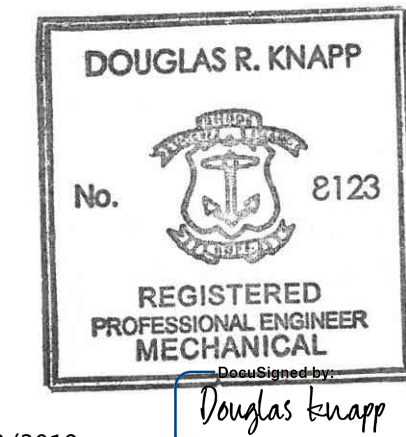


#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DOCS			
ISSUES			REVISIONS		

WILSON HGA

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

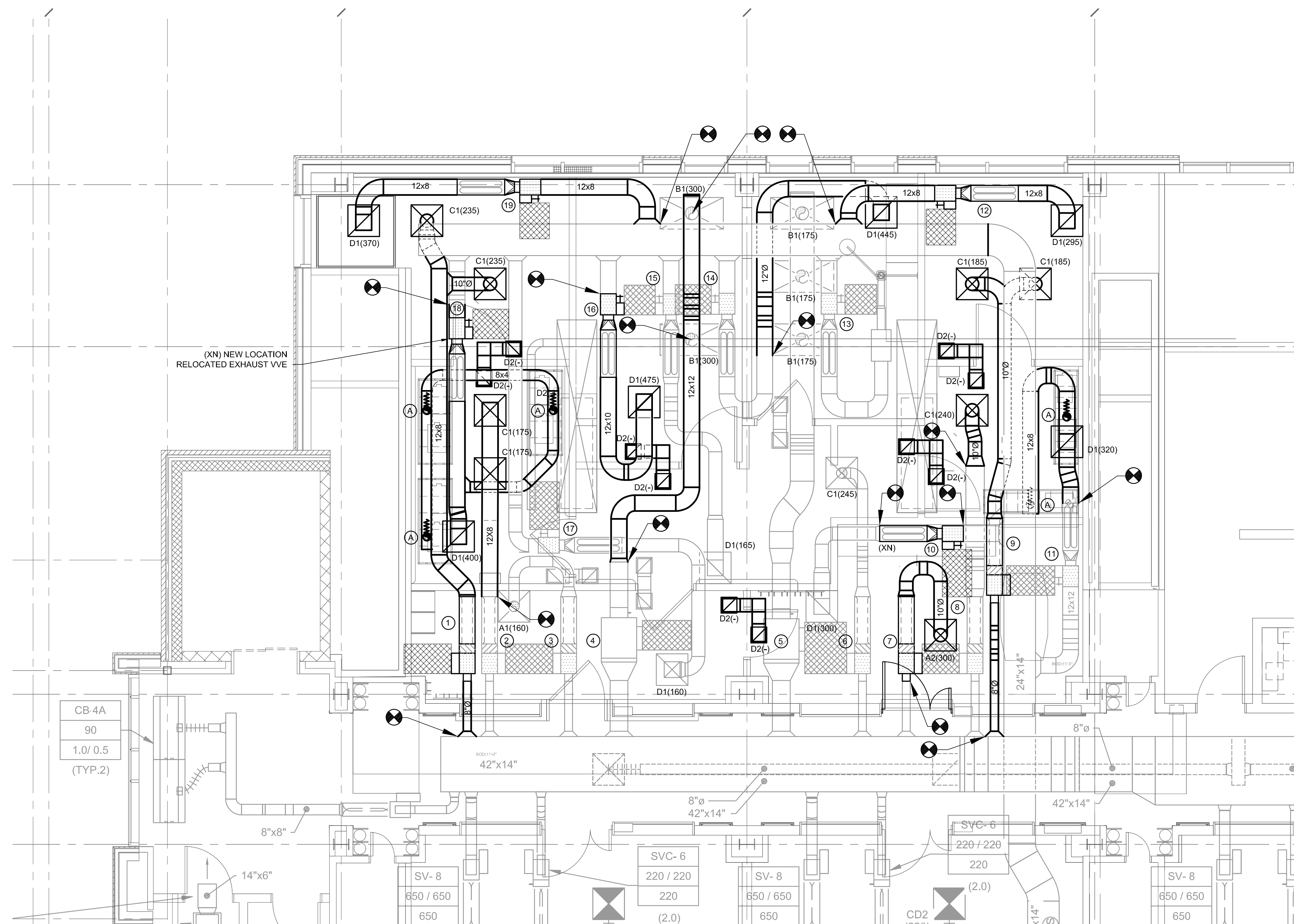
Drawn By: XXX
Checked By: XXX
Approved By: XXX



