

ABBREVIATIONS

ABV	above	FIN	finish (ed)	OBS	obscure
AFF	above finish floor	FFE	finished floor elevation	OC	on center (s)
ASC	above suspended ceiling	FFL	finished floor line	OP	opaque
ACC	access	FA	fire alarm	OPG	opening
ACFL	access floor	FBRK	fire brick	OJ	open-web joist
AP	access panel	FEC	fire extinguisher	OPP	opposite
AC	acoustical	FEC	fire extinguisher cabinet	OPH	opposite hand
ACPL	acoustical plaster	FHS	fire hose station	OPS	opposite surface
ACT	acoustical tile	FPL	fireplace	OD	outside diameter
ACR	acrylic plastic	FP	fireproof	OHMS	overall machine screw
ADD	addendum	FRC	fire-resistant coating	OHWS	overall wood screw
ADH	adhesive	FRT	fire-retardant	OA	overall
ADJ	adjacent	FLG	flashing	OH	overhead
ADJT	adjustable	FHMS	flathead machine screw	PNT	paint (ed)
AGS	aggregate	FHWS	flathead wood screw	PNL	panel
A/C	air conditioning	FLX	flexible	PB	panic bar
ALT	alternate	FLR	floor (ing)	PTD	paper towel dispenser
AL	aluminum	FLCO	floor cleannot	PTR	paper towel receptor
ANC	anchor, anchorage	FD	floor drain	PAR	parallel
AB	anchor bolt	FPL	floor plate	PK	parking
ANOD	anodized	FLUR	fluorescent	PBD	particle board
APX	approximate	FJT	flush joint	PTN	partition
ARCH	architect (ural)	FTG	footing	PV	pave (d), (ing)
AD	area drain	FRG	forged	PVMT	pavement
ASB	asbestos	FND	foundation	PED	pedestal
ASPH	asphalt	FR	frame (d), (ing)	PERF	perforate (d)
AT	asphalt tile	FRA	fresh air	PERI	perimeter
AUTO	automatic	FS	full size	PLAS	plaster
BP	back plaster (ed)	FBO	furnished by others	PLAM	plastic laminate
BSMT	basement	FUR	furred (ing)	PL	plate
BRG	bearing	FUT	future	PG	plate glass
BPL	bearing plate	GA	gage, gauge	PWD	plywood
BUT	bed joint	GV	galvanized	PT	point
BM	bench mark	GI	galvanized iron	PVC	polyvinyl chloride
BEL	below	GP	galvanized pipe	PE	porcelain enamel
BET	between	GSS	galvanized steel sheet	PEC	post-tensioned concrete
BVL	beveled	GKT	gasket (ed)	PCF	pounds per cubic foot
BIT	bituminous	GC	general contract (or)	PFL	pounds per linear foot
BLK	block	GL	glass, glazing	PSF	pounds per square foot
BLKG	blocking	GLB	glass block	PSI	pounds per square inch
BD	board	GLF	glass flbat	PCC	precast concrete
BW	both ways	GCMU	glazed concrete masonry units	PFB	prefabricate (d)
BOT	bottom	GST	glazed structural tile	PFN	prefinished
BRK	brick	GB	grab bar	PRF	preformed
BRZ	bronze	GD	grade, grading	PSC	prestressed concrete
BLDG	building	GRN	granite	PL	property line
BUR	built up roofing	GVL	gravel	QT	quarry tile
BBD	bulletin board	GF	ground face	RST	rabbit, rebate
CAB	cabinet	GT	grout	RAD	radius
CAD	cadmium	GPDW	gypsum dry wall	RL	rail (ing)
CPT	carpet (ed)	GPL	gypsum lath	RWC	rainwater conductor
CSMT	casement	GPPL	gypsum plaster	REF	reference
CI	cast iron	GPT	gypsum tile	RFL	reflect (ed),(ive)(or)
CIPC	cast-in-place concrete	HH	handhold	REFR	refrigerator
CST	cast stone	HBD	hardboard	REG	register
CB	catch basin	HDW	hardware	RE	reinforce (d), (ing)
CK	caulk (ing) caulk (ing)	HWD	hardwood	RCP	reinforced concrete pipe
CLQ	ceiling	HJT	head joint	REM	remove
CHT	ceiling height	HDR	header	RES	resilient
CEM	cement	HTG	heating	RET	return
CPL	cement plaster (portland)	HVAC	heating/ventilation/air conditioning	RA	return air
CM	centimeter (s)	HD	heavy duty	RVS	reverse (side)
CER	ceramic	HT	height	REV	revision (s), revised
CT	ceramic tile	HX	hexagonal	RH	right hand
CMT	ceramic mosaic (tile)	HES	high early-strength	ROW	right of way
CKBD	chalkboard	HC	hollow core	R	riser
CHAM	chamfer	HM	hollow metal	RVT	rivet
CR	chromium (plated)	HK	hook (s)	RD	roof drain
CIR	circle	HOR	horizontal	RFH	roof hatch
CIRC	circumference	HB	hose bibb	RM	room
CLR	clear (ance)	HWH	hot water heater	RO	rough opening
CLS	closure	INCON	incinerator	RB	rubber base
COL	column	INCL	include (d), (ing)	RBT	rubber tile
COMB	combination	ID	inside diameter	RBL	rubber stone
CMPT	compartment	INS	insulate (d), (ion)	SFGL	safety glass
COMPO	composition (composite)	INSC	insulating concrete	SCH	schedule
COMP	compress (ed), (ion), (ible)	INSF	insulating fill	SCN	screen
CONC	concrete	INT	interior	SEAT	seating
CMU	concrete masonry unit	ILK	interlock	STG	seating
CX	connection	INTM	intermediate	SEC	section
CONST	construction	INVT	invert	SK	sealing
CONT	continuous or continue	IPS	iron pipe size	SHTH	sheathing
CONTR	contract (or)	JC	janitor's closet	SHT	sheet
CLL	contract limit line	JT	joint	SG	sheet glass
CLT	control joint	JF	joint filler	SH	shelf, shelving
CPR	copper	J	joist	SHO	shore (d), (ing)
CG	corner guard	KCPJ	keene's cement plaster	SIM	similar
CORR	corrugated	KPL	kickplate	SKL	skylight
CTR	counter	KIT	kitchen	SL	sleeve
CFL	counterflashing	KO	knockout	SC	solid core
CS	countersink	LBL	label	SP	sound proof
CTSK	countersunk screw	LAB	laboratory	S	south
CRS	course (s)	LAD	ladder	SPC	spacer
CRG	cross grain	LB	lag bolt	SPK	speaker
CFT	cubic foot	LAM	laminare	SPL	special
CYD	cubic yard	LAV	lavatory	SPEC	specification(s)
DPR	dampner	LH	left hand	SQ	square
DP	dampproofing	L	length	SST	stainless steel
DL	dead load	LT	light	STD	standard
DEM	demolish, demolition	LC	light control	STA	station
DMT	dismountable	LP	lightproof	ST	steel
DEP	depressed	LW	lightweight	STO	storage
DLT	detail	LWC	lightweight concrete	SD	storm drain
DIAQ	diagonal	LMS	limestone	STR	structural
DIAM	diameter	LTL	lintel	STC	structural clay tile
DIM	dimension	LL	live load	SUS	suspended
DPR	dispenser	LVR	louver	SYM	symmetry (ical)
DIV	division	LPT	low point	SYN	synthetic
DR	door	MB	machine bolt	SYS	system
DA	doublebleading	MI	malleable iron	TKBD	tackboard
DH	double hung	MH	manhole	TKS	tackstrip
DTA	dovetail anchor	MFR	manufacture (er)	TEI	telephone
DTS	dovetail anchor slot	MRB	marble	TV	television
DS	downspout	MFR	manufacture (er)	TC	terra cotta
DB	drain	MAS	masonry	TZ	terrazo
DRB	drainboard	MO	masonry opening	THK	thick (ness)
DT	drain tile	MTL	material (s)	THR	threshold
DWR	drawer	MAX	maximum	TPN	toilet partition
DWG	drawing	MECH	mechanic (al)	TPD	toilet paper dispenser
DF	drinking fountain	MC	medicine cabinet	TOL	tolerance
DW	dumbwaiter	MED	medium	TG	tongue and groove
EF	each face	MBR	member	TSL	top of slab
E	east	MMB	membrane	TST	top of steel
ELEC	electric (al)	MET	metal	TW	towel bar
EP	electrical panelboard	MFD	metal floor decking	TB	transom
EW	electric water cooler	MTFR	metal furring	TR	tred opening
EL	elevation	MRD	metal roof decking	TYP	typical
ELEV	elevator	MTHR	metal threshold	UC	undercut
EMER	emergency	M	meter	UNF	unfinished
ENC	enclose (ure)	MM	millimeter (s)	UR	urnial
EQ	equal	MWK	milwork	VJ	v-joint
EOP	equipment	MIN	minimum	VB	vapor barrier
ESC	escalator	MIR	mirror	VAR	varnish
EST	estimate	MISC	miscellaneous	VNR	veneer
EXCA	excavate	MOD	modular	VRM	vermiculite
EXH	exhaust	MLD	molding, moulding	VERT	vertical
EXG	existing	MR	mop receptor	VG	vertical grain
EXMP	expanded metal plate	MT	mount (ed), (ing)	VIN	vinyl
EB	expansion bolt	MOV	movable	VAT	vinyl asbestos tile
EXP	exposed	MULL	mullion	VB	vinyl base
EXT	exterior	NL	nailable	VF	vinyl fabric
EXS	extra strong	NAT	natural	VT	vinyl tile
FB	face brick	NI	nickel	W	wainscot
FCC	face of concrete	NPR	noise reduction	WTW	wall to wall
FOF	face of finish	NRC	noise reduction coefficient	WH	wall hung
FOM	face of masonry	NOM	nominal	WC	water closet
FOS	face of studs	NOM	nonmetallic	WP	waterproofing
FF	factory finish	N	North	WR	water repellent
FAS	fasten fastener	NIC	not in contract	WS	waterstop
FBD	fiberboard	NTS	not to scale	WWF	welded wire fabric
FN	fence			W	west
FGL	fiberglass			WHB	wheel bumper
				W	width, wide
				WIN	window
				WG	wired glass
				WM	wire mesh
				WO	without
				WD	wood
				WB	wood base
				WPT	working point
				WI	wrought iron

MATERIALS LEGEND

	CONTINUOUS WOOD BLOCKING
	NON-CONTINUOUS WOOD BLOCKING (SHIM)
	STEEL
	GYPSUM BOARD
	PLYWOOD
	RIGID INSULATION
	BATT INSULATION
	CONCRETE MASONRY UNITS

SYMBOLS

	ELEVATION SYMBOL
	SECTION/DETAIL SYMBOL
	WALL TYPE SYMBOL
	WINDOW SYMBOL
	ROOM NAME
	ROOM NAME & NUMBER SYMBOL
	FINISH NUMBER
	DOOR SYMBOL

GENERAL NOTES

1. ALL CONSTRUCTION INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE.
2. ALL ASTM STANDARDS LISTED HERE WITHIN, SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS
3. THE CONTRACTOR, SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE BEGINNING WORK. THE ARCHITECT AND ENGINEER, SHALL IMMEDIATELY BE NOTIFIED IN WRITING OF ANY DISCREPANCIES. THE CONTRACTOR SHALL CAREFULLY STUDY AND COORDINATE THE MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS WITH THE ARCHITECTURAL WORK PRIOR TO INSTALLATION AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ALL APPARENT INCONSISTENCIES FOR CLARIFICATION.
4. ALL OMISSIONS AND OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER. WORK SHOULD NOT PROCEED UNTIL A SOLUTION IS GIVEN BY THE ARCHITECT OR ENGINEER.
5. IN CASE OF CONFLICTS BETWEEN GENERAL NOTES AND DETAILS, THE DETAILS, SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES. TYPICAL DETAILS, SHALL BE USED WHENEVER APPLICABLE. REFER TO SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE NOTES OR DRAWINGS.
6. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF WORK, THE CONSTRUCTION, SHALL BE THE SAME AS FOR SIMILAR WORK.
7. COORDINATE FOUNDATION PLANS AND MECHANICAL DRAWINGS, FOR ALL OPENINGS, INSERTS AND OTHER RELATED ITEMS.
8. DIMENSIONS ARE TO FINISH FACE OF WALLS UNLESS NOTED OTHERWISE.
9. ADDITIONAL MISCELLANEOUS STEEL ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS MAY BE REQUIRED. GENERAL CONTRACTOR AND FABRICATOR SHALL COORDINATE ALL REQUIREMENTS AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ALL APPARENT INCONSISTENCIES FOR CLARIFICATION. (SUCH AS SIMPSON STRONG TIES)
10. DO NOT DIMENSION THIS DRAWING. ANY DIMENSIONS, QUESTIONS, SHOULD BE DIRECTED TO THE ARCHITECT OR ENGINEER.

