

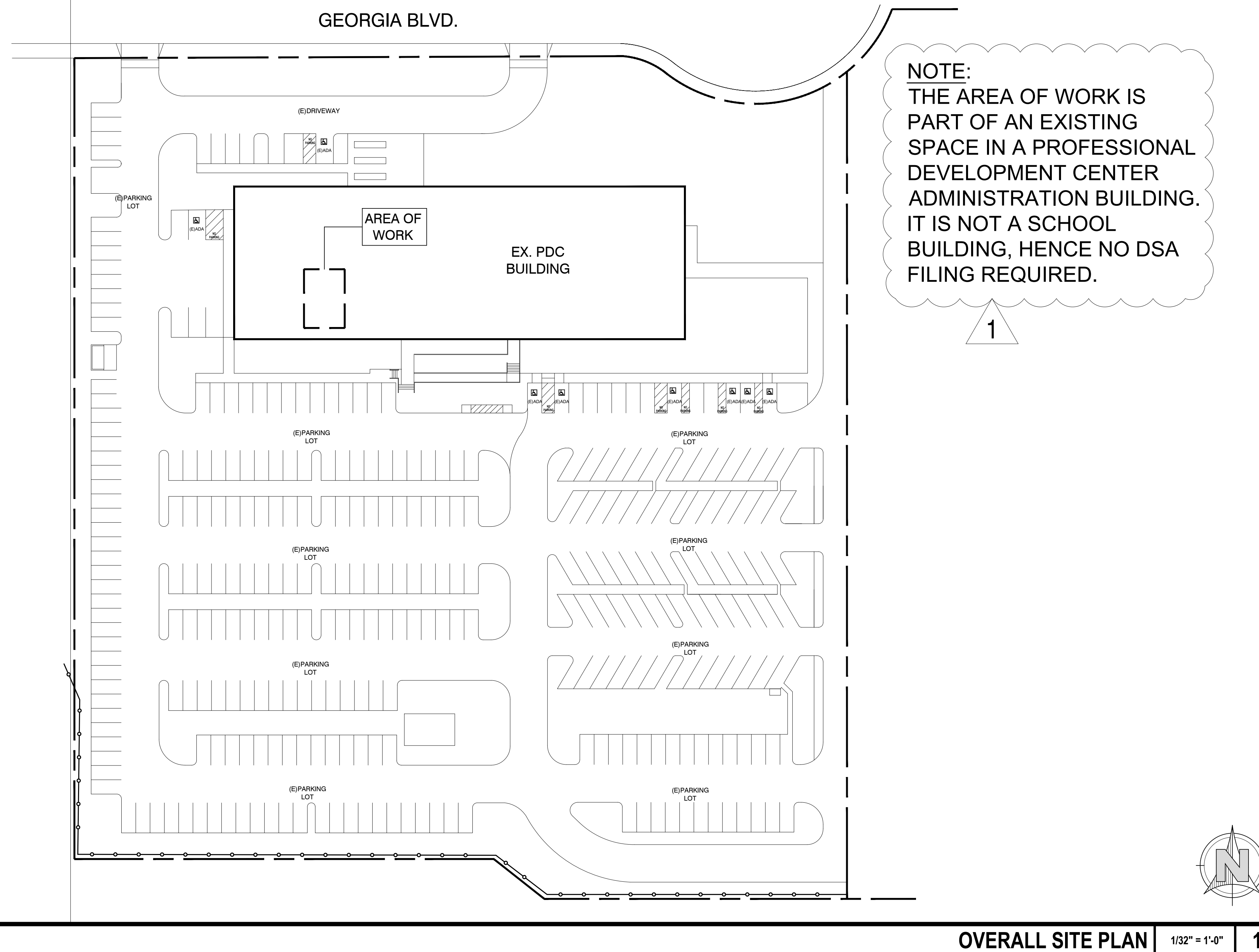
PROFESSIONAL DEVELOPMENT CENTER BLDG. INTERIOR RENOVATIONS

4030 GEORGIA BLVD., SAN BERNARDINO, CA 92407

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT



CITY Approval Stamp



SHEET INDEX

ARCHITECTURAL

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SCOPE OF WORK

PROPOSED INTERIOR RENOVATIONS TO EXISTING OFFICE SPACE

BUILDING INFORMATION

BUILDING AREA 55,408.0 SFT
T.I. WORK AREA 960.0 SFT
NUMBER OF STORIES 2
CONSTRUCTION TYPE II-B
OCCUPANCY GROUP B-S1
FLOOR AREA ALLOWANCE PER OCCUPANT FOR 'B' 100 GROSS
MAX. OCCUPANT LOAD 960 / 100 = 9.6 - 9 PERSONS MAX.
PROPOSED OCCUPANT LOAD 6 PERSONS
SPRINKLERS EXISTING SPRINKLED

PROJECT DIRECTORY

CLIENT / OWNER:
SBCUSD
777 NORTH F. STREET
SAN BERNARDINO, CA 92410
(909) 381-1100

MECHANICAL ENGINEER:
ENGINEOUS GROUP INC.
751 N. FAIR OAKS AVE., SUITE 201
PASADENA, CA 91103
(626) 696-3850
BRAD SEVERSON
brad@engineousgroup.com

ARCHITECT:
DC ARCHITECTS
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UPLAND, CALIFORNIA 91786
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RICHARD DUNCAN
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ELECTRICAL ENGINEER:
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(626) 696-3850
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devans123@earthlink.net

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES:

- Part 1 2016 California Building Standards Administrative Code (CBSAC), Title 24 C.C.R.
Part 2 2016 California Building Code (CBC), Title 24 C.C.R.
(2015 International Building Code of the International Code Council with California Amendments)
Part 3 2016 California Electrical Code (CEC), Title 24 C.C.R.
(2014 National Electrical Code of the National Fire Protection Association, NFPA)
Part 4 2016 California Mechanical Code (CMC), Title 24 C.C.R.
(2015 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials, IAPMO)
Part 5 2016 California Plumbing Code (CPC), Title 24 C.C.R.
(2015 Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials, IAPMO)
Part 6 2016 California Energy Code, Title 24 C.C.R.
Part 9 2016 California Fire Code (CFC), Title 24 C.C.R.
(2015 International Fire Code of the International Code Council)
Part 10 2016 California Existing Building Code, Title 24 C.C.R.
Part 11 2016 California Green Building Standards Code (CALGreen Code), Title 24 C.C.R.
Part 12 2016 California Referenced Standards Code (CRSC), Title 24 C.C.R.
Title 19 C.C.R., Public Safety, State Fire Marshal Regulations.

PARTIAL LIST OF APPLICABLE STANDARDS:

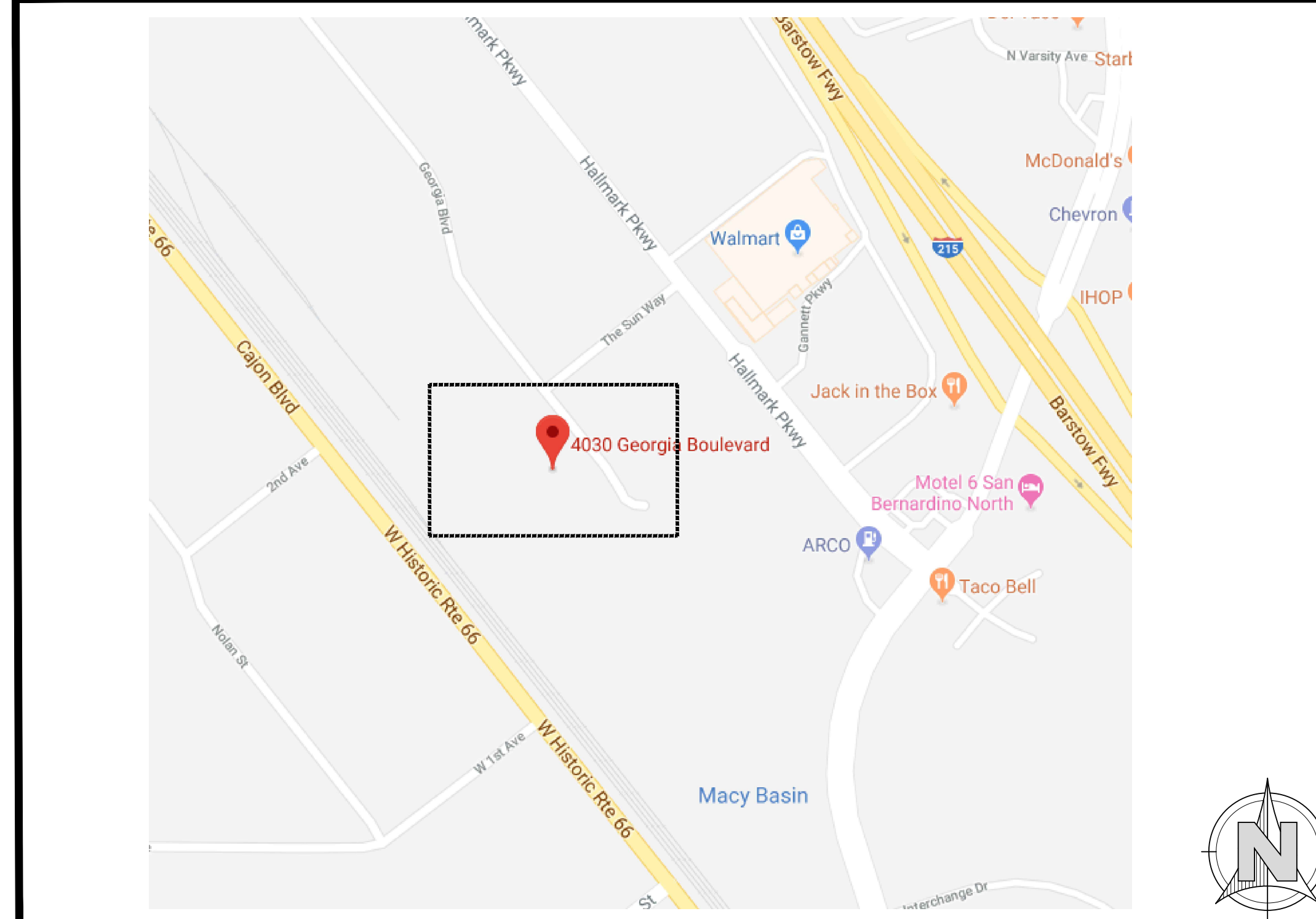
NFPA Standards - 2016 California Building Code (SFM) Chapter 35

- NFPA 17 Dry Chemical Extinguishing Systems 2016 Edition
NFPA 17A Wet Chemical Extinguishing Systems 2016 Edition
NFPA 20 Stationary Pumps 2016 Edition
NFPA 24 Private Fire Service Mains (California Amended) 2016 Edition
NFPA 72 National Fire Alarm Code (California Amended) 2016 Edition
NFPA 80 Fire Door and Other Opening Protectives 2016 Edition
NFPA 2001 Clean Agent Fire Extinguishing Systems 2015 Edition