Date Issued: 24 MAY 2019
Project Number: 4437-001
Drawing Scale: 1/4" = 1'-0"
HVAC PIPING DEMOLITION PLAN

M1.02

IF THIS SHEET IS NOT 30" x 42" IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY



1	VV-2 470 470	10	(X) VVE-2 300 300
2	(X) VV-2 350 350	11	(X) VVE-3 320 320
3	(X) VV-1 160 160	12	VVE-1 295 295
4	(X) FPB-1 600 600	13	(X) VVE-1 150 150
5	(X) FPB-2 525 525	14	(X) VVE-3 445 445
6	(X) VV-1 245 245	15	(X) VVE-1 165 165
7	VV-2 300 300	16	VVE-3 475 475
8	(X) VV-2 240 240	17	(X) VVE-1 160 160
9	VV-2 370 370	18	(X) VVE-3 400 400
		19	VVE-2 370 370

GENERAL NOTES

- BALANCE DIFFUSERS TO CFM SHOWN ON PLANS. SYSTEM FANS SHALL BE BALANCED TO ACCOMMODATE NEW SYSTEM TOTAL. RE-BALANCE EXISTING DEVICES/DIFFUSERS CONNECTED TO EXHAUST. PROVIDE NEW FAN SHEAVES AND BELT AS REQUIRED. RE-BALANCE EXHAUST TO AREAS OUTSIDE SCOPE OF WORK AREA THAT ARE AFFECTED BY NEW WORK. TO PRE-CONSTRUCTION AIRFLOW.
- ALL DUCTWORK CONSTRUCTION SHALL BE COORDINATED SUCH THAT AIRFLOW OUTSIDE OF PROJECT SCOPE REMAINS AT PRE-CONSTRUCTION AIRFLOW DURING AND AFTER CONSTRUCTION.
- PROVIDE REMOTELY ADJUSTABLE BALANCING DAMPER (RVD) ACCESSIBLE BELOW FINISHED CEILING AT ALL BRANCH DUCTWORK.
- REFER TO BASE BUILDING SPECIFICATIONS DIV 20 - COMMON MECHANICAL/ELECTRICAL REQUIREMENTS AND DIV 23 - HVAC FOR ALL SYSTEMS. BASE BUILDING PROJECT - UNIVERSITY OF RHODE ISLAND, NEW CENTER FOR CHEMISTRY & FORENSIC SCIENCE 17 OCTOBER 2012

KEYED NOTES

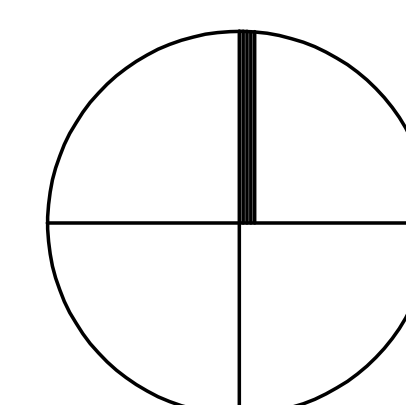
- (A) PROVIDE 6" ALLENTOWN THIMBLE W/ IRIS DAMPER (30CFM) AT EACH CAGE RACK CONNECTION.



University of Rhode Island
New Center for Chemistry
& Forensic Science

CONSTRUCTION DOCUMENTS

Owner University of Rhode Island Kingston, RI 02881 p 401.874.2444	Architect Wilson Architects Inc. 374 Congress Street Suite 400 Boston, MA 02210 p 617.338.5990	Consultants Mechanical / Electrical / Plumbing / Fire Protection Vanderwell Engineers 274 Sumner Street Boston, MA 02210 p 617.423.7423	Consultants Structural Odeh Engineers, Inc. 1223 Mineral Spring Avenue Lincoln, RI 02904 p 401.724.1771	Civil Pare Corporation 8 Blackstone Valley Place Lincoln, RI 02905 p 401.334.4100	Landscape Carol R. Johnson Associates, Inc. 115 Broad Street Boston, MA 02110 p 617.896.2500
--	--	---	---	--	---



#	DATE	DESCRIPTION	#	DATE	DESCRIPTION
2	24MAY2019	CONSTRUCTION DOCUMENTS			
1	01MAY2019	70% CONSTRUCTION DOCS			
ISSUES			REVISIONS		

WILSON HGA

Wilson Architects Inc.
374 Congress Street, Suite 400 Boston, MA 02210
(p) 617-338-5990 (f) 617-338-5991

Drawn By: XXXX
Checked By: XXXX
Approved By: XXXX

DOUGLAS R. KNAPP
No. 0123
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
5/28/2019

Date Issued: 24 MAY 2019
Project Number: 4437-001
Drawing Scale: 1/4" = 1'-0"
HVAC
NEW DUCTWORK PLAN

M2.01