PROJECT CONTACTS

ARCHITECT: RUDY MOLINA, A.I.A.	MILNET ARCHITECTURAL SERVICES 608 S. 12th STREET Mc ALLEN, TEXAS 78501 (956) 688-5656	CIVIL: NA
OWNER: PSAJ ISD	PSJA ISD 601 E KELLY AVE PHARR, TX 78577 956-354-2000	STRUCTURAL: NA
MEP:		GENERAL CONTRACTOR: NA

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OLD SORENSEN ELEMENTARY RENOVATIONS BID
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SITE PLAN/LOCATION MAP



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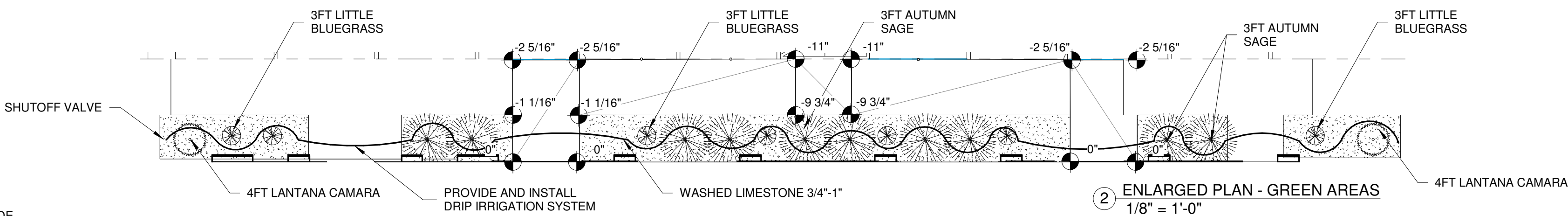
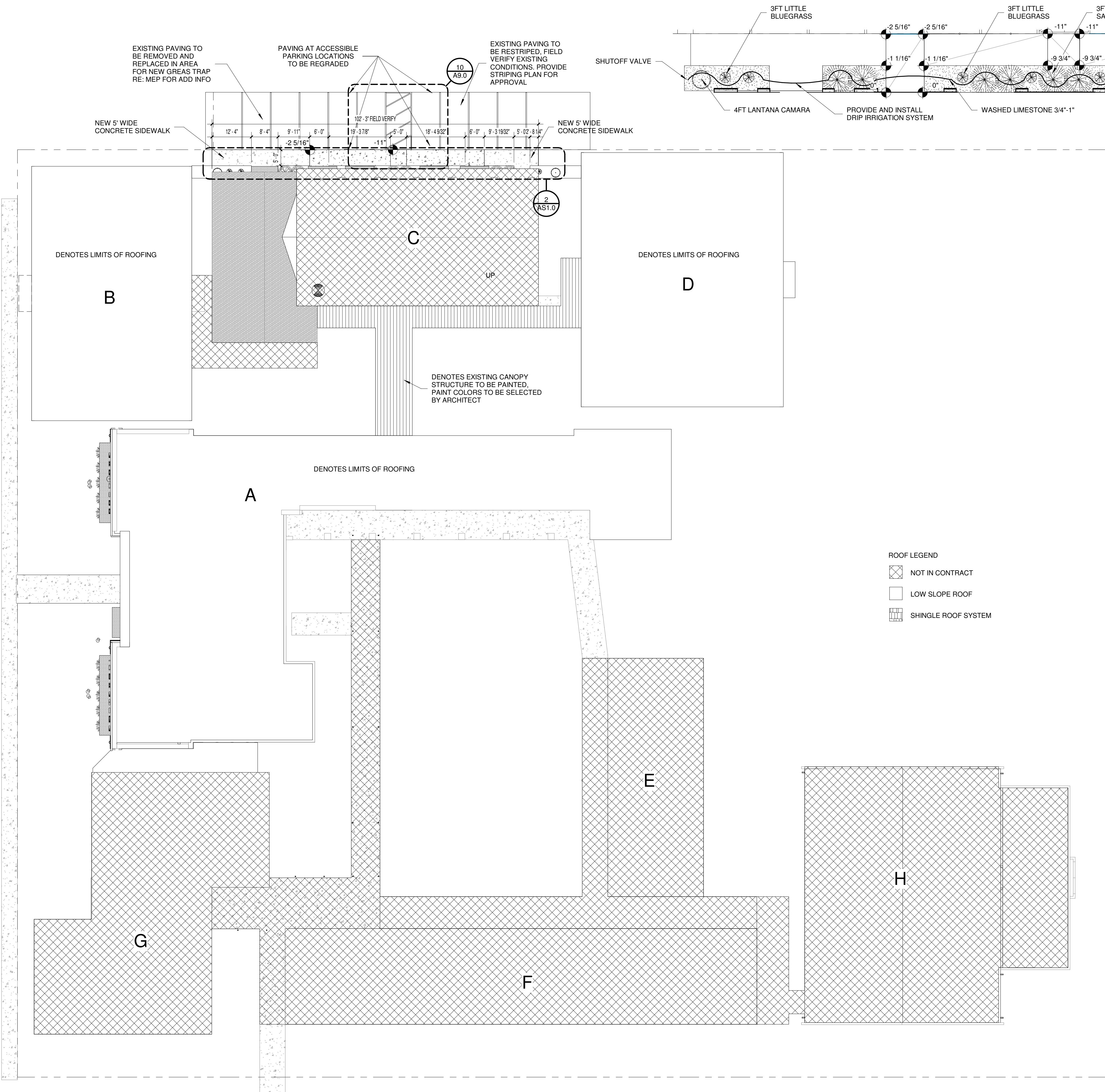
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GENERAL NOTES:

- OWNER WILL PROVIDE SOIL TESTS PRIOR TO FOUNDATION WORKS.
- PROVIDE SIDEWALK AS PART OF BASE BID.
- RE: CIVIL FOR UTILITY CONNECTIONS (U.R. WATER & SEWER.)
- WARNING:
CONTACT 1-800-DIG-TEST FOR UNDERGROUND ELECTRICAL CABLES IN SITE.
- ALL CONSTRUCTION AND MATERIALS FOR DRAINAGE, GRADING AND PAVING TO BE IN ACCORD WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
- ALL SOIL PLACED ONTO SITE IS TO BE COMPACTED TO 80% DENSITY, EXCEPT UNDER ANY PAVING COMPACTION IS TO BE 95%, BY OWNER. RE: CIVIL FOR ADDT. INFO.
- CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PAYING ANY FEES FOR PERMITS AS MAY BE REQUIRED FOR THIS CONSTRUCTION.
- ALL PIPE SLEEVES SHALL BE SCH. 40 PVC AND FURNISHED IN PLACE BY THE CONTRACTOR BEFORE PAVING.

TUELECTRIC SLEEVES:
6" SLEEVES ARE TO BE DOVE GREY AND PLACED 48" BELOW TOP OF CURB ELEVATIONS. WITH END CONDUIT MARKERS FURNISHED BY TUELECTRIC PLACED ON EACH END OF CONDUIT.
IRRIGATION SLEEVES:
2" & 4" SLEEVES ARE TO BE PLACED 24" BELOW TOP OF CURB.
- CONTRACTOR TO SET CONTROL GRADES AT 25' INTERVALS ALONG ALL PAVING FLOW LINES.
- CONTRACTOR TO PROVIDE JOB SIGN. RE: 4/A9.0
- PROVIDE AND INSTALL TIRE STOPS AT EXISTING PARKING SPACES.
- ALL SIDEWALKS AND COVERED WALKWAYS SHALL HAVE 1:50 MAXIMUM CROSS SLOPE. SIDEWALKS OR COVERED WALKWAYS THAT MUST HAVE SLOPES GREATER THAN 1:20 SHALL HAVE HANDRAILS ON BOTH SIDES WITH 4" HIGH CONC. CURBS ON BOTH SIDES. HANDRAILS SHALL BE 34" TO TOP A.F.F. THERE SHALL BE NO ABRUPT CHANGE IN ELEVATION ALONG ACCESSIBLE ROUTES AT SIDEWALKS AND COVERED WALKWAYS.
- CURB RAMP SLOPE SHALL BE 1:12 MAXIMUM WITH 1:10 FLARED SIDES AND SHALL BE TEXTURED. PAINT WITH A LIGHT REFLECTIVE PAINT. PARALLEL CURB RAMP SLOPE SHALL BE 1:12 MAXIMUM & TEXTURED. PAINT WITH A LIGHT REFLECTIVE PAINT. ALL CURB RAMPS SHALL HAVE A LANDING AT TOP & BOTTOM. LANDINGS SHALL HAVE A 1:50 MAXIMUM SLOPE IN ANY DIRECTION.
- STRIPED ACCESS AISLES AND ACCESSIBLE PARKING SHALL HAVE A MAXIMUM CROSS SLOPE IN ALL DIRECTIONS OF 1:50.
- ALL GRADING SHALL BE DONE TO DRAIN WATER AWAY FROM BUILDINGS.
- ALL EXTERIOR ALCOVES SHALL HAVE A 1:50 MAXIMUM SLOPE AND SHALL HAVE NO DROPS AT DOORS NOR AT CONNECTING SIDEWALKS.
- REFER TO CIVIL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ARCHITECT IN CASE OF DISCREPANCIES AND COORDINATING WITH CIVIL ENGINEER PRIOR TO PROCEEDING.
- PROVIDE 2' X 4' CONCRETE SPLASH BLOCK AT DOWNSPOUT LOCATIONS.
- ALL EXTERIOR DOORS SHALL HAVE A LEVEL AREA WITH A 1:50 MAXIMUM SLOPE IN ALL DIRECTIONS. THE AREA SHALL BE A MINIMUM OF 5 FT. IN THE DIRECTION OF TRAVEL BY THE WIDTH OF THE SIDEWALK.
- DESIGN IS BASED UPON A MINIMUM FLOW OF 56 GPM AND A MINIMUM PRESSURE OF 52 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE. IF SUFFICIENT PRESSURE IS NOT AVAILABLE AT POINT-OF-CONNECTION INSTALL A BOOSTER PUMP. CONTACT A RAIN BIRD REPRESENTATIVE FOR THE APPROPRIATE PUMP FOR THE SITE.
- ADDITIONAL LATERALS OUTSIDE DESIGNATED FIELD AREA MAY BE INSTALLED PROVIDED HYDRAULIC CAPABILITY OF SUPPLY IS NOT EXCEEDED.
- SPRINKLER LOCATIONS ARE TO SCAL. PIPE LOCATIONS ARE DIABRAMMATIC.
- PROVIDE #55K-1 KEY (1" MALE OUTLET) AND SH-2 SWIVEL HOSE ELL FOR EACH QUICK COUPLING VALVE.
- LOCATE IRRIGATION CONTROLLER ON BUILDING (LOCATE TO BE COORDINATED WITH OWNER.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ELECTRICAL SERVICE AND CONNECTION FROM ELECTRICAL POWER SYSTEM.
- CONTRACTOT TO PROVIDE A DETAILED SUBMITTAL OF INSTALLATION PREPARED BY A LICENSED IRRIGATOR.
- CONNECTION TO PUBLIC WATER SUPPLY MUST BE COORDINATED WITH N.A.W.S.C. ALL COST FOR PERMITS SHALL BE INCLUDED IN BID.
- PLANS REPRESNET A SCHEMATIC LAYOUT WITH MIN. PERFORMANCE REQUIREMENTS.

1 SITE PLAN
1/16" = 1'-0"



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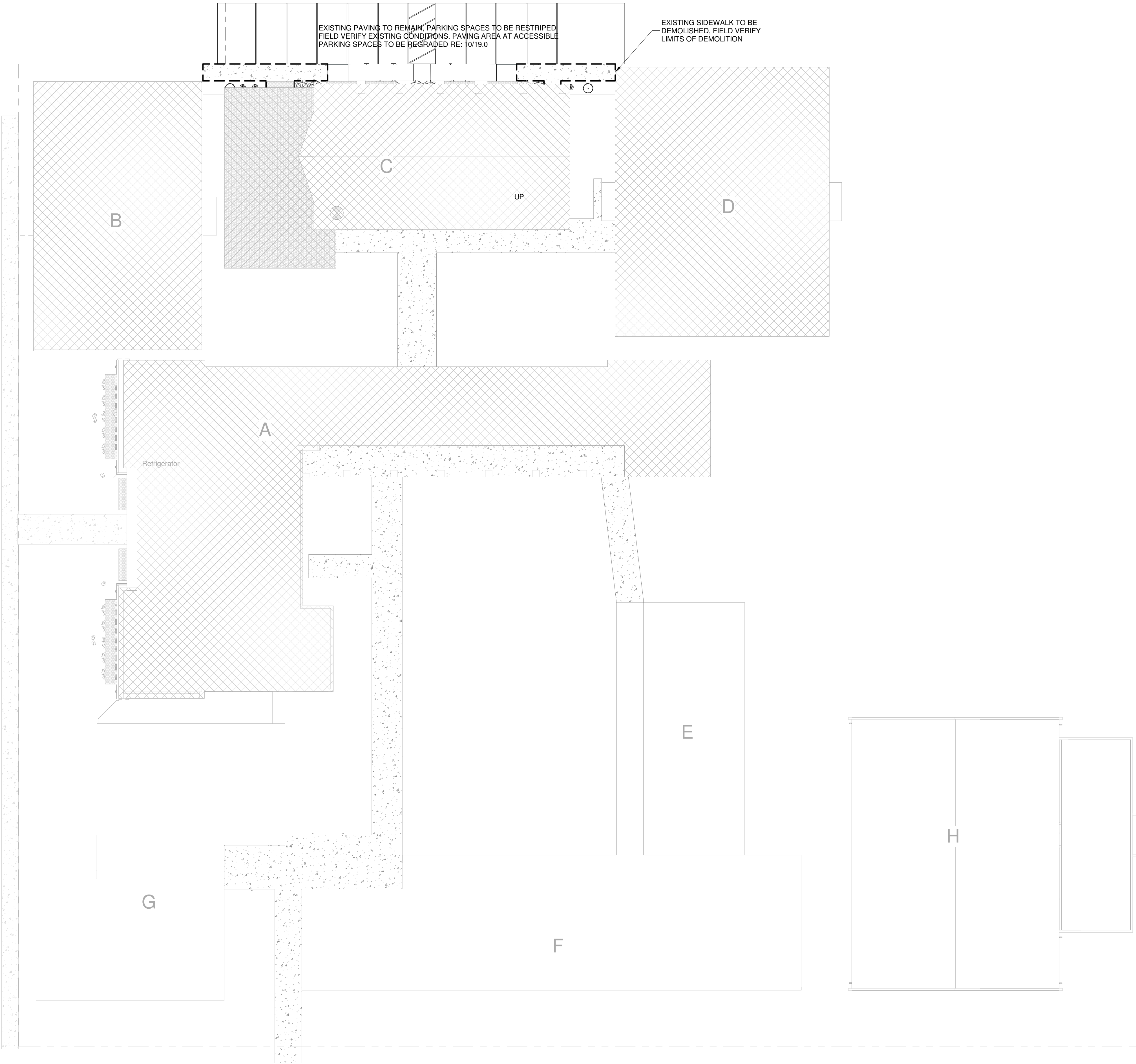
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SITE DEMO GENERAL NOTES

1. GENERAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK AND TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. ANY DISCREPENCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE ARCHITECT PRIOR TO BIDDING OR COMMENCING WORK FOR CLARIFICATION
2. REFER TO CIVIL, STRUCTURAL, & MEP DRAWINGS FOR ADDITIONAL DEMOLITION AND ALTERATION NOTES
3. THE OWNER HAS FIRST RIGHT OF SALVAGE OF ALL FIXTURES, EQUIPMENT, & BUILDING MATERIALS REMOVED AS PART OF THIS CONTRACT, AND SHALL NOT BE REUSED IN THE NEW CONSTRUCTION UNLESS OTHERWISE NOTED OR DIRECTED IN WRITING. REMOVE ALL OTHER DEBRIS AND WASTE FROM THE SITE AND DISPOSE OF PROPERLY, IN ACCORDANCE WITH FEDERAL, STATE, & LOCAL REGULATIONS
4. FIELD VERIFY LOCATIONS OF ALL EXISTING EXTERIOR PUBLIC ADDRESS SPEAKERS, INTERCOM SPEAKERS, PLUGS, SWITCHES, HOSE BIBS, LIGHTS AND CONTROLS PRIOR TO DEMOLITION. THESE SYSTEMS MUST BE PUT BACK IN ORIGINAL AND FUNCTIONING CONDITION AFTER NEW CONSTRUCTION IS COMPLETE. REPLACE, PATCH, OR REPAIR ANY DAMAGED EXISTING COMPONENTS OR SYSTEMS, WHICH ARE INTERRUPTED OR DISTURBED
5. STURCTURAL INTEGRITY: PROVIDE SUPPORT FOR THE EXISTING STRUCTURE TO REMAIN PRIOR TO PERFORMING ANY ALTERATION THERETO
6. STRUCTUAL INTEGRITY: UNLESS OTHERWISE INDICATED ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS, NEW OPENINGS CUT INTO EXISTING MASONRY WALLS, WHETHER BEARING OR NON-BEARING, SHALL RECEIVE LOOSE LINTELS WITH 8" BEARING AS A MINIMUM. REFER TO STRUCTURAL DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMNTS
7. CUTTING & PATCHING: PROVIDE MATERIALS FOR CUTTING & PATCHING WHICH WILL RESULT IN EQUAL OR BETTER WORK THAN THAT BEING CUT OR PATCHED
8. ANY EXISTING CONSTRUCTION THAT IS TO BE REMOVED, SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE ANY EXISTING CONSTRUCTION THAT IS TO REMAIN. FLOORS, WALLS, AND CEILINGS ARE TO BE PATCHED TO MATCH EXISTING CONDITIONS AND MADE READY TO RECEIVE ANY NEW FINISHES WHERE APPLICABLE
9. PLUMBING LINES THAT ARE TO BE REMOVED SHALL BE REMOVED COMPLETELY. PATCH WALLS AND FLOOR TO MATCH EXISTING CONDITIONS. REFER TO PLUMBING DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMENTS
10. WHERE EXISTING FLOOR, CEILING, OR WALL FINISHES ARE TO BE REPLACED WITH NEW FINISHES, EXISTING SURFACES SHALL BE STRIPPED CLEAN OF ALL EXISTING COVERINGS AND MADE READY TO RECEIVE NEW FINISHES. IN ACCORDACE WITH FINISH MANUFACTURERS WRITTEN INSTRUCTIONS AND RECOMMENDATIONS INCLUDING LEVEL 4 PLUMB TOLERANCES, REFER TO ROOM FINISH SCHEDULE FOR TYPES & LOCATIONS OF NEW FINISHES
11. ALL FLOOR FINISHED BEING REPLACED, SHALL BE COMPLETELY REMOVED & THE FLOOR CLEANED & PROPERLY PREPARED PRIOR TO INSTALLATION OF NEW FINISH MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING ALL FLOORS THAT RECEIVE NEW FINISHES PRIOR TO BID AND CONSTRUCTION. FLOORS SHALL BE PATCHED, FILLED, & STRIPPED AS REQUIRED TO PROVIDE A SMOOTH, DURABLE SURFACE FREE OF ALL BURRS OR ADHESIVE, AND SUITABLE FOR APPLICATION OF NEW FINISH MATERIAL. ANY UNDER CUTTING OF DOORS REQUIRED TO ACCOMMODATE NEW FLOOR FINISHES SHALL BE RESPONSIBILITY OF THE CONTRACTOR
12. WHERE NEW CONCRETE TOPPING IS TO BE POURED OVER AN EXISTING CONCRETE SLAB, BUSH HAMMER THE EXISTING CONCRETE FINISH FOR A BETTER BOND
13. WHERE EXISTING MASONRY ABUTS NEW MASONRY, EXISTING MASONRY SHALL BE TOOTHED TO RECEIVE NEW MASONRY (U.O.N.) NEW MASONRY SHALL MATCH EXISTING COURSING, TYPICAL
14. WHERE A PORTION OF AN EXISTING MASONRY WALL IS TO BE REMOVED, PROVIDE A FINISHED EDGE BY TOOTHING IN NEW MASONRY TO MATCH EXISTING (U.O.N.)
15. REFER TO STRUCTURAL DRAWINGS & NOTES FOR ADDITIONAL NOTES
16. CONTRACTOR SHALL MAINTAIN BUILDING INTEGRITY, BUILDING SECURITY, AND WEATHER-TIGHT BUILDING ENVELOPE (TO INCLUDE EXTERIOR WALL(S), ROOF, EXTERIOR OPENINGS, ETC.) DURING CONSTRUCTION. CONTRACTOR TO COORDINATE BUILDNG ACCESS WITH OWNER.

① SITE PLAN - DEMO
1/16" = 1'-0"



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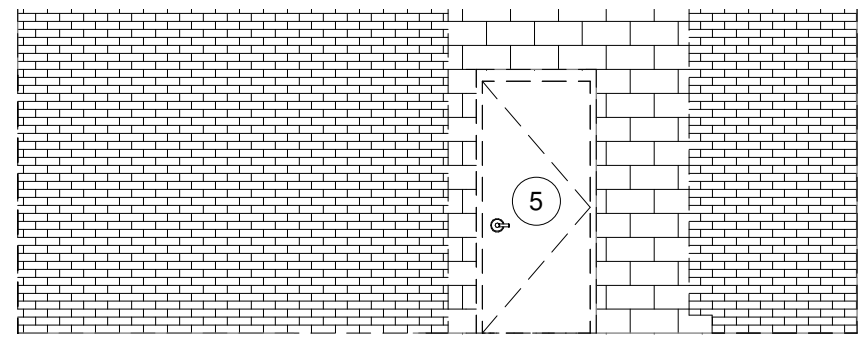
SHEET NUMBER

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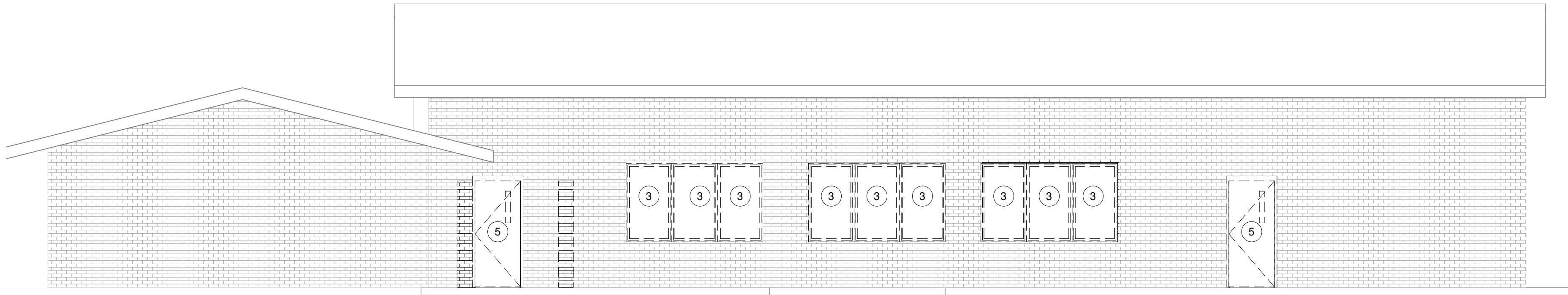
1. GENERAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK AND TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. ANY DISCREPENCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE ARCHITECT PRIOR TO BIDDING OR COMMENCING WORK FOR CLARIFICATION
2. REFER TO CIVIL, STRUCTURAL, & MEP DRAWINGS FOR ADDITIONAL DEMOLITION AND ALTERATION NOTES
3. THE OWNER HAS FIRST RIGHT OF SALVAGE OF ALL FIXTURES, EQUIPMENT, & BUILDING MATERIALS REMOVED AS PART OF THIS CONTRACT, AND SHALL NOT BE REUSED IN THE NEW CONSTRUCTION UNLESS OTHERWISE NOTED OR DIRECTED IN WRITING. REMOVE ALL OTHER DEBRIS AND WASTE FROM THE SITE AND DISPOSE OF PROPERLY, IN ACCORDANCE WITH FEDERAL, STATE, & LOCAL REGULATIONS
4. FIELD VERIFY LOCATIONS OF ALL EXISTING EXTERIOR PUBLIC ADDRESS SPEAKERS, INTERCOM SPEAKERS, PLUGS, SWITCHES, HOSE BIBS, LIGHTS AND CONTROLS PRIOR TO DEMOLITION. THESE SYSTEMS MUST BE PUT BACK IN ORIGINAL AND FUNCTIONING CONDITION AFTER NEW CONSTRUCTION IS COMPLETE. REPLACE, PATCH, OR REPAIR ANY DAMAGED EXISTING COMPONENTS OR SYSTEMS, WHICH ARE INTERRUPTED OR DISTURBED
5. STURCTURAL INTEGRITY: PROVIDE SUPPORT FOR THE EXISTING STRUCTURE TO REMAIN PRIOR TO PERFORMING ANY ALTERATION THERETO
6. STRUCTURAL INTEGRITY: UNLESS OTHERWISE INDICATED ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS, NEW OPENINGS CUT INTO EXISTING MASONRY WALLS, WHETHER BEARING OR NON-BEARING, SHALL RECEIVE LOOSE UNTELS WITH 8" BEARING AS A MINIMUM. REFER TO STRUCTURAL DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMNTS
7. CUTTING & PATCHING: PROVIDE MATERIALS FOR CUTTING & PATCHING WHICH WILL RESULT IN EQUAL OR BETTER WORK THAN THAT BEING CUT OR PATCHED
8. ANY EXISTING CONSTRUCTION THAT IS TO BE REMOVED, SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE ANY EXISTING CONSTRUCTION THAT IS TO REMAIN. FLOORS, WALLS, AND CEILINGS ARE TO BE PATCHED TO MATCH EXISTING CONDITIONS AND MADE READY TO RECEIVE ANY NEW FINISHES WHERE APPLICABLE
9. PLUMBING LINES THAT ARE TO BE REMOVED SHALL BE REMOVED COMPLETELY, PATCH WALLS AND FLOOR TO MATCH EXISTING CONDITIONS, REFER TO PLUMBING DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMENTS
10. WHERE EXISTING FLOOR, CEILING, OR WALL FINISHES ARE TO BE REPLACED WITH NEW FINISHES, EXISTING SURFACES SHALL BE STRIPPED CLEAN OF ALL EXISTING COVERINGS AND MADE READY TO RECEIVE NEW FINISHES, IN ACCORDAGE WITH FINISH MANUFACTURERS WRITTEN INSTRUCTIONS AND RECOMMENDATIONS INCLUDING LEVEL 4 PLUMB TOLERANCES, REFER TO ROOM FINISH SCHEDULE FOR TYPES & LOCATIONS OF NEW FINISHES
11. ALL FLOOR FINISHED BEING REPLACED, SHALL BE COMPLETELY REMOVED & THE FLOOR CLEANED & PROPERLY PREPARED PRIOR TO INSTALLATION OF NEW FINISH MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING ALL FLOORS THAT RECEIVE NEW FINISHES PRIOR TO BID AND CONSTRUCTION, FLOORS SHALL BE PATCHED, FILLED, & STRIPPED AS REQUIRED TO PROVIDE A SMOOTH, DURABLE SURFACE FREE OF ALL BURRS OR ADHESIVE, AND SUITABLE FOR APPLICATION OF NEW FINISH MATERIAL. ANY UNDER CUTTING OF DOORS REQUIRED TO ACCOMMODATE NEW FLOOR FINISHES SHALL BE RESPONSIBILITY OF THE CONTRACTOR
12. WHERE NEW CONCRETE TOPPING IS TO BE POURED OVER AN EXISTING CONCRETE SLAB, BUSH HAMMER THE EXISTING CONCRETE FINISH FOR A BETTER BOND
13. WHERE EXISTING MASONRY ABUTS NEW MASONRY, EXISTING MASONRY SHALL BE TOOTHED TO RECEIVE NEW MASONRY (U.O.N.) NEW MASONRY SHALL MATCH EXISTING COURSING, TYPICAL
14. WHERE A PORTION OF AN EXISTING MASONRY WALL IS TO BE REMOVED, PROVIDE A FINISHED EDGE BY TOOTHING IN NEW MASONRY TO MATCH EXISTING (U.O.N.)
15. REFER TO STRUCTURAL DRAWINGS & NOTES FOR ADDITIONAL NOTES
16. CONTRACTOR SHALL MAINTAIN BUILDING INTEGRITY, BUILDING SECURITY, AND WEATHER-TIGHT BUILDING ENVELOPE (TO INCLUDE EXTERIOR WALL(S), ROOF, EXTERIOR OPENINGS, ETC.) DURING CONSTRUCTION. CONTRACTOR TO COORDINATE BUILDNG ACCESS WITH OWNER.