ABBREVIATIONS

ARCH	ARCHITECTURAL	EQUIP	EQUIPMENT	MIN	MINIMUM	RO	ROUGH OPENING
BD	BOARD	EST	EXISTING	MB	MARKERBOARD	SB	SPLASH BLOCK
BETW	BETWEEN	EXP	EXPANSION	MISC	MISCELLANEOUS	SC	SOLID CORE
BLKG	BLOCKING	EXT	EXTERIOR	MTD	MOUNTED	SECT	SECTION
BOT	BOTTOM			MTG	MOUNTING	SEG	SEGMENT
BS	BOTH SIDES			MULL	MULLION	SSE	SEMI GLOSS ENAMEL
BUR	BUILT UP	FA	FIRE ALARM	N/A	NOT APPLICABLE	SHR	SHOWER
BU	BUILT-UP ROOFING	FIN	FINISH	NTS	NOT TO SCALE	SHTG	SHEATHING
		FLR	FLOOR			SK	SINK
C/C	CENTER TO CENTER	FOF	FACE OF FINISH	OC	ON CENTER	SPEC	SPECIFICATION
CAB	CABINET	FOS	FACE OF STUD	OD	OUTSIDE DIAMETER	SO	SQUARE
CARP	CARPET	FS	FLOOR SINK	O.H.	OPPOSITE HAND	SSK	SERVICE SINK
CB	CHALKBOARD	FT	FOOT OR FEET	OHWS	OVAL HEAD WOOD SCREW	ST	STREET
CEM	CEMENT			OPNG	OPENING	STAG	STAGGERED
CER	CERAMIC	GL	GLASS	OPP	OPPOSITE	STD	STANDARD
CURB	CURB FACE	GLB	GLUE LAMINATED BEAM	OPT	OPTIONAL	STIF	STIFFENER
CI	CAST IRON PIPE	GR BM	GRADE BEAM	ORIG	ORIGINAL	STIR	STIRRUP
CIP	CONSTRUCTION JOINT	GYP	GYP SUM	O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED	STL	STEEL
CL	CENTERLINE			O.F.O.I.	OWNER FURNISHED, OWNER INSTALLED	STOR	STORAGE
CLG	CLEAR	H&CW	HOT & COLD WATER			STRUC	STRUCTURAL
CLM	CONCRETE MASONRY UNIT	HB	HOSE BIB ADA			SUSP	SUSPENDED
CLN	CLEANOUT	HD	HEAD	PERF	PERFORATED	SYM	SYMMETRICAL
CO	COLUMN	HDR	HEADER	PIV	POST INDICATOR VALVE	T&B	TOP & BOTTOM
COL	COLUMN	HDW	HARDWARE	PKG	PACKAGE	T&G	TONGUE & GROOVE
COMPO	COMPOSITION	HM	HOLLOW METAL	PL	PLASTER	TB	TACKBOARD
CONC	CONCRETE	HORIZ	HORIZONTAL	PLAS	PLASTER	TOP OF CURB	TOP OF CURB
CONN	CONNECTION	HR	HEATER	P.L.	PROPERTY LINE	TEL	TELEPHONE
CONSTR	CONSTRUCTION	HW	HOT WATER	PLBG	PLUMBING	TEMP	TEMPERED
CONT	CONTINUOUS	HYD	HYDRANT	PLYWD	PLYWOOD	TERM	TERMINAL
CP	CONTROL PANEL	ID	INSIDE DIAMETER	PNL	PANEL	THICK	THICKNESS
CSK	COUNTERSINK	IN	INCH	PR	PAIR	THRES	THRESHOLD
		INCH	INCH	PREFAB	PREFABRICATED	THRU	THROUGH
DBL	DOUBLE	INSUL	INSULATION	PREFIN	PREFINISHED	TOP OF WALL	TOP OF WALL
DEC	DECOMPOSED	INT	INTERIOR	PRELIM	PRELIMINARY	TOP OF PAVING	TOP OF PAVING
DEMO	DEMOLITION	INV	INVERT	PROP	PROPERTY	TYP	TYPICAL NOTED
DEPT	DEPARTMENT			PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS OTHERWISE
DET	DETAIL	KD	KNOCK DOWN	PSI	POUNDS PER SQUARE INCH	VFY	VERIFY
		KO	KNOCK OUT	PT	POINT	VT	VINYL TILE
EA	EACH	LAM	LAMINATED	PVC	POLYVINYLCHLORIDE	WD	WOOD
ELEV	ELEVATION	LAV	LAVATORY	RA	RETURN AIR	WDW	WINDOW
		LF	LINEAR FOOT	RAD	RADIUS		

VICINITY MAP



GENERAL NOTES

- CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR BEING FAMILIAR WITH AND ENSURING THAT ALL WORKMANSHIP AND/OR MATERIALS MEET C.B.C. STANDARDS OF THE LATEST 2016 EDITION, AS WELL AS, CODES, ACCESSIBILITY ORDINANCES, AND STANDARDS OF THE DIVISION OF THE STATE ARCHITECT OR OTHER GOVERNING AGENCIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING & OBTAINING BUILDING PERMITS AS REQUIRED BY THE LOCAL BUILDING AND SAFETY DEPARTMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FILING NECESSARY APPLICATIONS FOR PERMITS AFFECTING THE TRADES REQUIRED BY THE RESPONSIBLE JURISDICTIONAL AGENCY. EACH SUBCONTRACTOR SHALL PROVIDE ANY ADDITIONAL DRAWINGS, SKETCHES, SCHEDULES, CALCULATIONS, ETC. AS REQUIRED BY SUCH AGENCIES.
- ALL DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE BY EACH SUBCONTRACTOR AND/OR SUPPLIER WHICH AFFECTS THE WORK. EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR BEING FAMILIAR AND COMPLYING WITH FOR CORRECT INSTALLATION AND USE OF ALL MATERIALS. ALL MATERIALS SHALL BE NEW AND OF FIRST QUALITY. NO USED MATERIALS OR SECONDS WILL BE PERMITTED UNLESS RE-USE OF EXISTING FIXTURES/ MATERIAL ARE NOTED ON THE DRAWINGS.
- NO CHANGES OR VARIATIONS FROM THESE PLANS MAY BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE ARCHITECT OR OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION AND SHALL PROVIDE ADEQUATE SHORING, DURING CONSTRUCTION. SAFETY AND BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO ATTENTION OF THE ARCHITECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
- ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE ARCHITECT SO THAT THE PROPER REVISIONS CAN BE MADE. MODIFICATIONS OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT OR OWNER.
- THESE PLANS ARE THE EXCLUSIVE PROPERTY OF THE ARCHITECT. ANY REPRODUCTION OR USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE ARCHITECT IS PROHIBITED. THE ARCHITECT ASSUMES NO LIABILITY FOR THE UNAUTHORIZED USE OF THESE PLANS.
- ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS 2016 CBC.
- SUBSTITUTIONS SHALL BE CONSIDERED CONSTRUCTION CHANGE DOCUMENT AND SHALL BE APPROVED BY THE OWNER AND ARCHITECT PRIOR TO FABRICATION.
- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER BEFORE PROCEEDING WITH THE WORK.

REVISIONS

2/2/2020 - BACK CHECK COMMENTS

DC | ARCHITECTS

820 N. MOUNTAIN AVENUE
SUITE 200
UPLAND, CA 91786

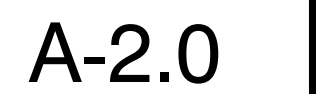
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GENERAL NOTES
&
OVERALL SITE PLAN

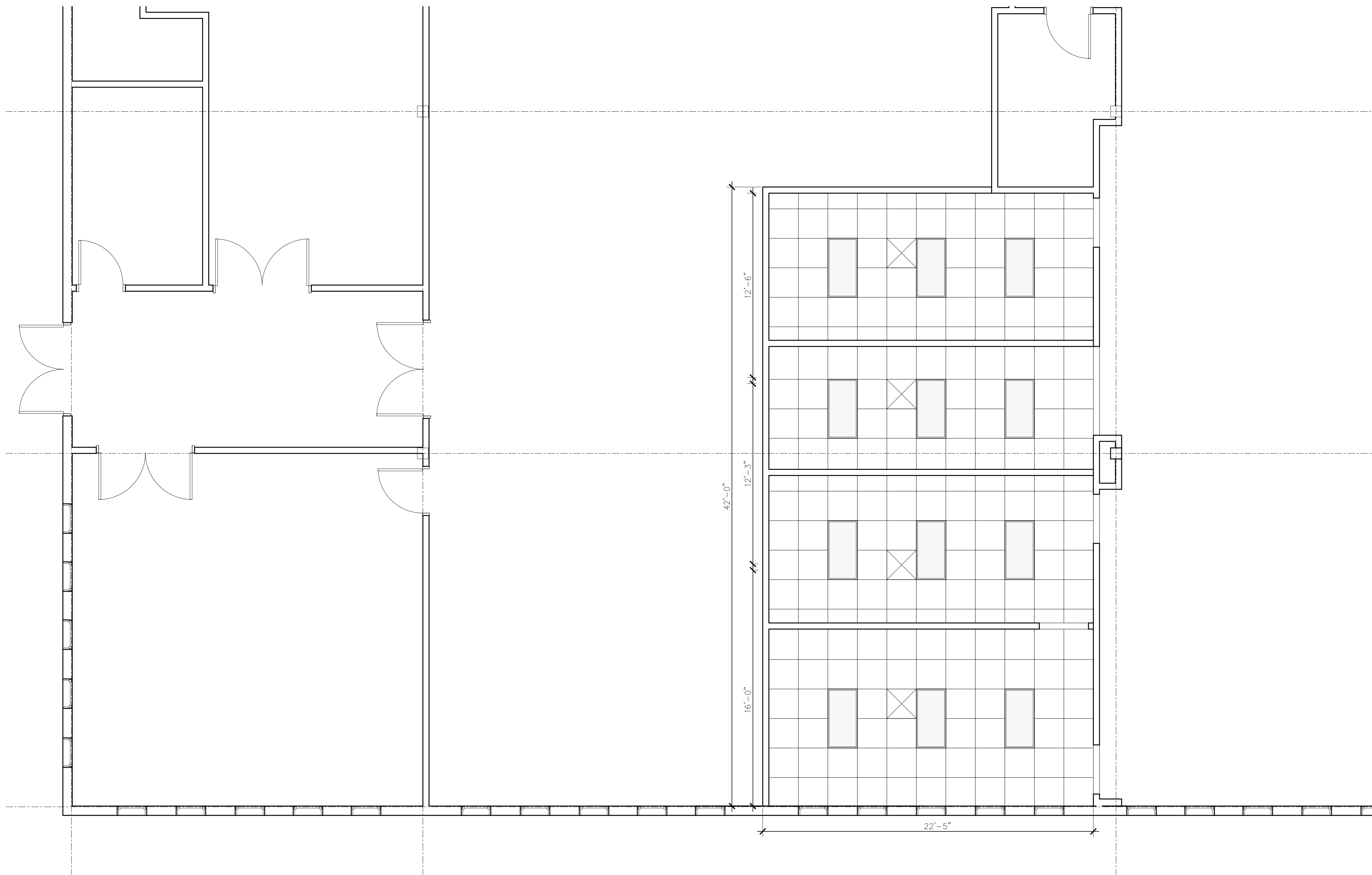
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SCALE:

A-1.0



ENLARGED DEMOLITION FLOOR PLAN	1/4" = 1'-0"	3
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ENLARGED FLOOR PLAN	1/4" = 1'-0"	2
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RCP PLAN

1/8" = 1'-0"

1

RCP KEY NOTES

- 01 EXISTING CEILING TO REMAIN. EXISTING CEILING HEIGHT TO REMAIN. GC TO REPLACE DAMAGED CEILING PANELS W/ SAME DURING CONSTRUCTION. GC TO MAKE NECESSARY ADJUSTMENTS TO CEILING PANELS ABOVE NEW INTERIOR PARTITIONS. REFER TO CEILING DETAILS ON SHEET A-10.1 FOR ADDITIONAL INFORMATION.
- 02 MECHANICAL DUCTS AND REGISTERS SEE MECH'L PLANS.

RCP LEDGEND

- EX. SUSPENDED FLUORESCENT LIGHT
- 2'-0"x 2'-0" SUSPENDED LAY-IN CEILING SYSTEM
BURNING CHARACTERISTICS = 25 OR LESS
SMOKE = 450 OR LESS. SEE SHEET A-10.1
- EX. MECHANICAL DIFFUSERS. SEE MECH. DWGS.