DEMOLITION NOTES (D):

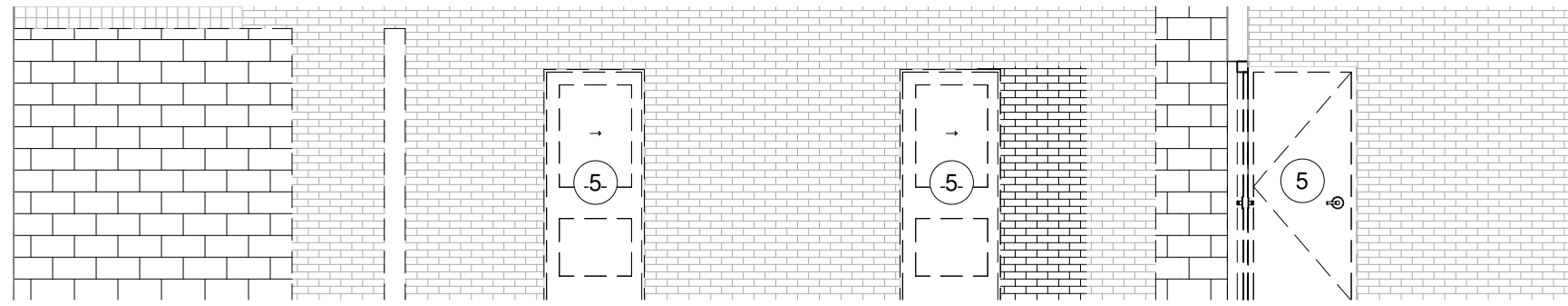
- 1 REMOVE PARTIAL EXISTING WALL.
- 2 REMOVE EXISTING WALL ENTIRELY.
- 3 REMOVE EXISTING WINDOW(S).
- 4 REMOVE EXISTING DOOR(S).
- 5 REMOVE EXISTING DOOR(S) & FRAME(S)
- 6 REMOVE EXISTING DOOR HARDWARE ONLY.
- 7 REMOVE EXISTING FLOORING.
- 8 REMOVE EXISTING CEILING.
- 9 REMOVE EXISTING TOILET.
- 10 REMOVE EXISTING LAVATORY.
- 11 REMOVE EXISTING SINK.
- 12 REMOVE PARTIAL CONCRETE.
- 13 REMOVE PARTIAL WOOD STAGE.
- 14 REMOVE STAIRS.



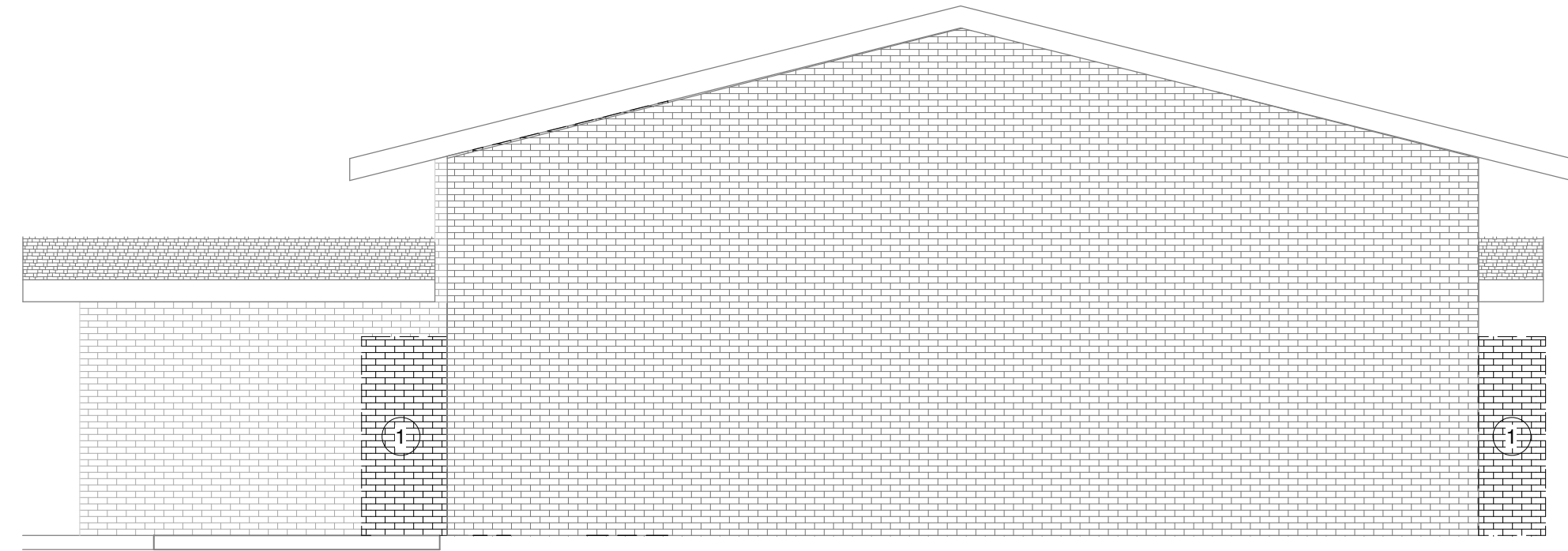
9 ELEVATION - DEMO
3/16" = 1'-0"



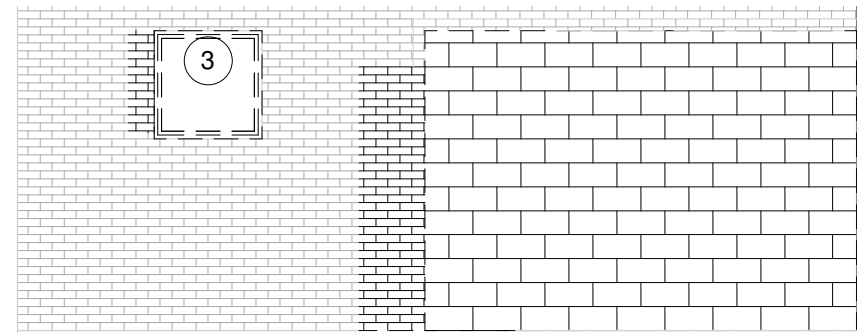
4 ELEVATION - DEMO
3/16" = 1'-0"



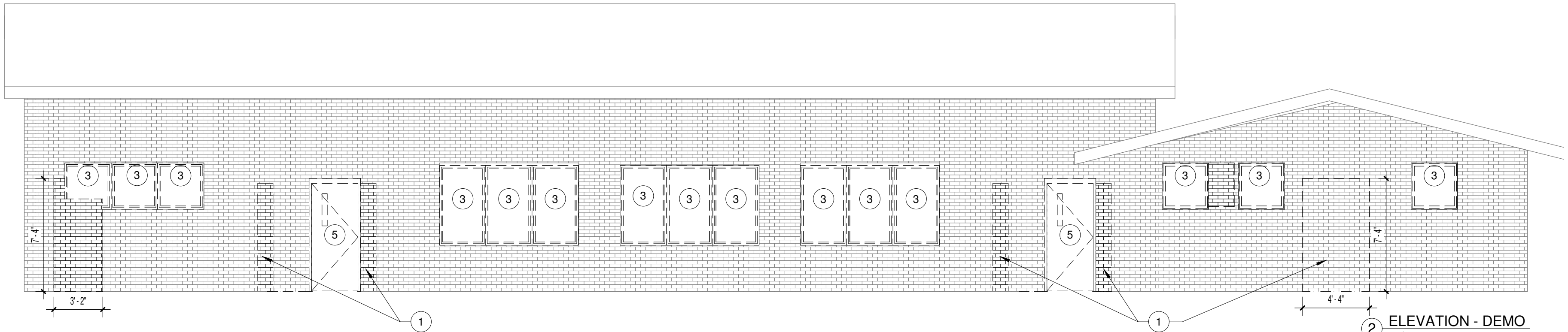
8 ELEVATION - DEMO
3/16" = 1'-0"



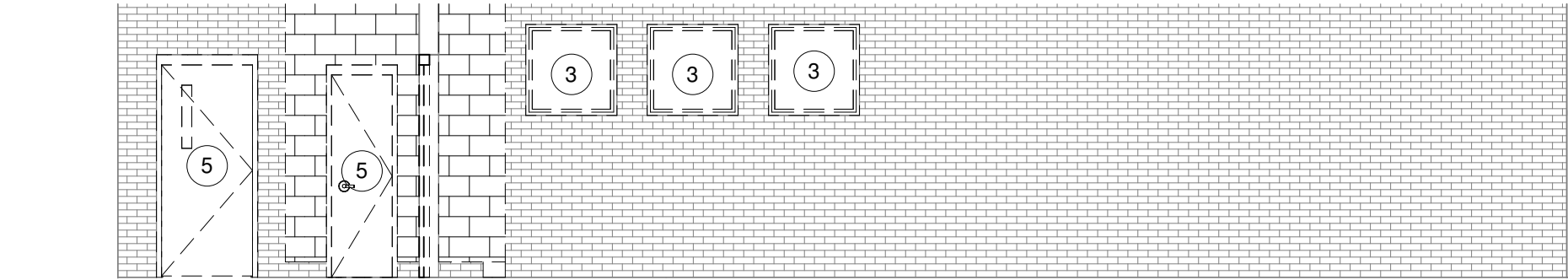
3 ELEVATION - DEMO
3/16" = 1'-0"



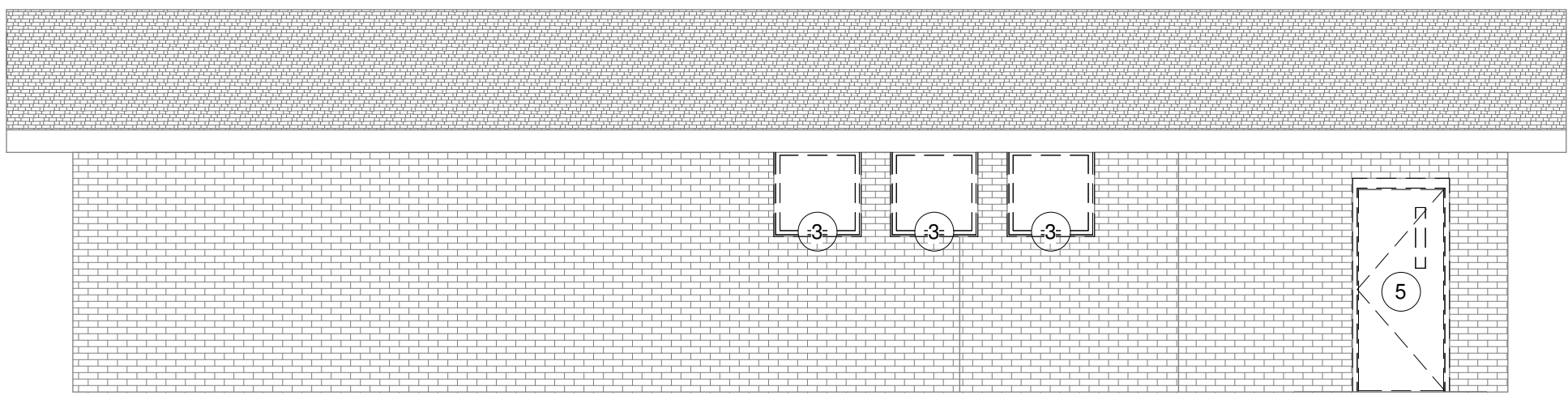
7 ELEVATION - DEMO
3/16" = 1'-0"



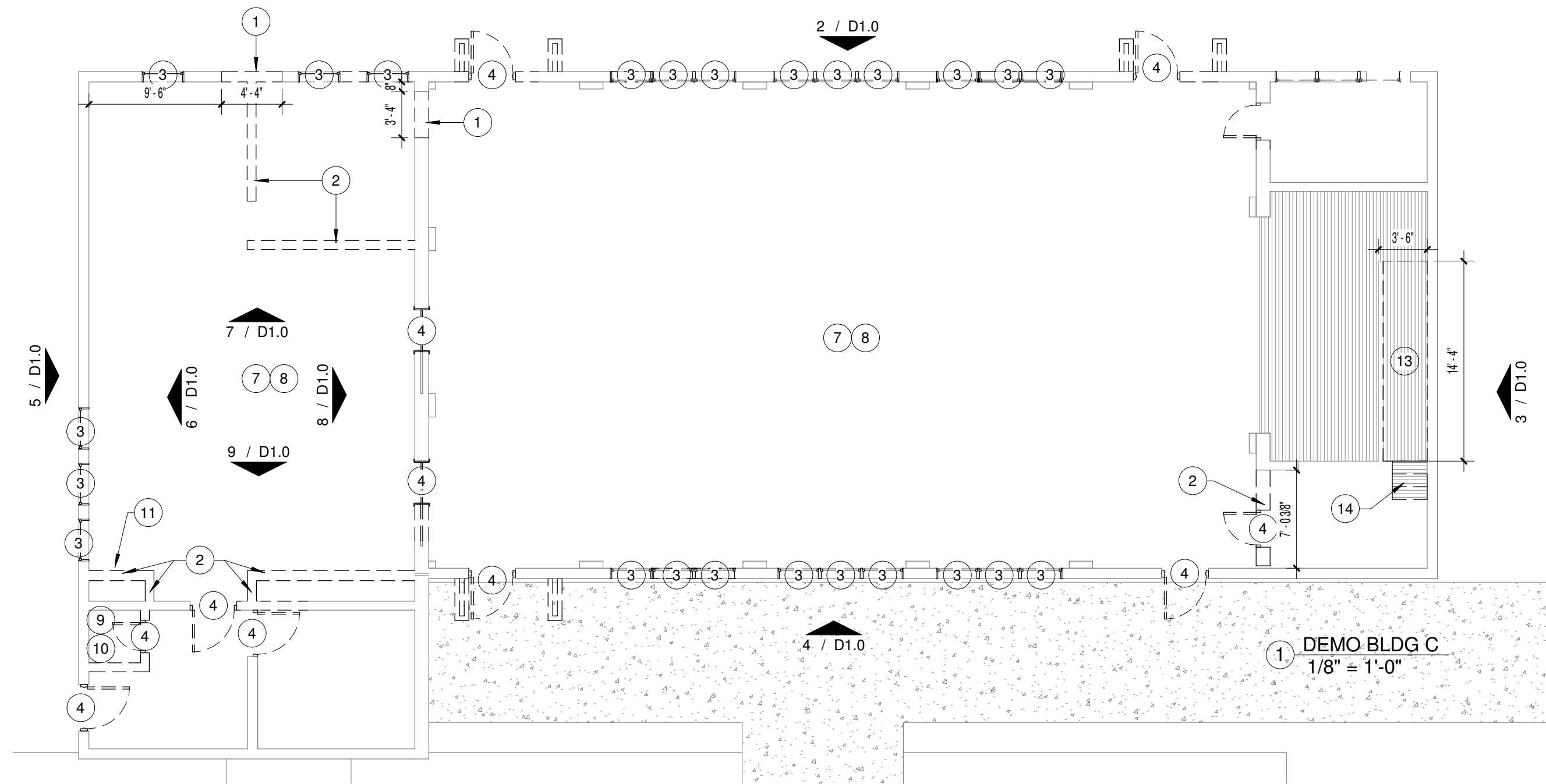
2 ELEVATION - DEMO
3/16" = 1'-0"



6 ELEVATION - DEMO
3/16" = 1'-0"



5 ELEVATION - DEMO
3/16" = 1'-0"



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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

DATE
AUGUST 26, 2019

ISSUE FOR BIDS

SHEET NUMBER

D1.0

KITCHEN EQUIPMENT

(KITCHEN EQUIPMENT TO BE CONTRACTOR PROVIDED AND INSTALLED)

K1	DOUBLE INDUSTRIAL OVEN	-	VULCAN VC44ED
K2	BAKING OVEN	-	LOGIUDICE MINISTAR - MSR-41016
K3	6 BURNER GAS RANGE	-	AMERICAN RANGE AR6
K4	FLAT GRILL	-	VULCAN MSA36 - 36" W HEAVY DUTY GAS COMMERCIAL GRIDDLE
K5	PAN RACKS	-	NEW AGE INDUSTRIAL # 7331
K6	3 DOOR REFRIGERATOR	-	TRUE T-72G-HC
K7	FOOD PROCESSOR	-	HOBART HCM62
K8	COMMERCIAL BLENDER	-	XTREME MX1000TXTP
K9	TORTILLA PRESS	-	DUTCHESS DUT/TXM-15
K10	COMMERCIAL MIXER	-	DOYON BTF060 60QT
K11	3 COMPARTMENT SINK	-	ADVANCE TABCO 94-3-54 (3) COMPARTMENT SINK 62"
K12	EXHAUST HOOD	-	RE: MEP
K13	WORK TABLE	-	STEELTON 24"X48"
K14	WORK TABLE	-	STEELTON 24"X60"
K15	WORK TABLE	-	STEELTON 24"X72"
K16	WORK TABLE-BUTCHER	-	JOHN BOOS JNS02 24"X48" BUTCHER BLOCK WORK TABLE W/ GALVANIZED UNDERSHELF
K17	EQUIPMENT STAND	-	REGENCY 30"X48" 16-GUAGE STAINLESS STEEL EQUIPMENT STAND WITH GALVANIZED UNDERSHELF
K18	WORK TABLE	-	REGENCY 24"X120" 16-GUAGE STAINLESS STEEL COMMERCIAL OPEN BASE WORK TABLE W/ 4" BACKSPLASH
K19	HAND SINK	-	REGENCY 17"X15" WALL MOUNTED HAND SINK WITH GOOSENECK FAUCET
K20	3 COM. SINK FAUCET	-	ADVANCE TABCO K-126 10" SWING SPOUT SPLASH MOUNT FAUCET

GENERAL NOTES:

1. ALL PENETRATIONS IN TOP OR BOTTOM PLATES FOR PLUMBING OR ELECTRICAL RUNS TO BE SEALED. SEE ELECTRICAL PLANS FOR ADDITIONAL SPECIFICATIONS.

2. ALL DIM. TO FINISH FACE OF WALL. DIM ON GRAY WALLS TO BE FIELD VERIFIED.

3. BUILDING MUST HAVE A PANEL BOX (LOCATION AS PER CITY CODES)

4. ALL SMOKE DETECTORS ARE TO BE PLACED AS PER CITY CODES.

5. ALL LIGHT FIXTURES TO BE REVIEWED BY OWNER. RE: ELEC.

6. RE: A7.0 FOR DOOR AND WINDOW SCHEDULES.

7. RE: 2/A1.0 FOR PARTITION TYPES.

8. ALL PARTITION TYPE "A" U.N.O.

9. PROVIDE ROOM SIGNAGE. RE: 3/A9.0 FOR SIGNAGE SPECIFICATIONS.

10. BULLNOSE EDGE AT ALL C.M.U. CORNERS FOR INTERIOR C.M.U. WALLS.

11. ALL EXISTING INTERIOR WALLS TO BE PAINTED, ALL EXISTING SURFACE MOUNTED CONDUITS NOT NOTED TO BE DEMOLISHED TO BE PAINTED.

12. ALL KITCHEN EQUIPMENT TO BE PROVIDED AND INSTALLED BY CONTRACTOR.

13. REFER TO SHEET A5.3 FOR NEW AND EXISTING MASONRY WALLS FOR ADDITIONAL INFORMATION.

14. THE CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS, SPECIFICATIONS, DIMENSIONS AND SITE CONDITIONS PRIOR TO BEGINNING ANY WORK AND REPORT ANY INCONSISTENCIES OR DISCREPANCIES TO THE ARCHITECT IMMEDIATELY FOR RESOLUTION DURING THE Q&A PERIOD OF THE BID PHASE, AND AT THE LATEST BEFORE BEGINNING CONSTRUCTION.

15. THE DRAWINGS AND SPECIFICATIONS ARE CORRELATIVE AND HAVE EQUAL AUTHORITY AND PRIORITY. BASE DISAGREEMENTS IN THEMSELVES OR IN EACH OTHER ON THE MOST EXPENSIVE COMBINATION OF QUANTITY AND QUALITY OF WORK INDICATED.

12. ITEMS SPECIFICALLY MENTIONED IN THE SPECIFICATIONS BUT NOT SHOWN ON THE DRAWINGS OR ITEMS SHOWN ON THE DRAWINGS BUT NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS SHALL BE PROVIDED AS IF THEY WERE BOTH SPECIFIED AND SHOWN IN THE DRAWINGS.

BUILDING C GROSS AREA

EXISTING KITCHEN AREA: 1,240 SQ. FT.

EXISTING DINING AREA: 2,637 SQ. FT.

TOTAL (BASE BID): 3,877 SQ. FT.

13. ALL MINOR DETAILS OF WORK WHICH ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS, AS WELL AS SUCH ITEMS WHICH ARE NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS, BUT ARE NECESSARY FOR THE PROPER COMPLETION OF THE WORK, SHALL BE CONSIDERED AS INCIDENTAL AND AS BEING PART OF AND INCLUDED WITH THE WORK FOR WHICH PRICES ARE GIVEN IN THE PROPOSAL AND NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE PERFORMANCE THEREOF.

14. ALL FLOOR PLAN DIMENSIONS ARE TO FINISH FACE OF WALL. DO NOT SCALE DRAWINGS. WHERE DIMENSIONS ARE NOTED "AS CLEAR" DIMENSION SHALL BE FROM FINISH TO FINISH.

15. CASEWORK, PLUMBING FIXTURES, TOILET PARTITIONS, AND OTHER FIXTURES AND EQUIPMENT ARE DIMENSIONED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE.

16. ALL SPACES WITH FLOOR DRAINS - SLOPE NOT TO EXCEED 2% (ONE - IN - FIFTY) IN ANY DIRECTION. COORDINATE ALL FLOOR DRAINS WITH PLUMBING DRAWINGS PRIOR TO ANY ROUGH-IN AND CONCRETE PLACEMENT.

17. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.

18. DIMENSIONS NOTED AS "CLEAR" REQUIRE SPECIFIC COORDINATION BETWEEN DISCIPLINES AND/OR MANUFACTURERS.

19. PROVIDE CORNERGUARDS AT ALL INTERIOR GYP. BOARD WALL CORNERS AS SPECIFIED.

20. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. ALL FLOOR FINISH ELEVATION CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS AS SPECIFIED.

21. OPEN EXTERIOR JOINTS AROUND DOOR AND WINDOW FRAMES, BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AT WALL AND ROOF PENETRATIONS AND ANY OTHER BUILDING ENVELOPE PENETRATION SHALL BE SEALED, CAULKED AND/OR WEATHER-STRIPPED TO PREVENT OR LIMIT AIR, MOISTURE AND VAPOR PENETRATION. USE ONLY SPECIFIED MANUFACTURER APPROVED MATERIALS AS DIRECTED BY MATERIAL MANUFACTURERS.

22. EFFECTIVELY ISOLATE ALL DISSIMILAR METALS/ MATERIALS TO PREVENT CORROSION BY ELECTROLYTIC ACTION OR OTHER CAUSES AS RECOMMENDED BY THE RESPECTIVE PRODUCT MANUFACTURER OR SUPPLIER.

23. PROPERLY TERMINATE ALL MATERIALS WITH APPROPRIATE TRIM, FLASHING, SEALANT, EXPANSION CONTROL, ETC. AS INDICATED ON DRAWINGS OR AS REQUIRED FOR PROPER INSTALLATION AS ACCEPTED BY STANDARD BUILDING PRACTICE.

24. COORDINATE AND PROVIDE APPROPRIATE BLOCKING IN WALLS AS REQUIRED TO SECURE ALL EQUIPMENT, HANDRAILS, CASEWORK, ETC. AS REQUIRED. WOOD BLOCKING SHALL MEET CODE REQUIREMENTS.

25. SINGLE USER TOILET ROOMS MAY BE CONFIGURED IN ACCORDANCE WITH TECHNICAL MEMORANDUM TM 03-02 ISSUED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS. ARCHITECTURAL BARRIERS DIVISION ALLOWING THE DOOR SWING TO ENCROACH INTO THE 5 FOOT DIAMETER TURNING CIRCLE SPACE SO LONG AS A CLEAR FLOOR SPACE OF 30" X 48" IS PROVIDED.

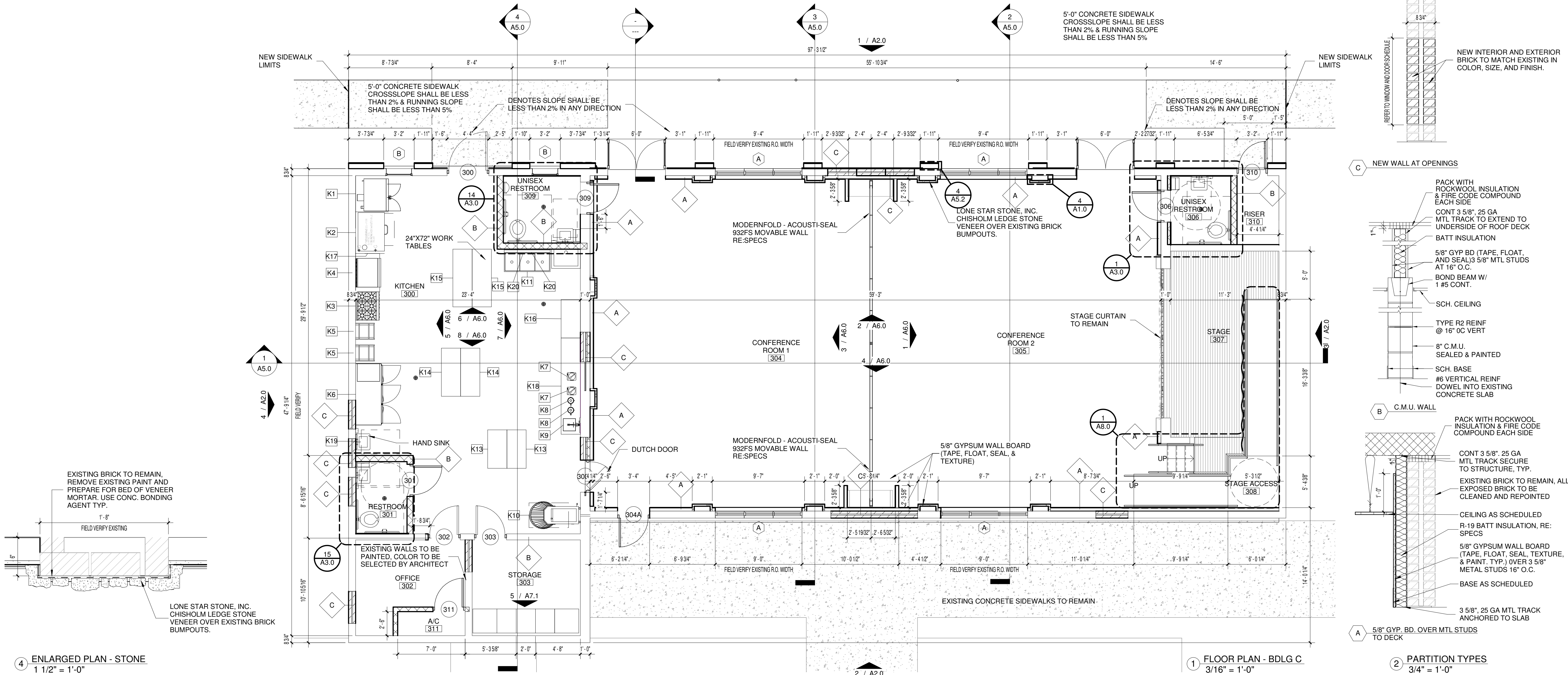
26. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS. COORDINATE ALL LIGHT FIXTURES, MECHANICAL DIFFUSERS, NOTIFICATION DEVICES, ETC. WITH MEP DRAWINGS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.