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REFLECTED CEILING
PLAN

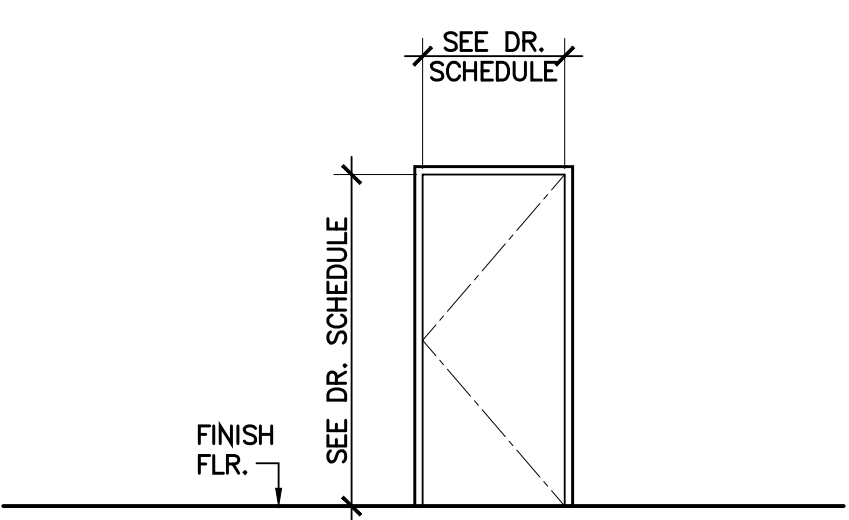
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DATE: 03.07.2019
SCALE:

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DOOR SCHEDULE

OPENING NUMBER	DOORS					FRAME		DETAILS			LABEL (MINUTES)	GLASS TYPE	HARDWARE	REMARKS		
	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	MATERIAL	FINISH	HEAD	JAMB					THRESHOLD OR SILL	
									DET	SHT					DET	SHT
D1		3'-0"	7'-0"	-	-	PTD	-	PTD	2	A-7.1	1	A-7.1	--	--	--	SEE DOOR HARDWARE NOTE # 3

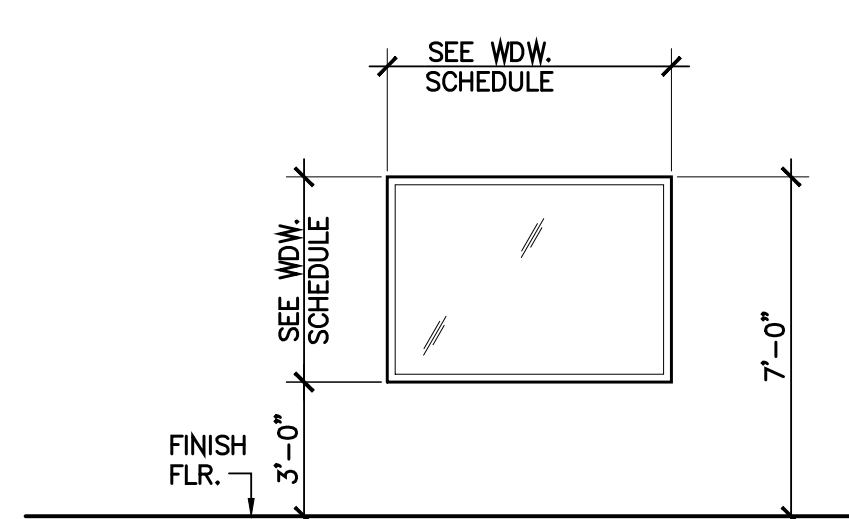
DOOR TYPE



WINDOW SCHEDULE

OPENING NUMBER	WINDOW		FRAME		TYPE	DETAILS				GLASS TYPE	LABEL (MINUTES)	AREA (S.F.)	EXPOSURE	
	WIDTH	HEIGHT	MATERIAL	FINISH		HEAD	JAMB	SILL	MULLION					
						DET	SHT	DET	SHT					DET
W1	6'-0"	4'-0"	HM	PTD	1	3	A-7.1	4	A-7.1	4	A-7.1	B	24.0	

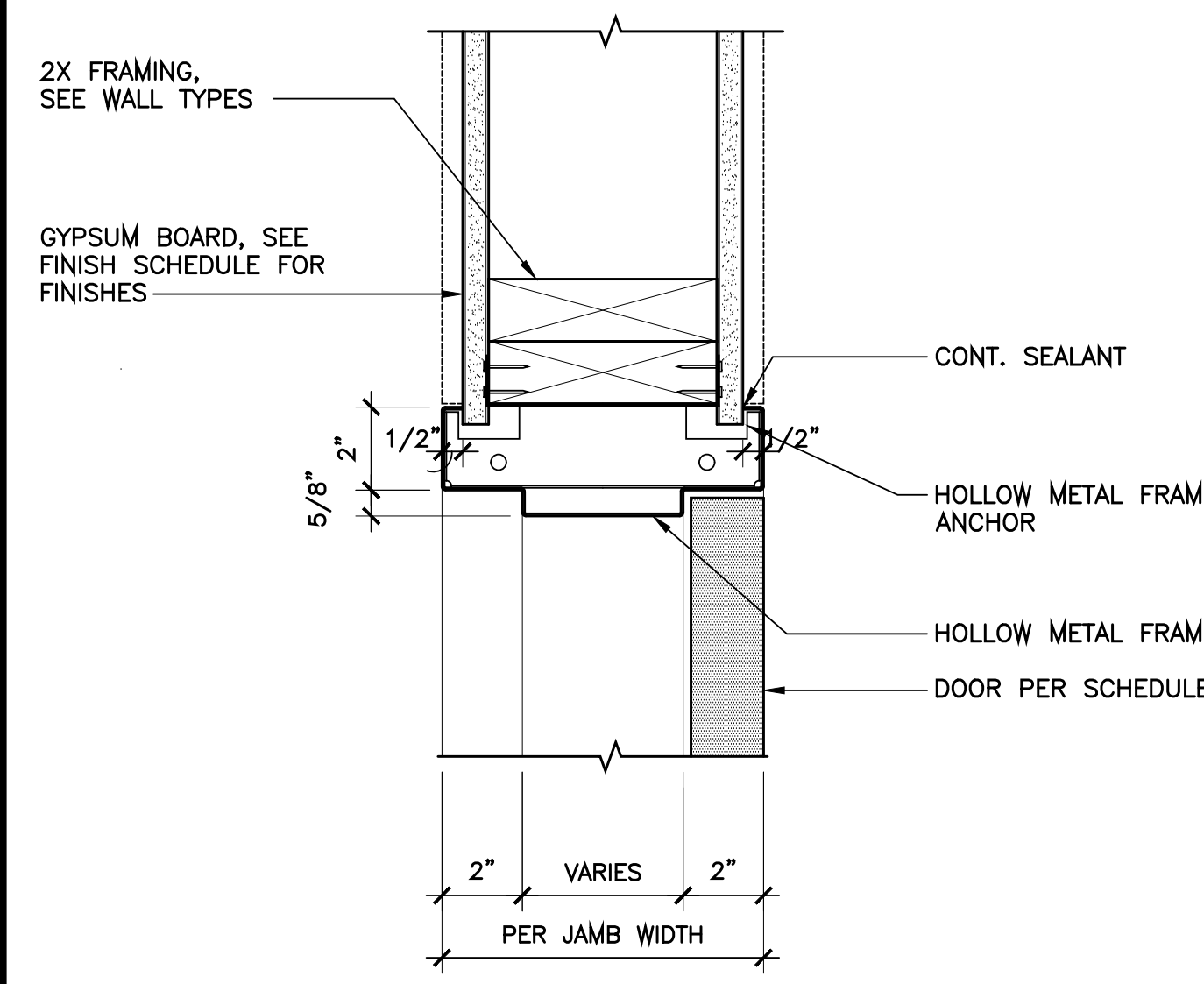
WINDOW TYPES



HOLLOW METAL DOOR JAMB

3" = 1'-0"

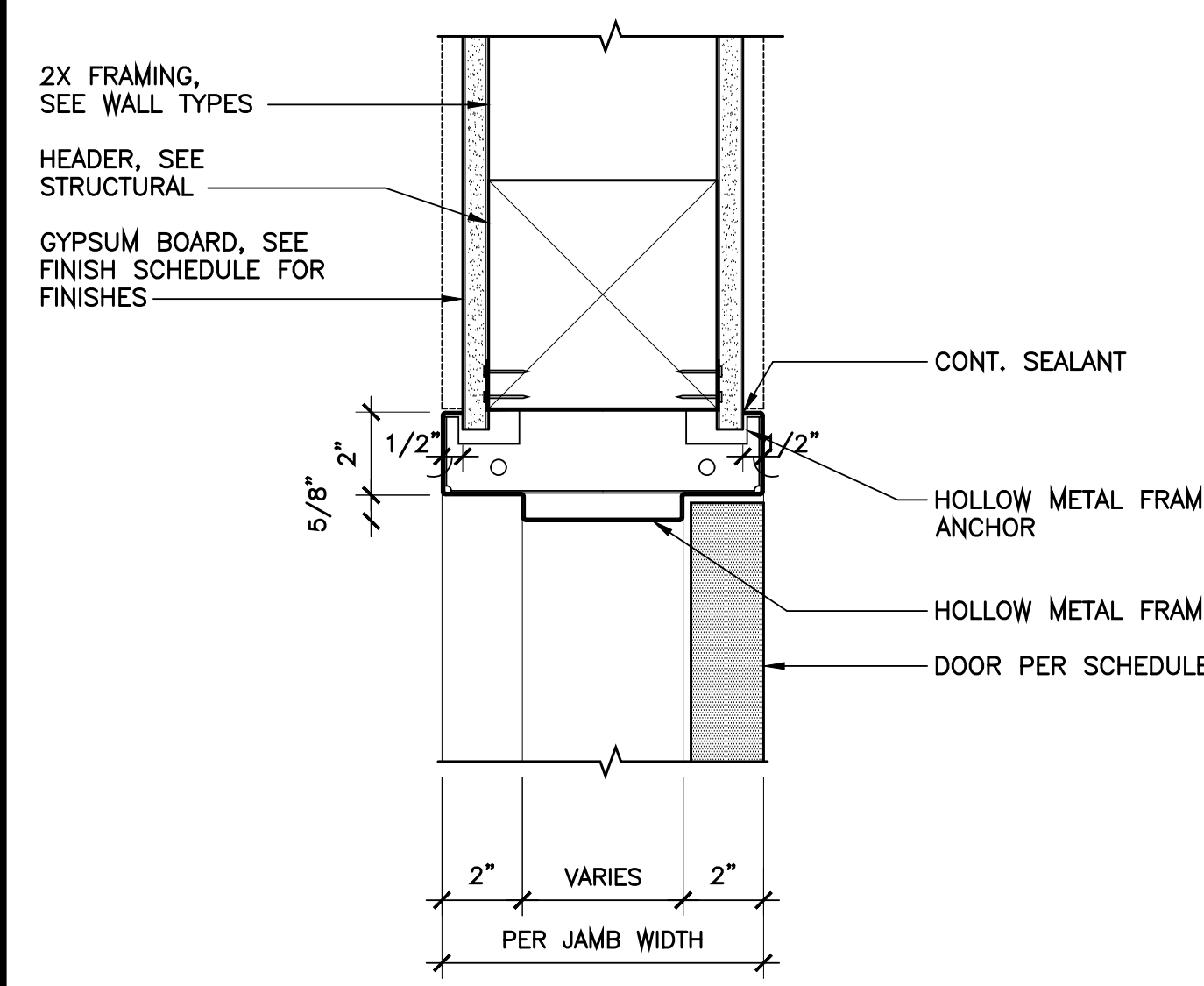
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HOLLOW METAL DOOR HEAD

3" = 1'-0"