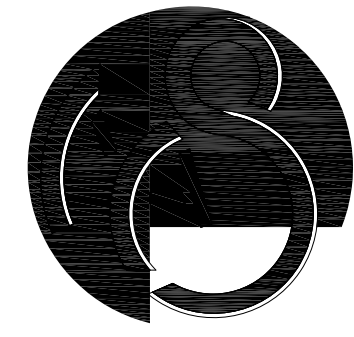
27. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. ALL HOUSEKEEPING PADS SHALL BE A MINIMUM OF 4" TALL REINF. W/ #3 BARS AT 15" O.C.B.W. AND PROVIDE 1" (45- DEGREE) CHAMFERED EDGES UNLESS NOTED OTHERWISE.

28. ALL INTERIOR DOORS IN STUD WALL ASSEMBLIES SHALL BE SET A MINIMUM OF 4" OFF THE PERPENDICULAR ADJACENT WALL ON THE HINGE SIDE OF THE DOOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS FOR RESOLUTION.

29. SET ALL EXTERIOR DOOR THRESHOLDS IN FULL BED OF MANUFACTURER APPROVED SEALANT IN ACCORDANCE WITH MANUFACTURER INSTALLATION INSTRUCTIONS.

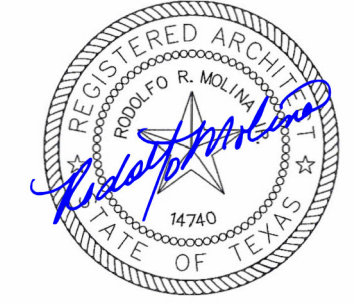
30. REFER A3.0 AND A8.0 SHEET FOR MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT AS SCHEDULED. REFER TO THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS DIVISION TEXAS ACCESSIBILITY STANDARDS FOR ALL MOUNTING HEIGHTS NOT LISTED AND FOR FURTHER CLARIFICATION AS NEEDED.





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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055
PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
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DATE
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R1.01

OVERALL ROOF
PLAN AND
GENERAL NOTES

GENERAL ROOF NOTES

- PROVIDE ALL REQUIRED UTILITY / STRUCTURAL COMPONENTS AND/OR CONNECTIONS FOR THE FUNCTIONAL USE OF ALL CONTRACTOR SUPPLIED EQUIPMENT OR APPLIANCES, REGARDLESS OF ANY OMISSIONS OR INCONSISTENCIES ENCOUNTERED IN THE CONSTRUCTION DOCUMENTS.
- THE WORD 'PROVIDE' SHALL MEAN 'FURNISH AND INSTALL COMPLETE AND READY TO USE.'
- IF DISCREPANCIES APPEAR BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE HIGHER QUALITY, QUANTITY, AND PRICE SHALL SUPERSEDE.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BECOME FAMILIAR WITH THE PROJECT AND THE ON-SITE / OFF-SITE CONDITIONS PRIOR TO BIDDING OR COMMENCING WORK. TO INCLUDE VERIFICATION OF EXISTING ROOF DECKS, DECK SLOPE, DECK TYPE, PROFILE, MEP PENETRATIONS, DRAINAGE, ECT. TO INCLUDE ALL QUANTITIES, TYPES, STYLES AND/OR PROFILES ECT.
- ROOF SLOPES SHOWN ON DRAWING ARE GENERAL AND CONCEPTUAL ONLY. PROVIDE POSITIVE DRAINAGE TO ALL ROOF DRAINS. VERIFY TAPER IN SHOP DRAWINGS. REFER TO STRUCTURAL DOCUMENTS FOR EXACT TOS/BOB ELEVATIONS.
- PROVIDE TAPERED INSULATION CRICKETS (1/2" FT. MIN. SLOPE) AT HIGH SIDE OF ALL MECHANICAL UNITS SMOKE VENTS, ROOF HATCHES & OTHER MISC. ROOF PENETRATIONS, TO SHED WATER AROUND & TO ENSURE POSITIVE ROOF DRAINAGE.
- PROVIDE ADDITIONAL FULLY ADHERED MEMBRANES AS PROTECTION AT "SERVICE SIDE" OF ALL MECH. EQUIPMENT, ACCESS POINTS OF ALL ROOF HATCHES AND ROOF ACCESS LADDERS FIELD VERIFY LOCATIONS.
- ALL WOOD BLOCKING AT ROOF EDGES ARE TO BE FABRICATED FROM CONT. 2X6 FR-WD BOARDS. PROVIDE LARGER 2X FR-WD AS REQUIRED PER DIMENSIONED DETAILED OR AS FIELD CONDITIONS DICTATE. ALL COPING TO BE SLOPED TOWARD THE INTERIOR.
- ALL EXPOSED FLASHING, COPING (IF APPLICABLE) AND THEIR ACCESSORIES SHALL BE AS SPECIFIED. PAINT ALL METAL FLASHING THAT IS NOT PREFINISHED (TYP) AND VISIBLE FROM THE GROUND.
- HEIGHT OF ALL NAILERS SHALL BE FLUSH WITH TOP OF NEW INSULATION THICKNESS
- ALL THROUGH WALL FLASHING SYSTEMS TO ACCOMMODATE 8" MINIMUM FLASHING HEIGHT FROM FINISHED ROOF SURFACE. PROVIDE END DAMS AS CONDITIONS ALLOW. ALL FLASHING TO HAVE 4" LAP MINIMUM AND OR STEP.
- ALL PITCH PANS SHALL BE CLAD METAL AND RECEIVE EITHER MECHANICALLY ATTACHED GOOSENECK OR METAL BONNETS. METAL BONNETS SHALL BE SECURED WITH CLAMPING RING AND SEALANT. SPECIAL CARE GIVEN TO CLEAN ALL METAL PENETRATIONS OF CONTAMINENTS PRIOR TO INSTALLATION.
- TERMINATION AT ROOF EDGE TO MEET PROFILE OF PERIMETER.
- ANY CRACKS OR VOIDS IN RISE WALLS ABOVE COUNTER FLASHING SHALL BE REPAIRED WITH COMPATIBLE SEALANT.
- ALL VERTICAL MEMBRANE FLASHING SHALL BE MECHANICALLY FASTENED AND INSTALLED WITH NEW METAL COUNTER FLASHING UTILIZING A CONTINUOUS CLIP. SLIDE METAL COVER PLATE DOWN OVER VERTICAL CLIP AND SEAL.
- ALL PIPE AND CONDUIT SHALL RECEIVE PIPE SUPPORTS AND RELATED SHIMS, AND SHALL BE PLACED ON AN ADDITIONAL FULLY ADHERED ROOF MEMBRANE UNDER SPECIFIED WALK PAD PRIOR TO SURFACE APPLICATION. SUPPORTS TO OCCUR AT 10'-0" O.C. AND WITHIN 2'-0" OF ALL SLOPES, TEES AND CORNERS. ALL PIPE TO BE PAINTED PER BUILDING CODE REQUIREMENTS.
- ALL METAL FLASHING SHALL EXTEND BEYOND ROOF EDGE MIN. 8" WHERE FLASHING ABUTS VERTICAL WALL SURFACE AS DETAILED. ALL FLASHING SHALL BE INSTALLED IN SHINGLE FASHION.
- ALL EQUIPMENT CURBS TO BE SET OR RAISED AS NECESSARY TO MAINTAIN 10" MINIMUM HEIGHT ABOVE FINISHED ROOF SURFACE.
- MECHANICAL, ELECTRICAL, AND PLUMBING ROOF EQUIPMENT SHOWN ON THIS PLAN IS FOR GENERAL ARCHITECTURAL INFORMATION ONLY. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS FOR ROOFTOP EQUIPMENT NOT SHOWN, AND FOR ADDITIONAL REQUIREMENTS AND COORDINATION PRIOR TO BIDDING OR COMMENCING WORK.
- FLASHING AND STRIPPING MATERIALS, MEMBRANES, INSULATION, AND ACCESSORIES SHOULD BE RECOMMENDED BY THE ROOFING SYSTEM MANUFACTURER FOR INTENDED USE AND COMPATIBILITY WITH THE MEMBRANE ROOFING SYSTEM.
- WHERE WOOD BLOCKING EXCEEDS 6" IN VERTICAL THICKNESS AT TAPERED INSULATION, PROVIDE STEM WALL CONSTRUCTED OF 6" GALVANIZED COLD FORMED METAL FRAMING AT 16" O.C. WITH CON. TRACK AT TOP AND BOTTOM AND WITH 3/4" FR-EXT GRADE PLYWOOD AT EACH SIDE, TOP TO SLOPE WITH TAPERED INSULATION.
- PIPE SUPPORT PAD SHALL BE MIN 2" WIDER THAN SUPPORT IN ALL DIRECTIONS.
- PROVIDE STEP FLASHING AND COVER PLATE AT SLOPED ROOF HI/LOW CONDITIONS.
- GUTTERS SHALL BE PREFINISHED GALVANIZED STEEL, SIZE PER ROOF PLAN, UNO. PROVIDE PREFINISHED 1/4"x1 1/2" GALVANIZED STEEL BENT PLATE BRACKETS AND PREFINISHED 1" GALVANIZED STEEL SPACERS AT 36" O.C. MAX. STAGGER WITH EACH OTHER AT 18" O.C.
- PROVIDE PREFINISHED GUTTER EL/S 30'-0" O.C. MAX.
- DOWNSPOUTS SHALL BE 5"x6" PREFINISHED GALVANIZED STEEL UNO AS INDICATED ON ROOF PLAN. PROVIDE PREFINISHED 2" GALVANIZED STEEL HANGERS AT 36" O.C. PROVIDE VANDAL PROOF STAINLESS STEEL STRAINERS AT EACH OUTLET. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
- PROVIDE SPLASH BLOCKS AT ALL ROOF LEADER NOZZLES THAT SPILL ONTO GROUND.
- VERIFY ELEVATION OF ROOF DRAIN RELATIVE TO OVERFLOW SCUPPER PRIOR TO INSTALLATION OF SCUPPERS.
- ROOF PLAN SHOWS TAPERED INSULATION CONCEPTUALLY AND FOR INTENT ONLY. TAPERED INSULATION IS NOT SHOWN TO SCALE AND IS SHOWN AS GRAPHIC REPRESENTATION ONLY IN ORDER TO SHOW SLOPE AND APPROXIMATE LOCATIONS OF MATERIAL. VERIFY INSULATION REQUIRED TO MAINTAIN SLOPE PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SPECIFIC ROOF NOTES

- PROVIDE METAL END CAP WHERE PARAPET TERMINATES.
- PROVIDE NEW ROLLER SUPPORTS FOR EXISTING PIPING ABOVE ROOF.
- PROVIDE PREFINISHED METAL EDGE FLASHING AS DETAILED.
- PROVIDE PREFINISHED RAKE FLASHING AS DETAILED.
- PROVIDE TAPERED INSULATION TO PROVIDE POSITIVE DRAINAGE TOWARDS ROOF DRAINS 1/4" PER FOOT SLOPE.
- REMOVE THE EXISTING PARAPET COPING IN ITS ENTIRETY WHERE NEW CONSTRUCTION OCCURS. ADD ADDITIONAL WOOD NAILERS TO TOP OF PARAPET AS REQUIRED TO PROVIDE POSITIVE SLOPE AS DETAILED.
- PROVIDE 1/2" PER FOOT TAPERED CRICKETS.
- PROVIDE NEW OVERFLOW 8"x12" SCUPPER ADJACENT TO EXISTING AS SHOWN AND MAINTAIN 2" HEIGHT ABOVE NEW ROOF SURFACE. INCREASE SCUPPER OUTLET TO BE 8" X16".
- ADD NEW OVERFLOW SCUPPER THROUGH ROOF EDGE.
- PROVIDE NEW CAST IRON STRAINERS ON ALL DRAIN BOWLS.
- PROVIDE DECK INFILL AT EXISTING ABANDONED CURB. PROVIDE ADDITIONAL FRAMING AS REQUIRED TO SUPPORT NEW DECK. DECK TYPE TO MATCH EXISTING STYLE, SIZE, AND PROFILE.
- REMOVE AREAS OF DAMAGED LIGHTWEIGHT CONCRETE. REMOVE RUSTED REINFORCING WIRE IF APPLICABLE AND REPLACE BY TYING NEW REINFORCING OF MATCHING GAGE AND PATTERN LAPPING OVER EXISTING 3". REPLACE LIGHTWEIGHT CONCRETE WITH CONCRETE OF MATCHING DENSITY AND STRENGTH.
- REMOVE EXISTING FRAMED CRICKET AND REPLACE WITH NEW TAPERED INSULATION CRICKET AS SPECIFIED
- DISCONNECT AND REMOVE EXISTING CONDUIT LINE FROM PASSING THROUGH PARAPET WALL AND PROVIDE NEW CONDUIT PROVIDING OFFSET TO PASS OVER PARAPET AND RECONNECT TO ALL UNITS. ALL WORK TO BE PERFORMED BY LICENSED MEP CONTRACTOR IN ACCORDANCE TO ALL LOCAL CODES
- TEAR OFF AND REMOVE EXISTING COMPOSITION SHINGLE ROOFING SYSTEM DOWN TO EXISTING PLYWOOD DECK AND PROVIDE NEW 40 MIL SELF ADHERING UNDERLAYMENT "LEAKGUARD" AS MANUFACTURED BY GAF OR APPROVED EQUAL, PROVIDE ASPHALTIC COMPOSITION SHINGLE TO MATCH ADJACENT BUILDING IN SIZE, WEIGHT, TYPE, STYLE ECT. TO INCLUDE ALL ASSOCIATED TRIMS FLASHING, ACCESSORIES ECT.