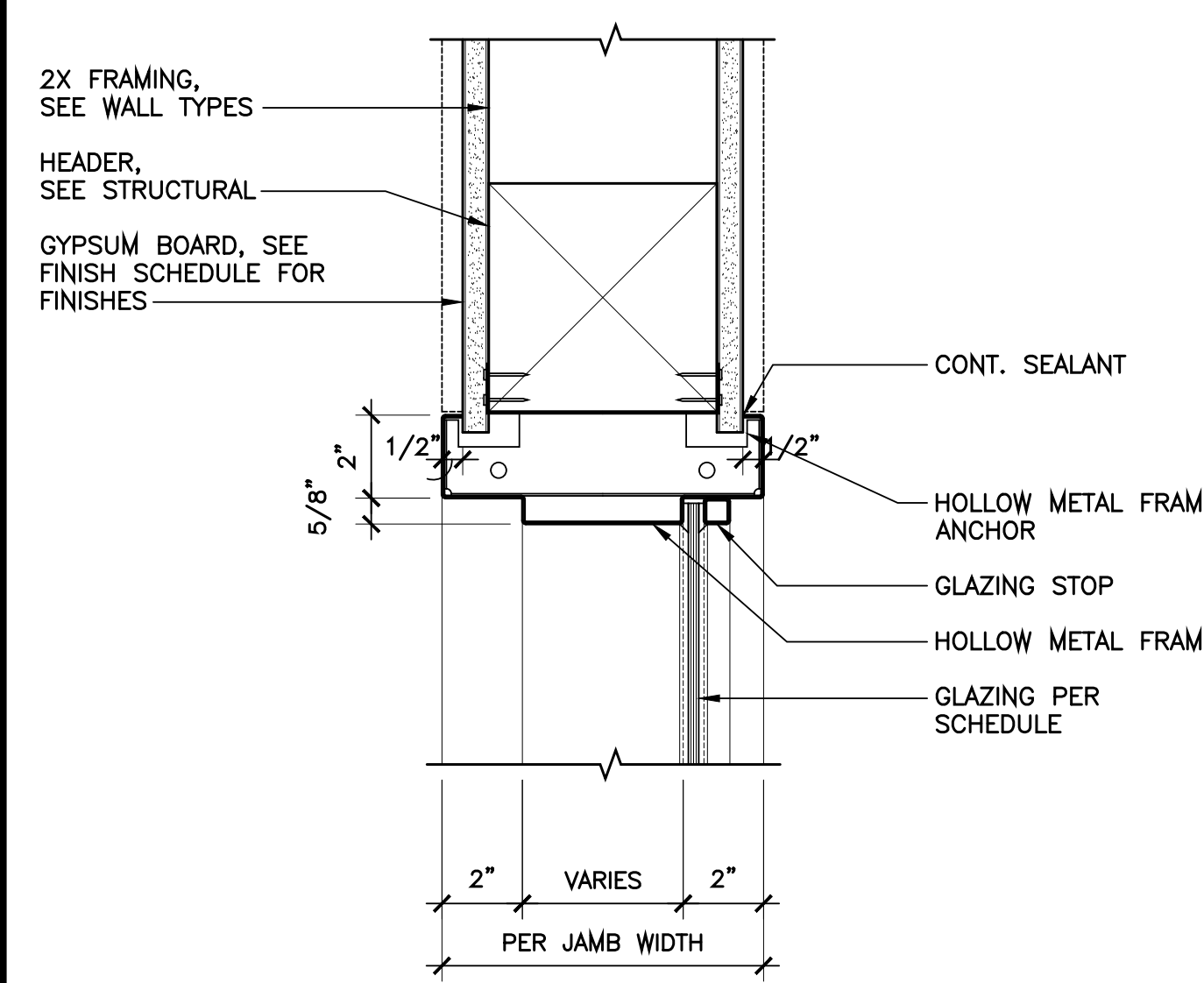
2



HOLLOW METAL WINDOW HEAD

3" = 1'-0"

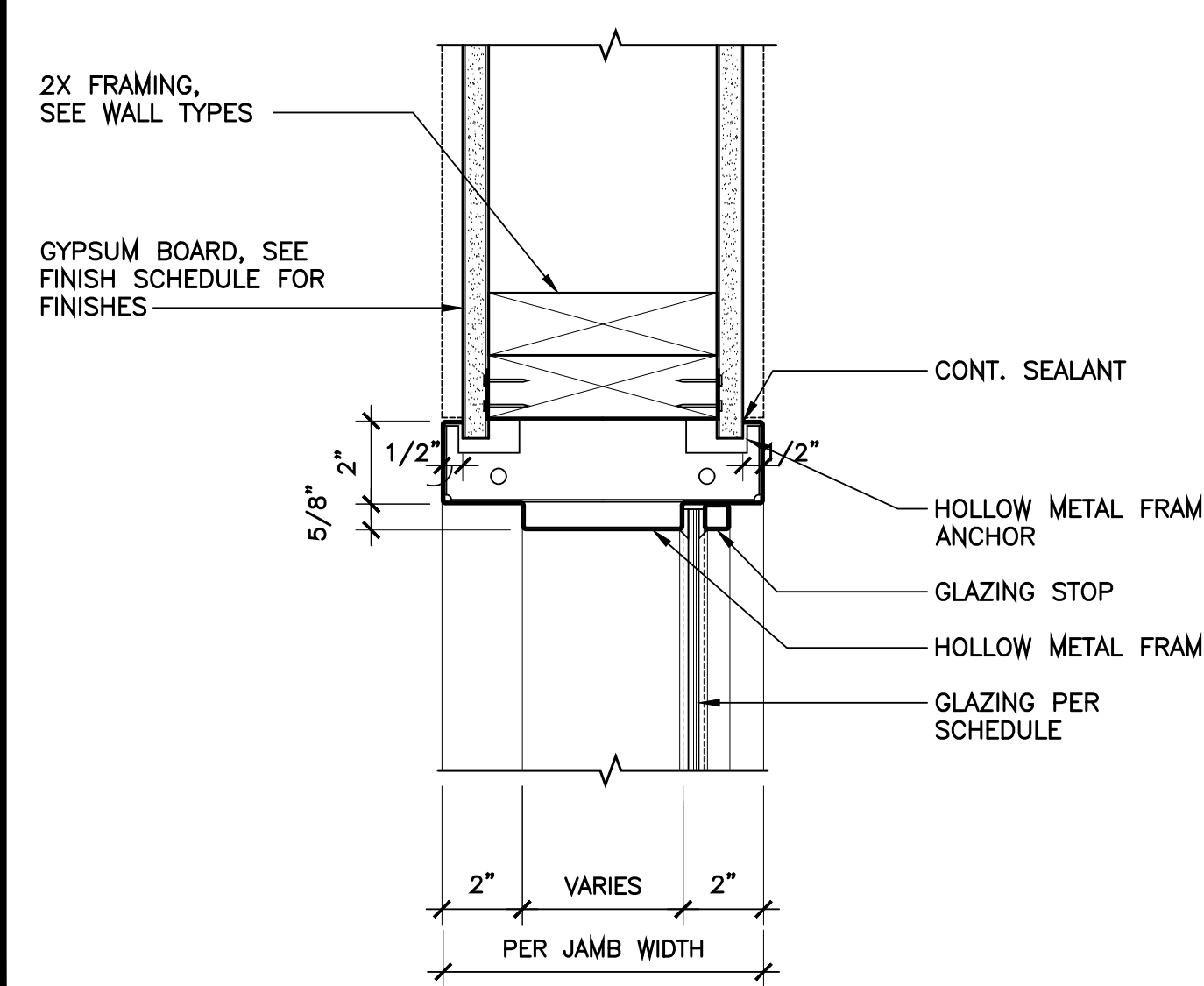
3



HOLLOW METAL WINDOW JAMB/SILL

3" = 1'-0"

4



ROOM FINISH NOTES

DOOR & WINDOW NOTES

DOOR HARDWARE NOTES

GLASS TYPE AND NOTES

ABBREVIATIONS

REVISIONS

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DOOR AND WINDOW
SCHEDULES
& TYP. DETAILS

DATE: 03.07.2019
SCALE: 1/8"=1'-0"

2019.001
DESIGNED BY: PS
DATE: 03.07.2019
SCALE: 1/8"=1'-0"

A-7.1

AIR CONDITIONING REQUIREMENTS

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CALIFORNIA MECHANICAL CODE, 2016 EDITION TITLE 24 PART 5

1. A. FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT AND FACILITIES NECESSARY TO FURNISH, FABRICATE, DELIVER, AND STORE AND INSTALL ALL WORK NOTED ON THE DRAWINGS AND/OR SPECIFIED HEREIN.

B. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL WORK NECESSARY TO MAKE A COMPLETE SYSTEM WHETHER OR NOT SUCH DETAILS ARE MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE PLANS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE SYSTEM, EXCEPTING ONLY THOSE PORTIONS THAT ARE SPECIFICALLY MENTIONED HEREIN OR PLAINLY MARKED ON THE ACCOMPANYING DRAWINGS AS BEING INSTALLED UNDER ANOTHER SECTION OF THE SPECIFICATIONS.

2. WORKMANSHIP: THE WORK SHALL BE ACCOMPLISHED IN A THOROUGH AND WORKMAN-LIKE MANNER SATISFACTORY TO AND MEETING THE APPROVAL OF THE OWNER AND ARCHITECT.

3. MATERIALS: ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KIND, FREE FROM ALL DEFECTS AND OF THE MAKE AND QUALITY SPECIFIED.

4. SITE INSPECTION: CONTRACTOR SHALL VISIT THE SITE OF WORK PRIOR TO SUBMISSION OF HIS BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS & EXACT NATURE OF THE WORK. SUBMISSION OF A BID KNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL SYSTEM. NO CHANGES IN CONTRACT WILL BE MADE TO ACCOMMODATE OR ALLOW EXTRA FUNDS FOR ANY OMISSION, WHICH RESULTS FROM A FAILURE TO THOROUGHLY MAKE THE EXAMINATION.

5. CODES AND PERMITS: ALL MECHANICAL EQUIPMENT, INSTALLATION, ETC., SHALL CONFORM WITH ALL APPLICABLE CODES AND ORDINANCES AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION, INCLUDING CALIFORNIA TITLE 24. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS. COPIES OF ALL PERMITS AND INSPECTION REPORTS SHALL BE SUBMITTED TO THE ARCHITECT.

6. AS-BUILTS: CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILTS TRANSPARENCIES WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE AND PAYMENT.

7. GUARANTEE: CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE ALL LABOR AND MATERIALS ON ALL WORK AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER COMPLETION.

8. SUBMITTALS: CATALOG INFORMATION AND CUTS OF ALL EQUIPMENT AND DEVICES SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW (SIX COPIES OF EACH).

9. COORDINATION: THE DRAWINGS ARE DIAGNOSTIC AND INTENDED TO SHOW SCOPE. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE BEST ARRANGEMENT OF ALL DUCTS, PIPES, CONDUIT, ETC. LOCATION OF EXISTING PIPING IS APPROXIMATE. CONTRACTOR SHALL VERIFY THEIR LOCATION PRIOR TO BEGINNING WORK OF THIS SECTION AND SHALL MAKE MODIFICATIONS AND ADJUSTMENTS REQUIRED TO INSTALL THE WORK OF THIS SECTION.

10. CUTTING AND PATCHING: ALL CUTTING AND PATCHING REQUIRED OF THE STRUCTURE (NEW OR EXISTING) SHALL BE PROVIDED UNDER OTHER SECTIONS OF THE WORK. PROVIDE NECESSARY REQUIREMENTS TO THE PROJECT SUPERINTENDENT.

11. CLEANUP: UPON COMPLETION OF THE WORK UNDER THIS SECTION, THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIALS, EQUIPMENT AND DEBRIS INCIDENTAL TO THIS WORK AND LEAVE THE PREMISES CLEAN AND ORDERLY.

12. DUCTWORK:

A. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE UNIFORM MECHANICAL CODE (LATEST ADOPTED VERSION) AND SMACNA STANDARDS.

B. DUCTWORK SHALL BE GALVANIZED STEEL.

C. DOUBLE THICKNESS TURNING VANES SHALL BE USED ON ALL DUCT TURNS OF 90°.

D. ALL DUCT JOINTS SHALL BE SEALED AIR TIGHT WITH APPROVED DUCT SEALER AND DUCT TAPE.

E. FLEXIBLE DUCT USED FOR CONDITIONED AIR SHALL BE U.L. APPROVED, VINYL COATED, WIRE REINFORCED FIBERGLASS, WITH MAXIMUM CONDUCTANCE OF .30 AND A MAXIMUM LENGTH OF FIVE FEET.

F. FILTERS SHALL BE U.L. RATED AND APPROVED.

14. INSULATION:

A. INSULATION SHALL BE U.L. LISTED IN COMPLIANCE WITH FLAME-SPREAD RATING OF NOT MORE THAN 25 AND SMOKE DENSITY NOT EXCEEDING 50. FOR THE UNIFORM MECHANICAL CODE INSTALLATION SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA ENERGY COMMISSION AND UMC REQUIREMENTS.

B. INSULATE ALL INTERIOR CONDITIONED SUPPLY AND RETURN AIR DUCTWORK WITH 1 1/2" THICK, 75 LB. PER CU. FT. DENSITY FIBERGLASS INSULATION WITH VAPOR BARRIER (MINIMUM R-VALUE = 4.0 AT 75° MEAN TEMPERATURE).

C. CONDITIONED SUPPLY AND RETURN AIR DUCTWORK EXPOSED TO THE WEATHER SHALL BE INTERNALLY LINED WITH 1-1/2" THICK, 1.5 LB. PER CU. FT. DENSITY FIBERGLASS DUCT LINER (MINIMUM R-VALUE = 6.3).

16. VOLUME DAMPERS SHALL BE PROVIDED IN EACH BRANCH DUCT TO EACH DIFFUSER AND REGISTER, AND SHALL BE LOW LEAKAGE OPPOSED BLADE ADJUSTABLE TYPE.

17. CONTRACTOR SHALL AFFIX A MAINTENANCE LABEL TO ALL EQUIPMENT REQUIRING ROUTINE MAINTENANCE AND SHALL PROVIDE THREE COPIES OF MAINTENANCE AND OPERATING MANUALS TO THE OWNER.

18. EACH MECHANICAL VENTILATION SYSTEM (SUPPLY AND/OR EXHAUST) SHALL BE EQUIPPED WITH A MEANS OF SHUT-OFF WHEN VENTILATION IS NOT REQUIRED, AND BACKDRAFT DAMPERS WHICH CAN BE CLOSED ON FAN SHUTDOWN SHALL BE PROVIDED FOR AIR INTAKES AND/OR DISCHARGES.

19. EACH GRAVITY VENTILATION SYSTEM, EXCEPT FOR COMBUSTION AIR OPENINGS, SHALL BE PROVIDED WITH AUTOMATIC DAMPERS IN ALL OPENINGS TO THE OUTSIDE.

20. EACH AIR HANDLING SYSTEM ABOVE 2000 CFM SHALL BE PROVIDED WITH SUITABLE SMOKE DETECTORS IN THE SUPPLY DUCT PER UMC. INTERLOCKED WITH FAN STARTER(S) FOR AUTOMATIC SHUT-OFF.

21. TEMPERATURE CONTROL DEVICES: EACH HVAC SYSTEM SHALL BE PROVIDED WITH AN AUTOMATIC SPACE TEMPERATURE CONTROL DEVICE THAT SHALL BE CAPABLE OF BEING SET TO MAINTAIN SPACE TEMPERATURE SET POINTS FROM 55°F TO 85°F AND SHALL BE CAPABLE OF OPERATING THE SYSTEM HEATING AND COOLING IN SEQUENCE. CONTROLS SHALL BE ADJUSTED TO PROVIDE A TEMPERATURE RANGE OF AT LEAST 5°F AND UP TO 10°F BETWEEN FULL HEATING AND COOLING, AND HAVE A CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE OF NO MORE THAN 70°F AND COOLING AT A TEMPERATURE NOT LESS THAN 78°F.

22. THERMOSTATS SHALL HAVE NUMERIC SETPOINTS IN °F, ADJUSTABLE SETPOINT STOPS ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR.

23. BALANCING AND ADJUSTING: ALL AIR SYSTEMS SHALL BE ADJUSTED BY AN INDEPENDENT BALANCING CONTRACTOR THAT IS A MEMBER OF THE ASSOCIATED AIR BALANCING COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). SUBMIT BALANCE REPORT TO OWNER PRIOR TO RECEIVING FINAL PAYMENT. ADDITIONAL BALANCING DAMPERS AND/OR PULLEY CHANGES SHALL BE PROVIDED AS REQUIRED TO BALANCE SYSTEMS AT NO INCREASE IN CONTRACT PRICE.

24. AUTOMATIC CONTROLS WHICH COMPLY WITH TITLE 24 REQUIREMENTS FOR OFF-HOURLY CONTROL SHALL BE PROVIDED FOR EACH SYSTEM, CONSISTING OF A 4 HOUR TIMER THAT CAN BE MANUALLY OPERATED TO CONTROL THE OPERATING PERIOD OF THE SYSTEM. CONTROLS SHALL BE PROVIDED THAT TEMPORARILY OPERATE THE SYSTEM AS REQUIRED DURING OFF HOURS TO MAINTAIN A SETBACK HEATING AND COOLING THERMOSTAT SETPOINT.

25. BEFORE STARTING ANY WORK, THE CONTRACTOR FOR THIS SECTION OF THE WORK SHALL EXAMINE A COMPLETE SET OF DRAWINGS FOR ALL TRADES, INCLUDING ARCHITECTURAL, STRUCTURAL, HVAC, ELECTRICAL, FIRE PROTECTION AND PLUMBING. DIMENSIONS, SPACE REQUIREMENTS AND POINTS OF CONNECTION TO ALL EQUIPMENT SHALL BE VERIFIED, AND ANY MINOR ADJUSTMENTS NECESSARY TO AVOID CONFLICT WITH THE BUILDING STRUCTURE AND THE WORK OF THE OTHER TRADES SHALL BE MADE. CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IF ANY MAJOR CONFLICTS OCCUR.

26. COORDINATE LOCATIONS OF ALL ROOF AND EXTERIOR WALL OPENINGS WITH ALL RELEVANT TRADES, AND PROVIDE WATERTIGHT FLASHINGS WHEREVER PENETRATIONS OCCUR. EXACT LOCATIONS AND SIZES MAY BE DEPENDENT UPON EQUIPMENT SELECTIONS. COORDINATE SIZES AND LOCATIONS OF ALL OPENINGS WITH APPROPRIATE EQUIPMENT REQUIREMENTS.

27. PERMANENT ACCESS TO EQUIPMENT SHALL BE PROVIDED, AND A MINIMUM OF 30" CLEAR WORKING SPACE IN FRONT OF ACCESS PANELS TO THE COMPRESSOR, BLOWER ASSEMBLY AND AIR FILTER SECTION OF THE EQUIPMENT SHALL BE PROVIDED.

28. ALL EQUIPMENT SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE WITH CODE APPROVED EARTHQUAKE RESTRAINTS.

29. GAS-FIRED EQUIPMENT SHALL BE EQUIPPED WITH A PILOTLESS ELECTRONIC INTERMITTENT IGNITION SYSTEM.

30. A 1" MINIMUM CONDENSATE DRAIN FROM EACH AIR CONDITIONING UNIT TO A CODE APPROVED RECEPTOR SHALL BE PROVIDED.

31. COMBINATION SMOKE/FIRE DAMPERS SHALL BE INSTALLED IN DUCTS PASSING THROUGH FIRE WALLS, AND WHERE SHOWN ON DRAWINGS, SMOKE DAMPERS SHALL BE INTERLOCKED WITH THE BUILDING FIRE/LIFE SAFETY SYSTEM. ACCESS TO FUSIBLE LINKS AND/OR DAMPER MOTORS SHALL BE PROVIDED THROUGH ACCESS DOORS. DAMPERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH NFPA 80A, UBC AND UMC REQUIREMENTS, APPROVED BY THE STATE FIRE MARSHAL, AND INSTALLED PER THE MANUFACTURERS U.L. INSTALLATION INSTRUCTIONS.

32. EACH PIECE OF EQUIPMENT AND ALL SYSTEMS SHALL BE ADJUSTED AND RE-ADJUSTED TO INSURE PROPER FUNCTION OF ALL CONTROLS, MAINTENANCE OF TEMPERATURE, ADEQUACY OF FLOWS AND CAPACITIES, ELIMINATION OF NOISE AND VIBRATION, AND SHALL BE LEFT IN PROPER OPERATING CONDITION.

33. MINIMUM VENTILATION RATES SHALL COMPLY WITH THE LATEST EDITION OF ASHRAE AND CEC REQUIREMENTS. CONTROLS SHALL BE PROVIDED TO ALLOW OUTSIDE AIR DAMPERS OR DEVICES TO BE OPERATED AT THE REQUIRED VENTILATION RATES.

34. FINAL LOCATION OF CEILING DIFFUSERS SHALL BE PER THE ARCHITECTURAL REFLECTED CEILING PLAN OR AS PER FIELD REQUIREMENTS.

35. NO COMBUSTIBLE MATERIALS SHALL BE INSTALLED IN RETURN AIR PLENUMS.

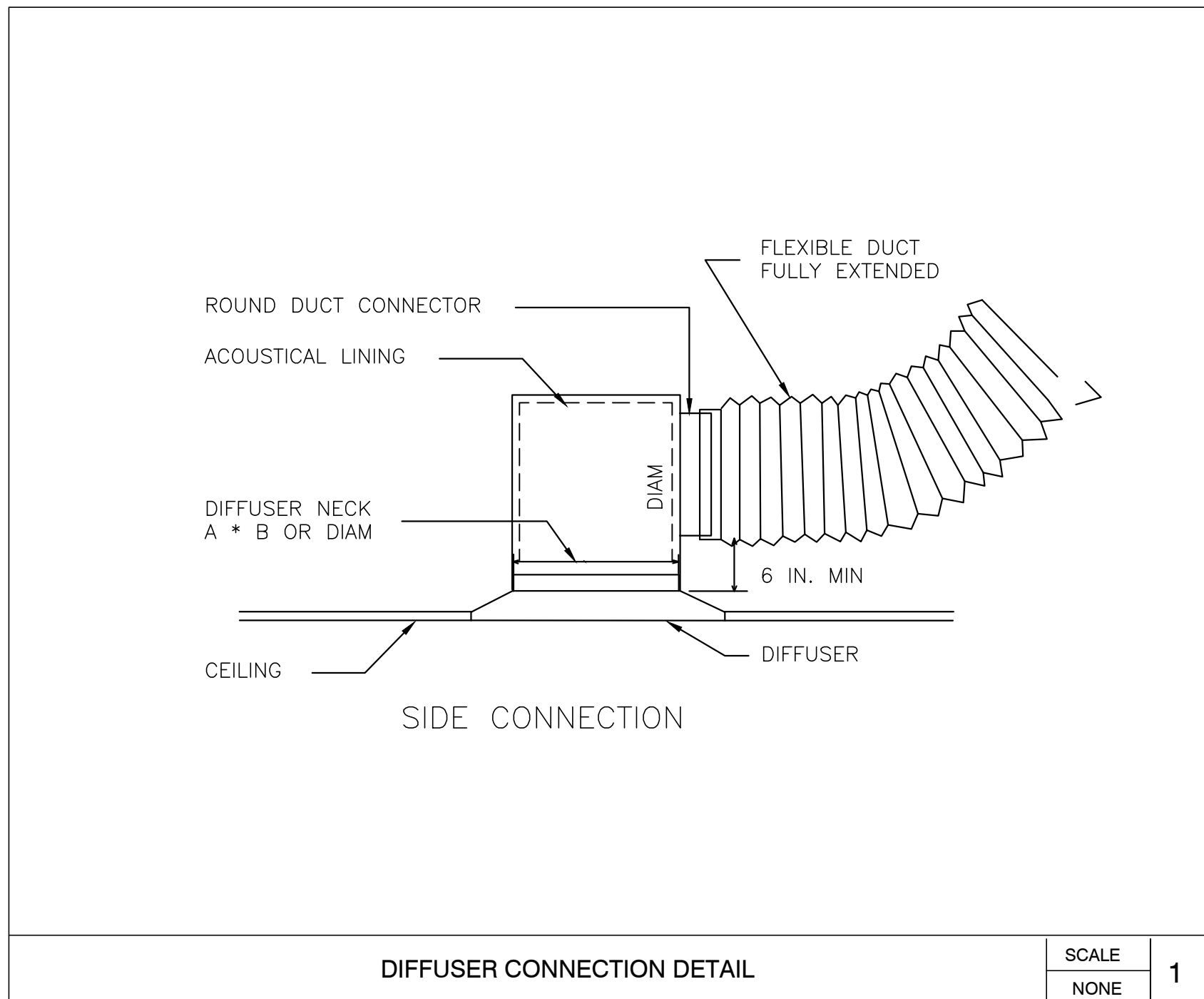
36. ACCESS DOORS: FOR ALL COMBINATION SMOKE/FIRE DAMPERS AND WHERE NECESSARY IN DUCTWORK OR CASINGS, SUITABLE ACCESS DOORS AND FRAMES TO PERMIT INSPECTION, OPERATION AND MAINTENANCE OF ALL CONTROLS, MOTOR BEARINGS, OR OTHER APPARATUS CONCEALED BEHIND THE SHEET METAL WORK SHALL BE PROVIDED. ACCESS DOORS IN DUCTS MAY BE OF SINGLE PANEL CONSTRUCTION OF NOT LESS THAN NO. 18 GAUGE, GALVANIZED, AND SHALL HAVE SPONGE RUBBER GASKETS WITH HINGES AND LATCHES.