1 OVERALL ROOF PLAN
NOT TO SCALE



SATELLITE
DISH



ANTENNA



SOIL/PLUMBING
VENT



FLANGE MOUNTED
EQUIPMENT



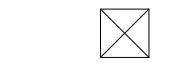
HOT STACK



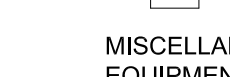
CURB MOUNTED
VENT



RTU



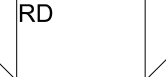
CURB MOUNTED
EQUIPMENT



MISCELLANEOUS
EQUIPMENT ON
EQUIP. SUPPORTS



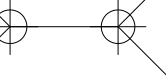
ROOF HATCH



PRIMARY ROOF
DRAIN



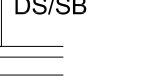
OVERFLOW
ROOF DRAIN



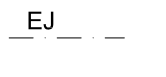
PRIMARY AND
OVERFLOW ROOF DRAIN



EDGE SCUPPER



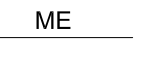
DOWNSPOUT/
SPLASHBLOCK



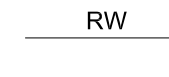
EXPANSION
JOINT



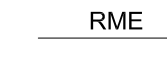
METAL EDGE
W/GUTTER



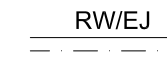
METAL EDGE



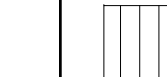
RISE WALL



RAISED METAL
EDGE



RISE WALL
W/EXPANSION
JOINT



SLOPE
DIRECTION



SKYLIGHT

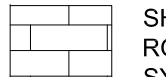
ROOF LEGEND



METAL
ROOF
SYSTEM



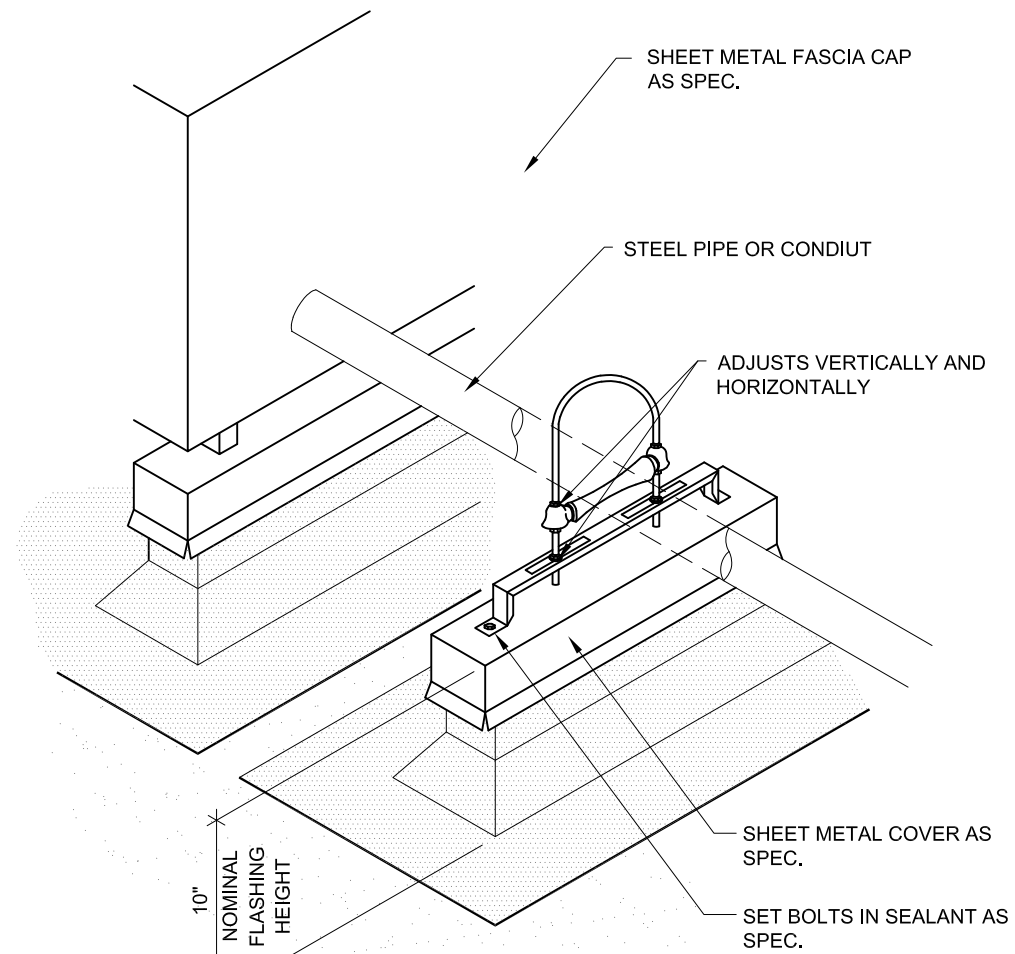
SHINGLE
ROOF
SYSTEM



LOW SLOPE
ROOF
SYSTEM



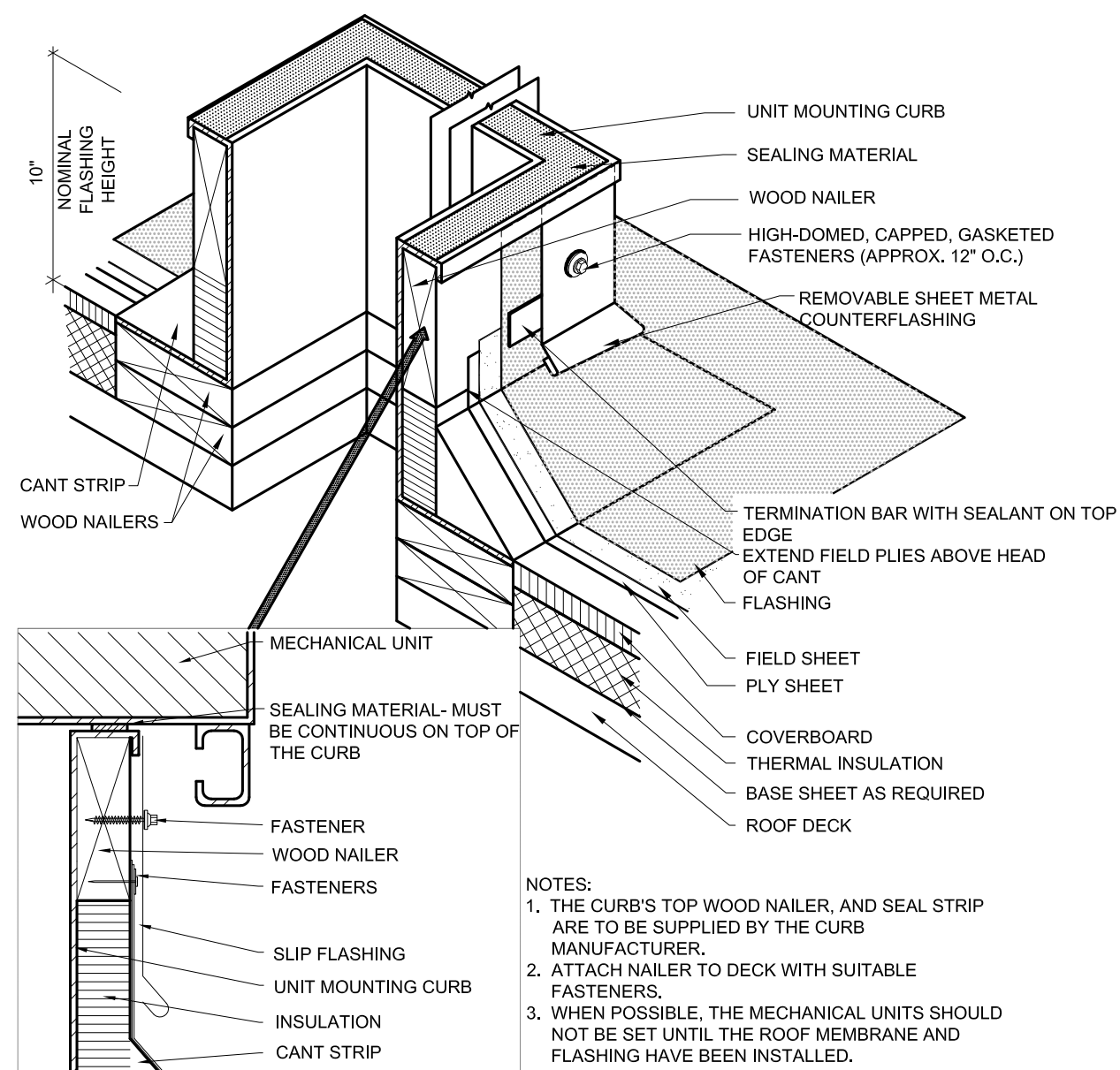
NOT
IN
CONTRACT



- NOTES:
1. NRCA SUGGESTS PIPES AND CONDUITS NOT BE PLACED ON ROOFS, HOWEVER, WHERE THEY ARE NECESSARY, A PIPE ROLLER SUPPORT IS RECOMMENDED.
 2. THIS DETAIL IS DESIGNED TO ELIMINATE ROOF DAMAGE DUE TO EXPANSION AND CONTRACTION OF PIPES.