37. DUCT RUNOUTS TO DIFFUSERS AND DUCT/PIPING CONNECTIONS TO EQUIPMENT SHALL BE SIZED TO MATCH NECK OR EQUIPMENT INTAKE/DISCHARGE SIZES, UNLESS OTHERWISE NOTED.

38. AIR CONDITIONING UNITS SHALL BE STATE OF CALIFORNIA ENERGY COMMISSION LISTED, AND SHALL MEET OR EXCEED ALL APPLICABLE EFFICIENCY REQUIREMENTS.

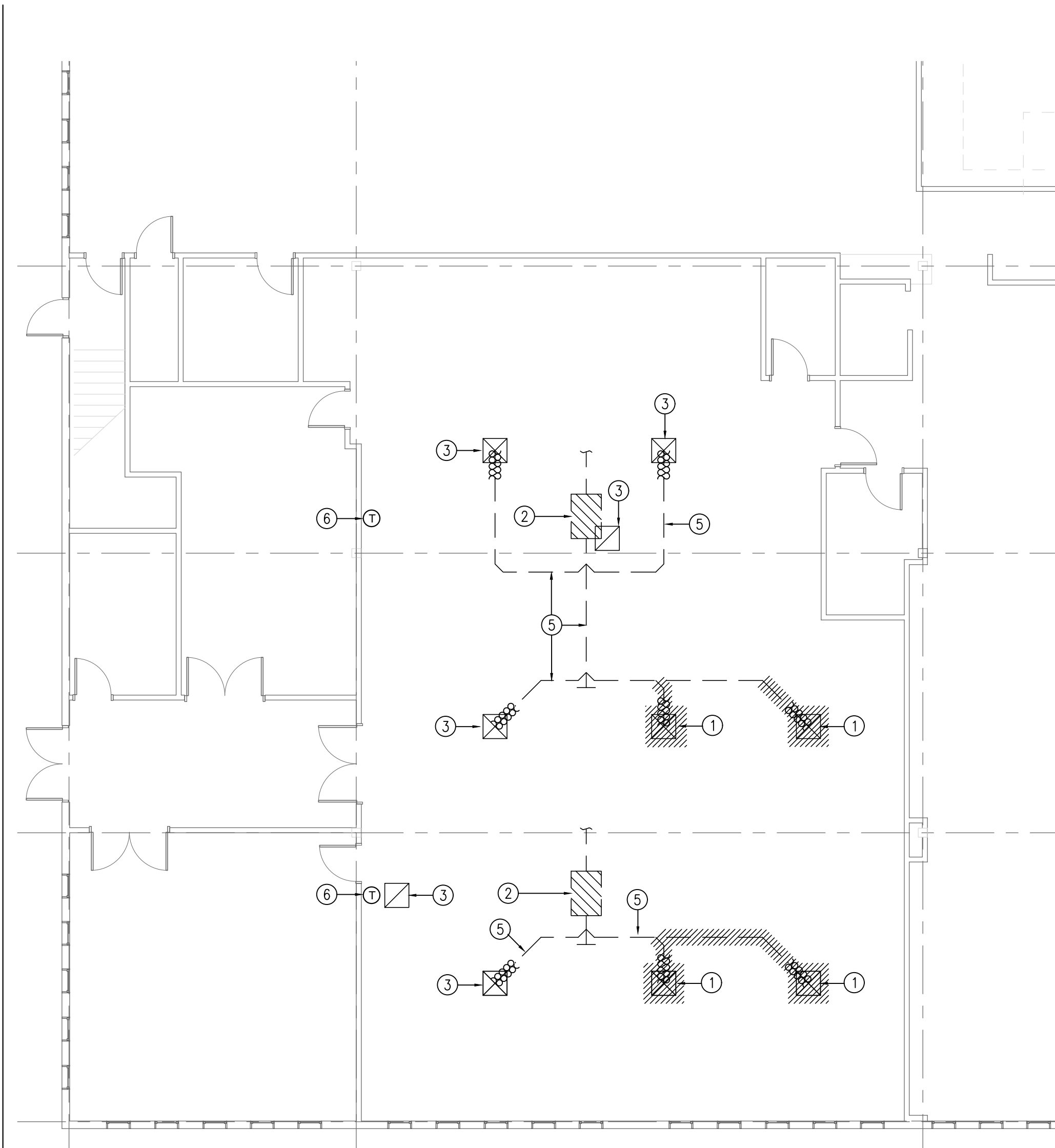
HVAC SYMBOL AND ABBREVIATIONS

—	SUPPLY AIR DUCT
—	RETURN, TRANSFER, EXHAUST OR BY-PASS AIR DUCT
⊗ OR ⊗	SUPPLY AIR DIFFUSER (4 WAY OR 2 WAY THROW) SA
⊗	RETURN AIR REGISTER RA
⊗	TRANSFER AIR REGISTER TA
⊗	EXHAUST AIR REGISTER EA
⊗	AC UNIT THERMOSTAT & ZONE
—	VOLUME DAMPER
—	UNDER CUT DOOR
—	DOOR LOUVER
—	DUCT TYPE SMOKE DETECTOR
—	DUCT TRANSITION
OA	OUTSIDE AIR
CD	CEILING DIFFUSER
F.P.	FILLER PANEL
R.C.G.	RETURN CEILING GRILLE
R.C.R.	RETURN CEILING REGISTER
T.C.G.	TRANSFER CEILING GRILLE
E.C.G.	EXHAUST CEILING GRILLE
E.C.R.	EXHAUST CEILING REGISTER
S.W.G.	SUPPLY WALL GRILLE
S.W.R.	SUPPLY WALL REGISTER
R.W.G.	RETURN WALL GRILLE
R.W.R.	RETURN WALL REGISTER
T.W.G.	TRANSFER WALL GRILLE
E.W.G.	EXHAUST WALL GRILLE
E.W.R.	EXHAUST WALL REGISTER
F.L.F.D.	FUSIBLE LINK FIRE DAMPER
A.P.	ACCESS PANEL
U.L.A.P.	U.L. LISTED ACCESS PANEL
A.C.	AIR CONDITIONING UNIT
R.E.F.	ROOF EXHAUST FAN
C.E.F.	CEILING EXHAUST FAN
I.E.F.	IN-LINE EXHAUST FAN
—	ZONE DAMPER
—	BYPASS DAMPER
P.O.C.	POINT OF CONNECTION
A.F.F.	ABOVE FINISHED FLOOR
[A]	FURNISHED AND INSTALLED UNDER THE ARCHITECTURAL DIVISION OF THE SPECIFICATIONS.
[E]	FURNISHED AND INSTALLED UNDER THE ELECTRICAL DIVISION OF THE SPECIFICATIONS.
[S]	FURNISHED AND INSTALLED UNDER THE STRUCTURAL DIVISION OF THE SPECIFICATIONS.
—	C.S.F.D. COMBINATION SMOKE/FIRE DAMPER
== OR ==	INTERNALLY LINED DUCTWORK
CO2	CARBON DIOXIDE SENSOR
⊗ OR ⊗	S.A. OR R.A. DUCT DROPS
⊗	E.A. DUCT DROP



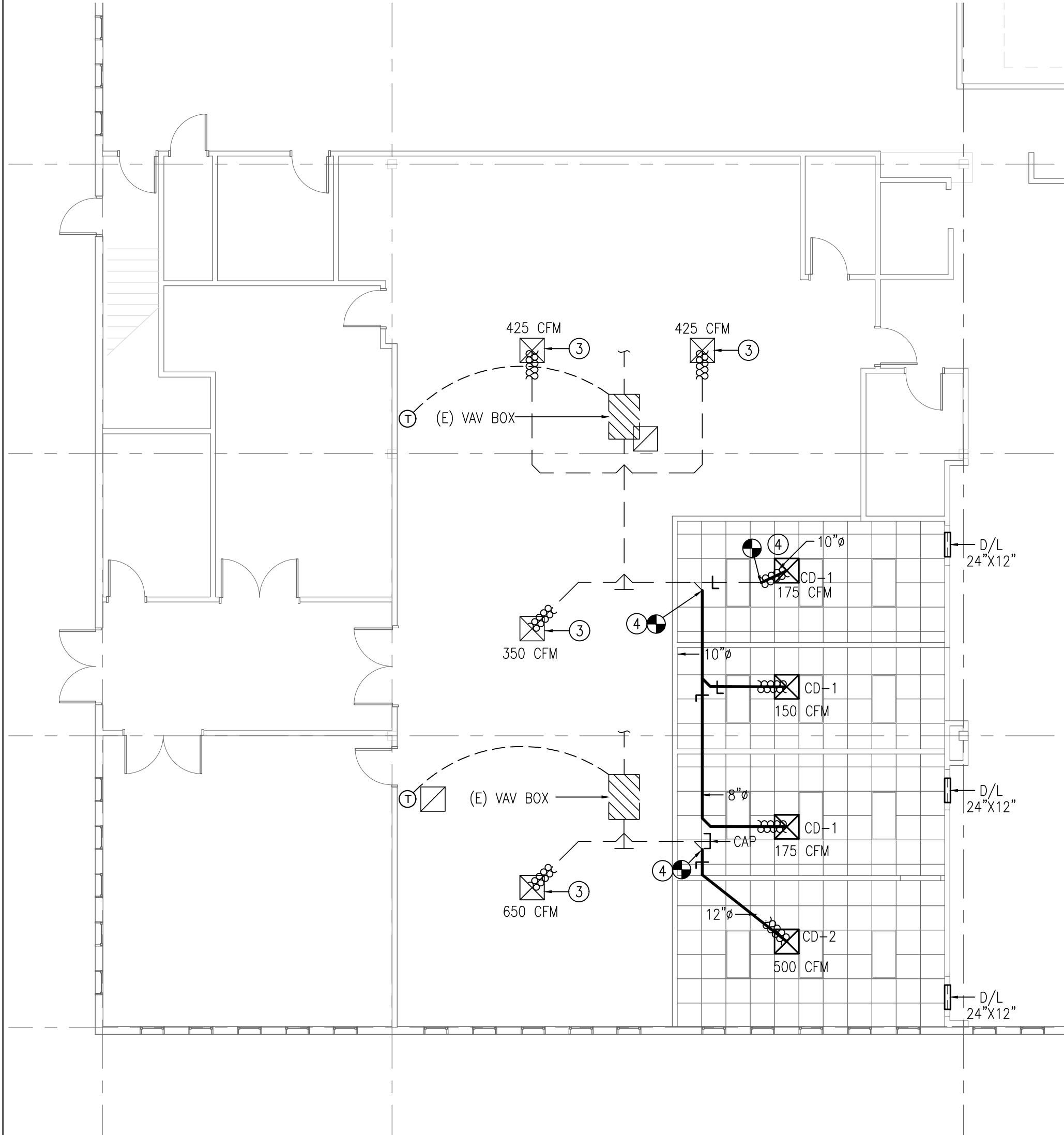
AIR DISTRIBUTION SCHEDULE

MARK	MAKE	MODEL	CFM		STYLE	USE	NECK (IN) SIZE	FACE (IN) SIZE	MAX (IN) PD	MAX NC	REMARKS
			MIN	MAX							
CD-1	KRUEGER	6204	100	200	PERFORATED	SA	8"x8"	24"x24"	.09	< 15	
CD-2	KRUEGER	6204	400	500	PERFORATED	SA	14"x14"	24"x24"	.02	< 23	



MECHANICAL DEMO FLOOR PLAN

Scale: 1/8" = 1' 0"



MECHANICAL FLOOR PLAN

Scale: 1/8" = 1' 0"

GENERAL NOTES:

1. ALL NEW DIFFUSERS AND REGISTERS SHALL BE BALANCED TO AIR QUANTITIES INDICATED.

2. ALL REMAINING DUCTING TO BE CLEANED; SEE SPECIFICATIONS.

KEYNOTES:

① EXISTING DIFFUSER TO BE REMOVED. RETAIN FOR RE-INSTALLATION.

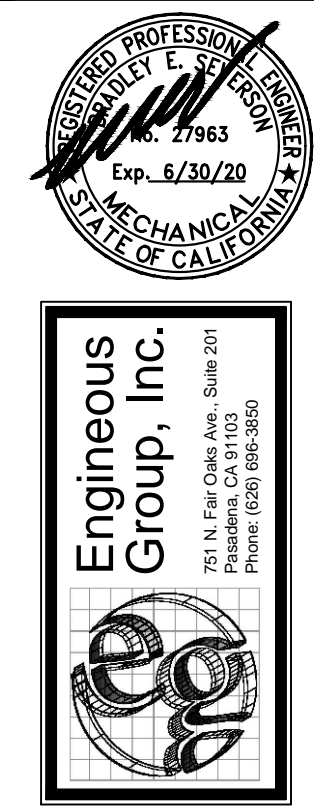
② EXISTING VAV BOX TO REMAIN. CONTRACTOR TO VERIFY ACTUAL LOCATION.

③ EXISTING DIFFUSER / REGISTER TO REMAIN. CONTRACTOR TO VERIFY ACTUAL LOCATION.

④ CONNECT NEW DIFFUSER TO EXISTING DUCTING AS INDICATED. EXTEND DUCTING AS REQUIRED. SIZE TO MATCH EXISTING.

⑤ EXISTING DUCTING TO REMAIN. CONTRACTOR TO VERIFY ACTUAL LOCATION.

⑥ EXISTING THERMOSTAT TO REMAIN. CONTRACTOR TO VERIFY ACTUAL LOCATION.



CITY Approval Stamp

REVISIONS	2/2/2020 - BACK CHECK COMMENTS

DC ARCHITECTS	820 N. MOUNTAIN AVENUE SUITE 200 UPLAND, CA 91786
	(951) 985 - 6939 OFFICE (951) 985 - 0841 FAX

INTERIOR RENOVATION
PROF. DEVELOPMENT CENTER
4030 GEORGIA BLVD.
SAN BERNARDINO, CA 92407
SAN BERNARDINO CITY U.S.D.

PDC CLASSROOM
MECHANICAL DEMO
AND FLOOR PLAN

DATE: 03/27/2019	SCALE:
BY: M-001	

M-001

STATE OF CALIFORNIA
Indoor Lighting
NRCCLTI-E (Created 7/18)
CERTIFICATE OF COMPLIANCE
This document is used to demonstrate compliance with requirements in §110.9, §130.0, §130.1, §140.6, and §141.0(b)(2) for indoor lighting scopes using the prescriptive path.
Project Name: Interior Renovation - Prof. Development Center Report Page: Page 1 of 6
Project Address: 4030 Georgia Blvd. Date Prepared: 7/16/2019

A. GENERAL INFORMATION
01 Project Location (city) San Bernardino 04 Total Conditioned Floor Area (ft²) 900
02 Climate Zone 10 05 Total Unconditioned Floor Area (ft²) 0
03 Occupancy Types Within Project (select all that apply): 06 # of Stories (Habitable Above Grade) 1
☒ Office ☐ Retail ☐ Warehouse ☐ Hotel/Motel ☐ School ☐ Support Areas
☐ Parking Garage ☐ High-Rise Residential ☐ Relocatable ☐ Other (write in):

B. PROJECT SCOPE
Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)(2) for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".
Scope of Work Conditioned Spaces Unconditioned Spaces
My Project Consists of (check all that apply): Calculation Method Area (ft²) Calculation Method Area (ft²)
☐ New Lighting System
☒ Altered Lighting System Entire Luminaire Alteration Area Category 900 Area Category 0
Total Area of Work (ft²) 900 0

C. COMPLIANCE RESULTS
Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.
Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)(1).
Compliance Results
01 Complete Building 02 Area Category 03 Area Category Footnotes 04 Tailored 05 Total Allowed (Watts) 06 Total Designed (Watts) 07 Portable Lighting 08 PAF Control Credits 09 Total Actual *Includes Adjustments 10 Compliance Results
(See Table I) (See Table I) (See Table K) (See Table L) 900 900 579.6 173.88 = 405.72 COMPLIES
Unconditioned: = DOES NOT COMPLY
Controls Compliance (See Table H for Details) DOES NOT COMPLY
Rated Power Reduction Compliance (See Table S for Details) NOT Applicable

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

STATE OF CALIFORNIA
Indoor Lighting
NRCCLTI-E (Created 7/18)
CERTIFICATE OF COMPLIANCE
Project Name: Interior Renovation - Prof. Development Center Report Page: Page 3 of 6
Project Address: 4030 Georgia Blvd. Date Prepared: 7/16/2019

04 Area Description 05 Complete Building or Area Category Primary Function Area 06 Area Controls §130.1(a) 07 Multi-Level Controls §130.1(b) 08 Shut-Off Controls §130.1(c) 09 Primary/Skylight Daylighting §130.1(d) 10 Secondary Daylighting §140.6(d) 11 Interlocked Systems §140.6(a)(1) 12 Field Inspector Pass Fail
13 Plan Sheet Showing Daylit Zones:
*NOTES: Controls with * require a note in the space below explaining how compliance is achieved.
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)(1)
I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(e) are being used.
Conditioned Spaces
01 Area Description 02 Complete Building or Area Category Primary Function Area 03 Allowed Density (W/ft²) 04 Area (ft²) 05 Allowed Wattage (Watts) 06 Additional Allowances / Adjustments Footnotes PAF Portable Ltg
OFFICE Office (<= 250 square feet) 1 280 280 ☒ ☐ ☐
OFFICE Office (<= 250 square feet) 1 268 268 ☐ ☒ ☐
OFFICE Office (<= 250 square feet) 1 352 352 ☐ ☐ ☐
TOTAL: 900 900 See Tables J, K, & R for detail
J. POWER ADJUSTMENT: PORTABLE LIGHTING IN OFFICES
This Section Does Not Apply
K. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD FOOTNOTES
This Section Does Not Apply
L. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This Section Does Not Apply
M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED SPECIAL FUNCTION AREAS
This Section Does Not Apply

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE
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T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at <http://www.energy.ca.gov/2013updates/ccec-400-2015-033/appendices/forms/NRC>
Form/Title Field Inspector Pass Fail
NRCCLTI-01-E - Must be submitted for all buildings ☐ ☐
NRCCLTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance. ☐ ☐
NRCCLTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance. ☐ ☐
NRCCLTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance. ☐ ☐
NRCCLTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance. ☐ ☐
NRCCLTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance. ☐ ☐
U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/2016standards>
Form/Title Field Inspector Pass Fail
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls. ☐ ☐
NRCA-LTI-03-A - Must be submitted for automatic daylight controls. ☐ ☐
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls. ☐ ☐
NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF). ☐ ☐

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

STATE OF CALIFORNIA
Indoor Lighting
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CERTIFICATE OF COMPLIANCE
Project Name: Interior Renovation - Prof. Development Center Report Page: Page 2 of 6
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D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.
No exceptional conditions apply to this project.
E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.
F. INDOOR LIGHTING FIXTURE SCHEDULE
Table Instructions: Include all permanent designed lighting and all portable lighting in offices.
01 Name or Item Tag 02 Complete Luminaire Description 03 Specialized Luminaire Types Track Portable 04 Watts per luminaire 05 How Wattage is determined 06 Total number luminaires 07 Exempt per §140.6(a)(3) 08 Design Watts 09 Field Inspector Pass Fail
2x4 LED (2) 4' long LED strips ☐ ☐ 48.3 12 ☐ 579.6 ☐ ☐
Total Designed Watts CONDITIONED SPACES: 579.6
*NOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.
G. TRACK LIGHTING
This Section Does Not Apply
H. INDOOR LIGHTING CONTROLS (Not Including PAFs)
Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.
Area Level Controls Table Continued

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

STATE OF CALIFORNIA
Indoor Lighting
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CERTIFICATE OF COMPLIANCE
Project Name: Interior Renovation - Prof. Development Center Report Page: Page 3 of 6
Project Address: 4030 Georgia Blvd. Date Prepared: 7/16/2019

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This Section Does Not Apply
O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This Section Does Not Apply
P. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This Section Does Not Apply
Q. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This Section Does Not Apply
R. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (PAF)
Table Instructions: Please complete the table for all areas indicated in Table I or Table L as using a PAF credit described in §140.6(e)(2).
Conditioned Spaces
01 Area Description 02 PAF per §140.6(e)(2) (*Can be used in conjunction with other PAFs) 03 Luminaire Name or Item Tag 04 Watts per Luminaire 05 # of Luminaires 06 Lighting Controlled (Watts) 07 Control Credit Power Adjustment (Watts)
OFFICE 1 2A 2B 2C 3A* 3B* 4* Pick up to one Pick up to one 2x4 LED 48.3 3 144.9 43.47
OFFICE ☐ ☐ ☒ ☐ ☐ ☐ 2x4 LED 48.3 6 289.8 86.94
OFFICE ☐ ☐ ☒ ☐ ☐ ☐ 2x4 LED 48.3 3 144.9 43.47
Total Power Adjustment (Watts) CONDITIONED SPACES: 173.88
S. RATED POWER REDUCTION COMPLIANCE BY SPACE
This Section Does Not Apply

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

STATE OF CALIFORNIA
Indoor Lighting
NRCCLTI-E (Created 7/18)
CERTIFICATE OF COMPLIANCE
Project Name: Interior Renovation - Prof. Development Center Report Page: Page 6 of 6
Project Address: 4030 Georgia Blvd. Date Prepared: 7/16/2019

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
Documentation Author Name: Arthur T. Owen Documentation Author Signature: *Arthur T. Owen*
Company: DLEng2 LLC Signature Date: 07/16/2019
Address: 5723 Indian Pointe Dr. CEA/HERS Certification Identification (if applicable):
City/State/Zip: Simi Valley, CA 93063 Phone: (818) 326-2614
RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.
Responsible Designer Name: Arthur T. Owen Responsible Designer Signature: *Arthur T. Owen*
Company: DLEng2 LLC Date Signed: 07/16/2019
Address: 5723 Indian Pointe Dr License: 13592 exp 06/30/2021
City/State/Zip: Simi Valley, CA 93063 Phone: (818) 326-2614

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> July 2018

ELECTRICAL SPECIFICATIONS

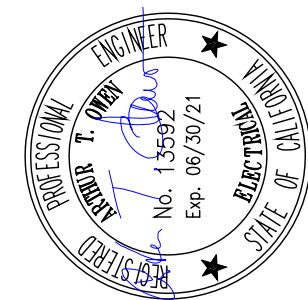
- CODE COMPLIANCE
 - ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE OF CALIFORNIA CODE OF REGULATIONS, ELECTRICAL REGULATIONS OF THE STATE FIRE MARSHALL AND ALL OTHER GOVERNING CODES.
- PERMITS AND FEES
SECURE AND PAY FOR ALL PERMITS AND FEES NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK.
- MATERIAL
 - ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED BY THE UNDERWRITER'S LABORATORIES, INC. MANUFACTURED IN ACCORDANCE WITH U.L., NEMA, ANSI OR IEEE STANDARDS, AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION.
- GROUNDING
 - ALL ELECTRICAL EQUIPMENT, DEVICES AND SYSTEMS SHALL BE GROUNDED IN STRICT COMPLIANCE WITH NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES. A GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL NEW BRANCH CIRCUIT WIRING.
- ALL CONDUCTORS SHALL BE COPPER TYPE "THWN\THHN" RATED AT 600 VOLTS, UNLESS OTHERWISE NOTED.
- ALL CONDUITS EXPOSED SHALL BE (RGS) RIGID GALVANIZED STEEL.
- ALL CONDUITS CONCEALED SHALL BE "EMT".
- THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL ELECTRICAL CONDITIONS THAT MAY AFFECT HIS BID AND HE SHALL INCLUDE ALL SUCH COSTS WHEN SUBMITTING HIS BID PROPOSAL. NO EXTRAS WILL BE ALLOWED IF THE CONTRACTOR DID NOT VISIT THE EXISTING JOB SITE AND TAKE INTO CONSIDERATION ALL EXISTING ELECTRICAL CONDITIONS.
- THE CONTRACTOR SHALL EXERCISE CARE AND PRUDENCE WHEN RUNNING CONDUIT BELOW GRADE. ALL DAMAGES INCURRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- WHERE CONDUITS ARE RUN EXPOSED ON ROOF OR COVERED WALK, USE 2" X 4" REDWOOD BLOCKS AT 5'-0" ON CENTER. USE MASTIC TO SECURE THE BLOCKS TO THE ROOF OR CANOPY, NO SCREWS ALLOWED.
- WHERE CUTTING OF EXISTING CONCRETE AND ASPHALT IS NECESSARY, THE CONTRACTOR SHALL PATCH THE CONCRETE OR ASPHALT TO MATCH EXISTING SURFACE.
- ALL TRENCHING AND BACKFILL AREAS SHALL BE PROTECTED SO AS TO PREVENT PERSONNEL INJURY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY INJURY. COORDINATE TRENCHING WITH EACH SCHOOL PRINCIPAL.
- ALL BACKFILL SHALL BE TAMPED TO MATCH THE EXISTING DENSITY. ANY CRACKING OR SAGGING OF ASPHALT OR CONCRETE PAVING WILL BE REPAIRED AT NO ADDITIONAL COST TO THE SCHOOL DISTRICT. DO NOT BACKFILL PRIOR TO INSPECTION OF DUCT BANK.
- REWORK OF EXISTING PANELBOARDS
WHERE A NEW CIRCUIT BREAKER ARE CALLED FOR WITHIN EXISTING PANELBOARDS THE NEW CIRCUIT BREAKER SHALL MATCH THE EXISTING IN ALL ASPECTS.
- SCHEDULE OF WORK
ANY WORK TO BE PERFORMED IN EXISTING BUILDINGS DURING SCHOOL SESSIONS MUST BE PLANNED BY THE CONTRACTOR IN ADVANCE. THE SCHEDULING SHALL BE DONE IN COOPERATION WITH THE SCHOOL PRINCIPAL WHO WILL MAKE AVAILABLE TO THE CONTRACTOR FOR THE PERFORMANCE OF THIS WORK, PORTIONS OF BUILDING WHICH MAY NORMALLY BE IN USE.
- CONTINUITY OF EXISTING ELECTRICAL SYSTEMS
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL POWER, LIGHTING, COMMUNICATION, SIGNAL, FIRE ALARM AND SECURITY SYSTEM SERVICES WITHIN ALL AREAS OF NO WORK WITHIN THIS BUILDING.
 - REFRIGERATION MOTORS SHALL BE KEPT OPERATING AT ALL TIMES, EXCEPT FOR PERIODS OF TIME NOT AGGREGATING MORE THAN TWO HOURS IN ANY ONE DAY AND DURING THE VACATION PERIOD. NOTIFY THE DISTRICT BEFORE DISCONNECTING REFRIGERATION MOTORS.
- SCHEDULED POWER OUTAGES
COORDINATE AND SCHEDULE ALL OUTAGES WITH THE OFFICE MANAGER AND SCHOOL DISTRICT'S DIRECTOR OF MAINTENANCE PRIOR TO ANY AND ALL OUTAGES.
- SHOP DRAWINGS
 - WITHIN TEN (10) DAYS AFTER RECEIPT OF CONTRACT, SUBMIT TO ARCHITECT SEVEN (7) COMPLETE SETS OF DRAWINGS FOR ALL ELECTRICAL EQUIPMENT AND DEVICES LISTED BELOW. DO NOT DELIVER THESE ITEMS TO THE JOB SITE UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY ARCHITECT AND ELECTRICAL ENGINEER.
 - CIRCUIT BREAKERS
 - SIGNAL/COMMUNICATION DEVICES
 - DUPLEX RECEPTACLES
 - LIGHTING FIXTURES AND MOTION SENSORS
 - SUBMIT DRAWINGS FOR THE FOLLOWING EQUIPMENT:
 - CIRCUIT BREAKERS
 - SIGNAL/COMMUNICATION DEVICES
 - DUPLEX RECEPTACLES
 - LIGHTING FIXTURES AND MOTION SENSORS
- GUARANTEE
THIS CONTRACTOR SHALL FURNISH THE OWNER WITH A WRITTEN GUARANTEE FOR THE PERIOD OF ONE YEAR AGAINST FAILURE OF THE ELECTRICAL SYSTEM DUE TO FAULTY MATERIALS OR WORKMANSHIP. GUARANTEE PERIOD SHALL START AT THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ALL SUCH DEFECTS MUST BE REPAIRED OR DEFECTIVE MATERIALS REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- CLEAN-UP
UPON COMPLETION OF THE WORK, THIS CONTRACTOR SHALL REMOVE FROM THE JOB SITE ALL DEBRIS AND UNUSED MATERIALS, TOOLS AND EQUIPMENT RESULTING FROM THIS WORK.
- DRAWINGS AND SPECIFICATIONS
ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN SOME RESPECTS. SIZES AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY IN THE DRAWINGS. FINAL LOCATIONS OF OUTLETS AND EQUIPMENT SHALL BE ADJUSTED AS DICTATED BY EXISTING CONDITIONS. IT IS NOT WITHIN THE SCOPE OF DRAWINGS TO SHOW ALL NECESSARY BENDS, OFFSETS, PULL BOXES AND OBSTRUCTIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.

SYMBOLS LIST (NOT ALL SYMBOLS ARE USED)

	CIRCUIT BREAKER (SEE SINGLE LINE DIAGRAM).
	CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS.
	CONDUIT RUN BELOW GRADE.
	RGS CONDUIT RUN EXPOSED ON ROOF.
	FREE STANDING DISTRIBUTION PANELBOARD.
	FLUSH MOUNTED PANELBOARD. (SEE SINGLE LINE DIAGRAM).
C.O.	CONDUIT ONLY. NTS NOT TO SCALE.
WP	WEATHERPROOF. UON UNLESS OTHERWISE NOTED.
GRD.	GROUND. CU COPPER.
NIC.	NOT IN CONTRACT GFI GROUND FAULT INTERRUPTER
	JUNCTION BOX MOUNTED IN ACCESSIBLE CEILING SPACE.
	JUNCTION BOX FLUSH MOUNTED IN CEILING FOR SECURITY SYSTEM MOTION SENSOR.
	FLUSH MOUNTED 277V, 20A, RATED SINGLE POLE TOGGLE SWITCH AT +48" U.O.N. a,b,c, etc. INDICATES LIGHTING FIXTURE CONTROL.
	FLUSH MOUNTED 125V, 2P, 3W, 15 AMP RATED DUPLEX RECEPTACLE MOUNTED AT +18". U.O.N.
	FLUSH MOUNTED 125V, 2P, 3W, 15 AMP RATED DOUBLE DUPLEX RECEPTACLE MOUNTED AT +18". U.O.N.
	CLOCK: WALL MOUNTED AT +8'-0" U.O.N. TO MATCH DISTRICT STANDARD
	WALL MOUNTED AUTOMATIC LIGHTING MOTION SENSOR, +45" A.F.F.
	1/2"C. 2#12
	1/2"C. 3#12
	1/2"C. 4#12
	1/2"C. 5#12
	1/2"C. 6#10
	1/2"C. 7#10
X	ADJACENT TO LIGHT FIXTURE, OUTLET SYMBOL OR IN CONDUIT RUN INDICATES EXISTING TO REMAIN.
XR	ADJACENT TO LIGHT FIXTURE, OUTLET SYMBOL OR IN CONDUIT RUN INDICATES EXISTING TO BE REMOVED.
XRL	ADJACENT TO LIGHT FIXTURE OR OUTLET SYMBOL INDICATES EXISTING LIGHT FIXTURE OR OUTLET SHALL BE DISCONNECTED, REMOVED AND REINSTALLED AT NEW LOCATION NOTED.
NL	ADJACENT TO LIGHT FIXTURE OR OUTLET SYMBOL INDICATES NEW LOCATION OF RELOCATED LIGHT FIXTURE OR OUTLET.
KI	FLUSH MOUNTED DATA OUTLET, +18" U.O.N. WITH 1"C.O. STUBBED INTO CEILING SPACE. FURNISH AND INSTALL 2 DATA JACKS AND 2 CAT 6 CABLES BACK TO NEAREST MDF OR IDF.
	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR TO MATCH EXISTING FIRE ALARM SYSTEM SMOKE DETECTOR.
FA	3/4"C. (2) 2#18/2 TWISTED PAIR

NOTES:

- THE ELECTRICAL DRAWINGS INDICATE NEW WORK. EXISTING ELECTRICAL SYSTEMS ARE NOT SHOWN EXCEPT WHERE INTERFACING IS REQUIRED.
- CONSULT WITH THE DISTRICT'S ELECTRICAL INSPECTOR BEFORE STARTING WORK.
- THE ELECTRICAL PLANS ARE DEVELOPED FROM AS-BUILT DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE CIRCUIT CONTINUITY FOR A WORKABLE SYSTEM.
- EACH EMPTY CONDUIT SHALL HAVE A PULL CORD INSTALLED IN IT.
- ALL ELECTRICAL SYMBOLS SHOWN ON SCHEDULES ARE NOT NECESSARILY USED ON THIS PROJECT.
- VERIFY EXACT LOCATION OF ALL EXISTING ELECTRICAL SWITCHGEAR, SIGNAL CABINETS (TEL/INTERCOM, F.A., CABLE TV, AND SECURITY) PRIOR TO BID AND INSTALLATION AND NOTIFY SCHOOL DISTRICT OF ANY DISCREPANCY WITH THEIR PLANS.
- EACH PANELBOARD SHALL BE GROUNDED WITH A 3/4" X 10' LONG COPPER CLAD STEEL GROUND ROD.
- MAKE ALL FINAL CONNECTIONS TO PANELBOARDS IN PORTABLE CLASSROOMS.



D-ENG2 LLC
5723 Indian Pointe Dr.
Simi Valley, CA 93063
(805) 520-1340 Office
(818) 326-2614 Cell

CITY Approval Stamp

REVISIONS

DC | ARCHITECTS



INTERIOR RENOVATION
PROF. DEVELOPMENT CENTER
4030 GEORGIA BLVD.
SAN BERNARDINO, CA 92407
SAN BERNARDINO CITY U.S.D.

SYMBOLS, NOTES
AND SPECIFICATIONS
TITLE 24 FORMS

DATE: 2019-07
DRAWN BY:
DATE: 03.02.2019
SCALE:

E-1.0



LIGHTING PLAN

EXISTING PANELBOARD

777/480 VOLTS										PANEL "1W4A"										MAIN BKR: 100A/3P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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