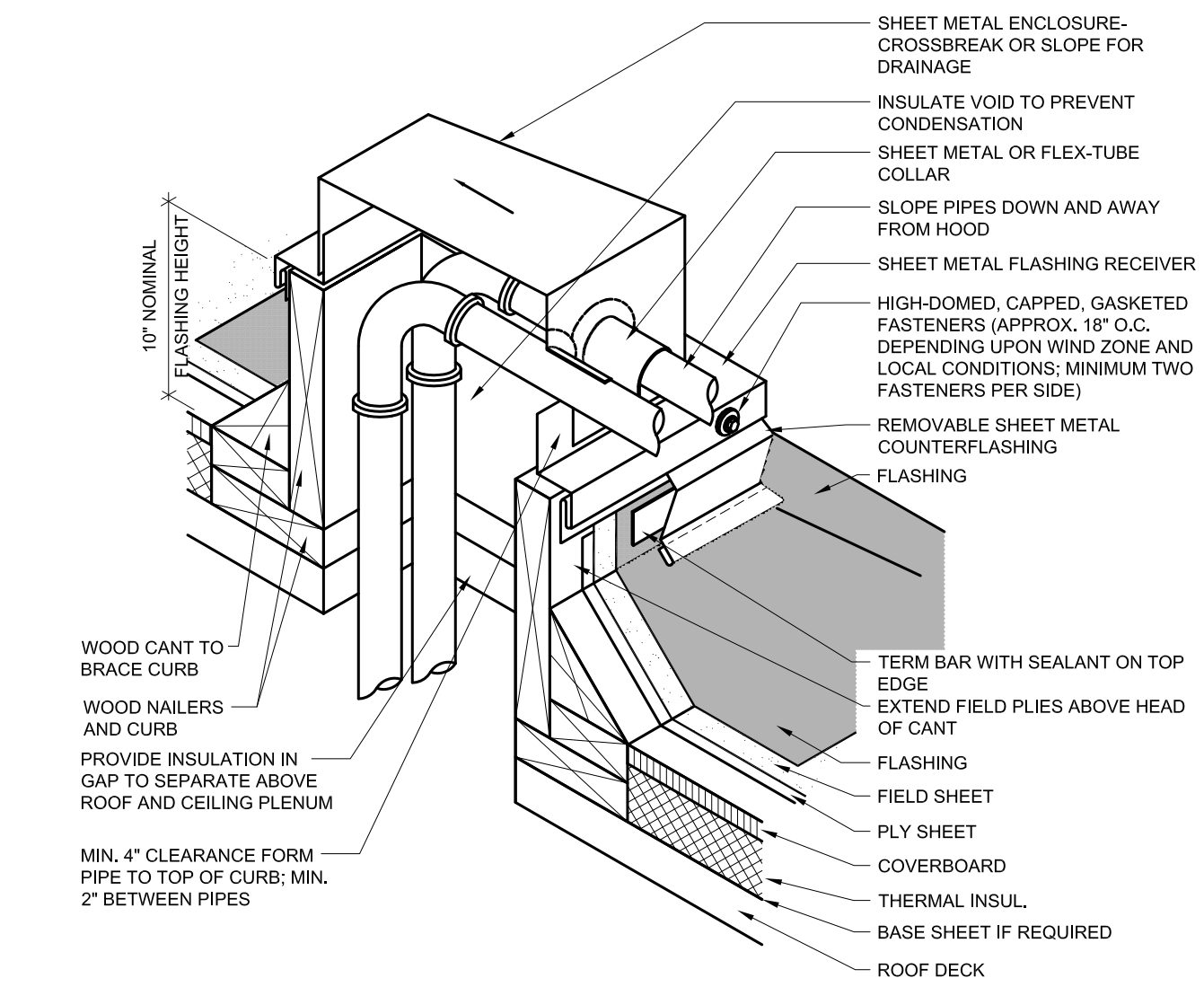
12 PIPE SUPPORT

NOT TO SCALE



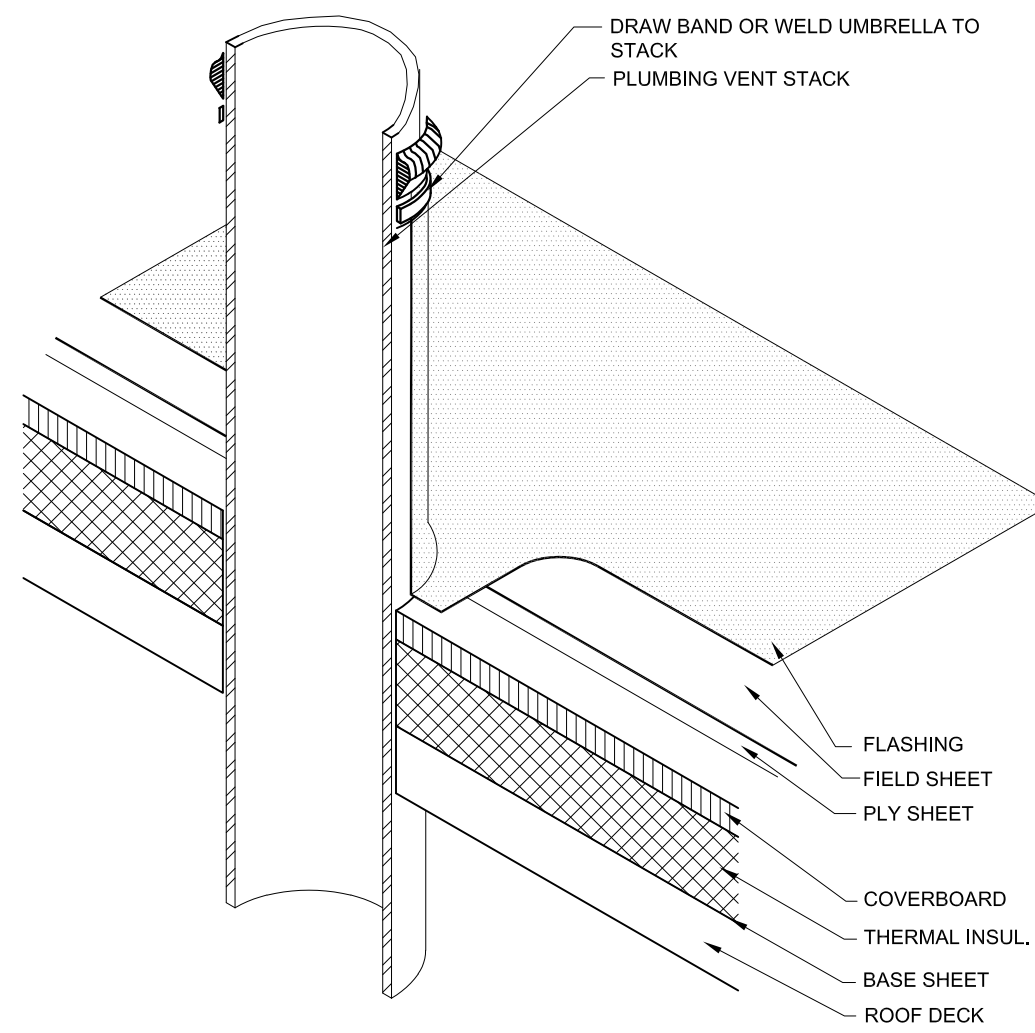
11 PRIMARY SCUPPER

NOT TO SCALE



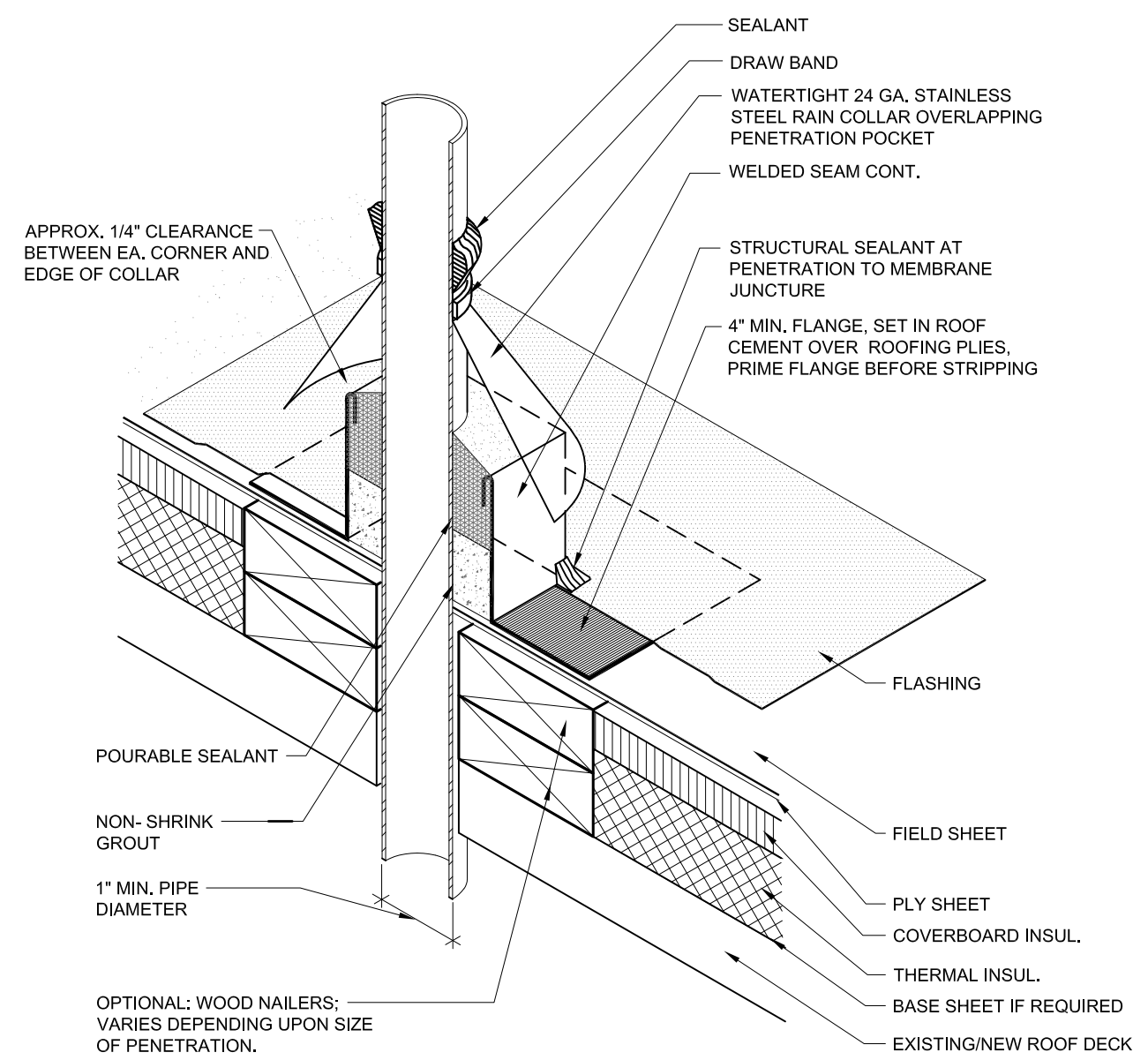
10 PRIMARY ROOF DRAIN

NOT TO SCALE



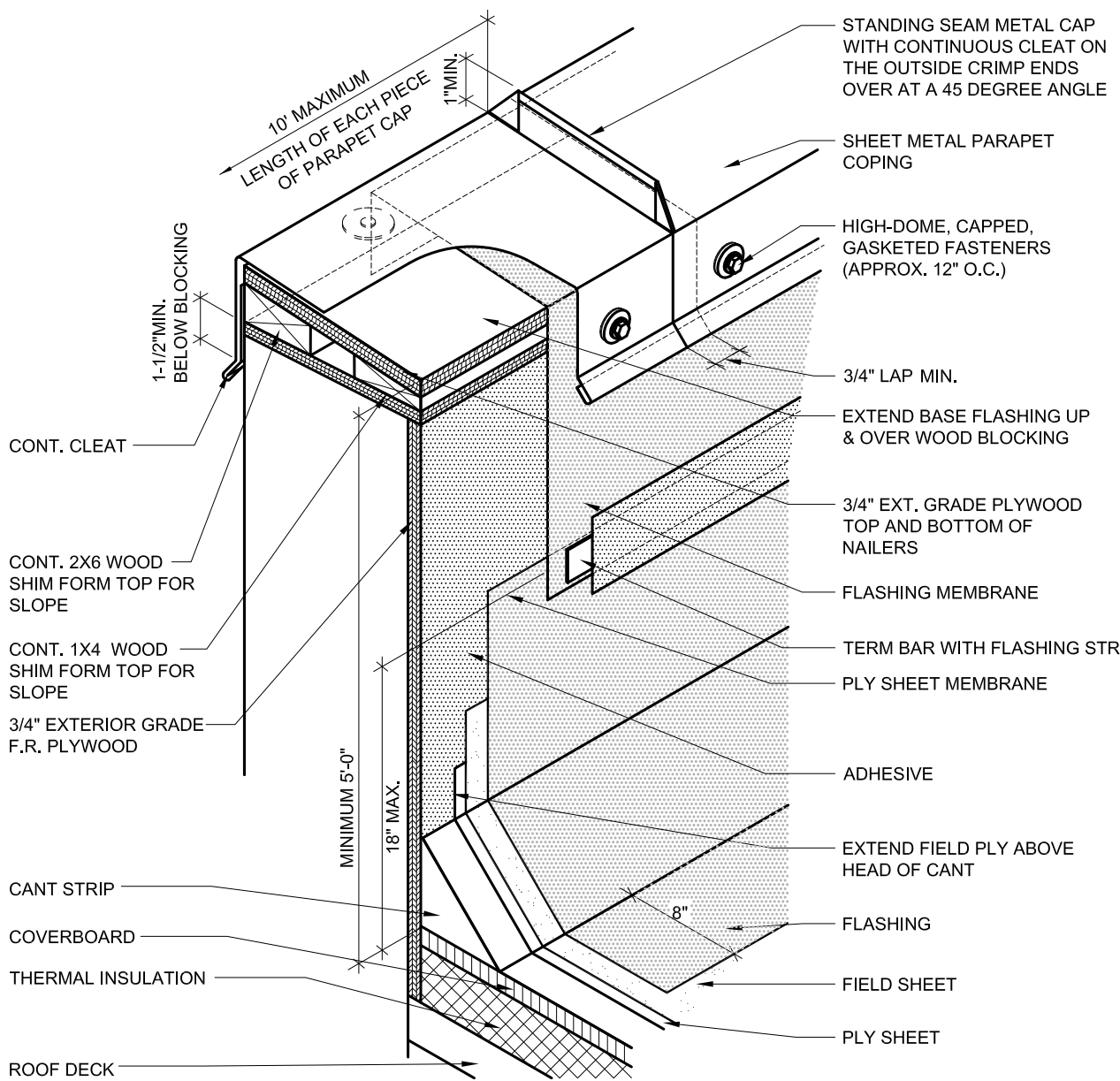
9 REGLET RECIVER AT RISEWALL

NOT TO SCALE



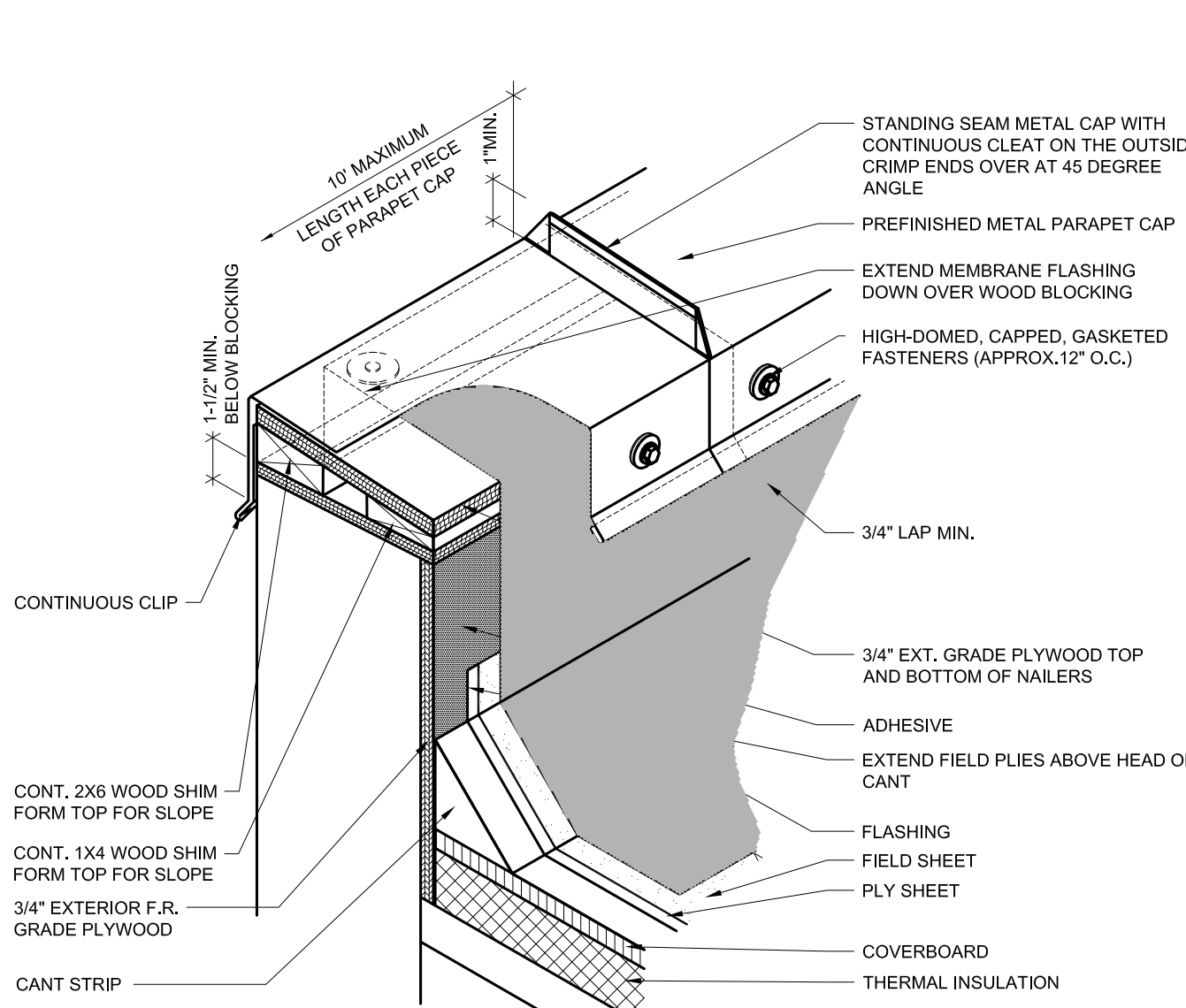
8 MECHANICAL CURB

NOT TO SCALE



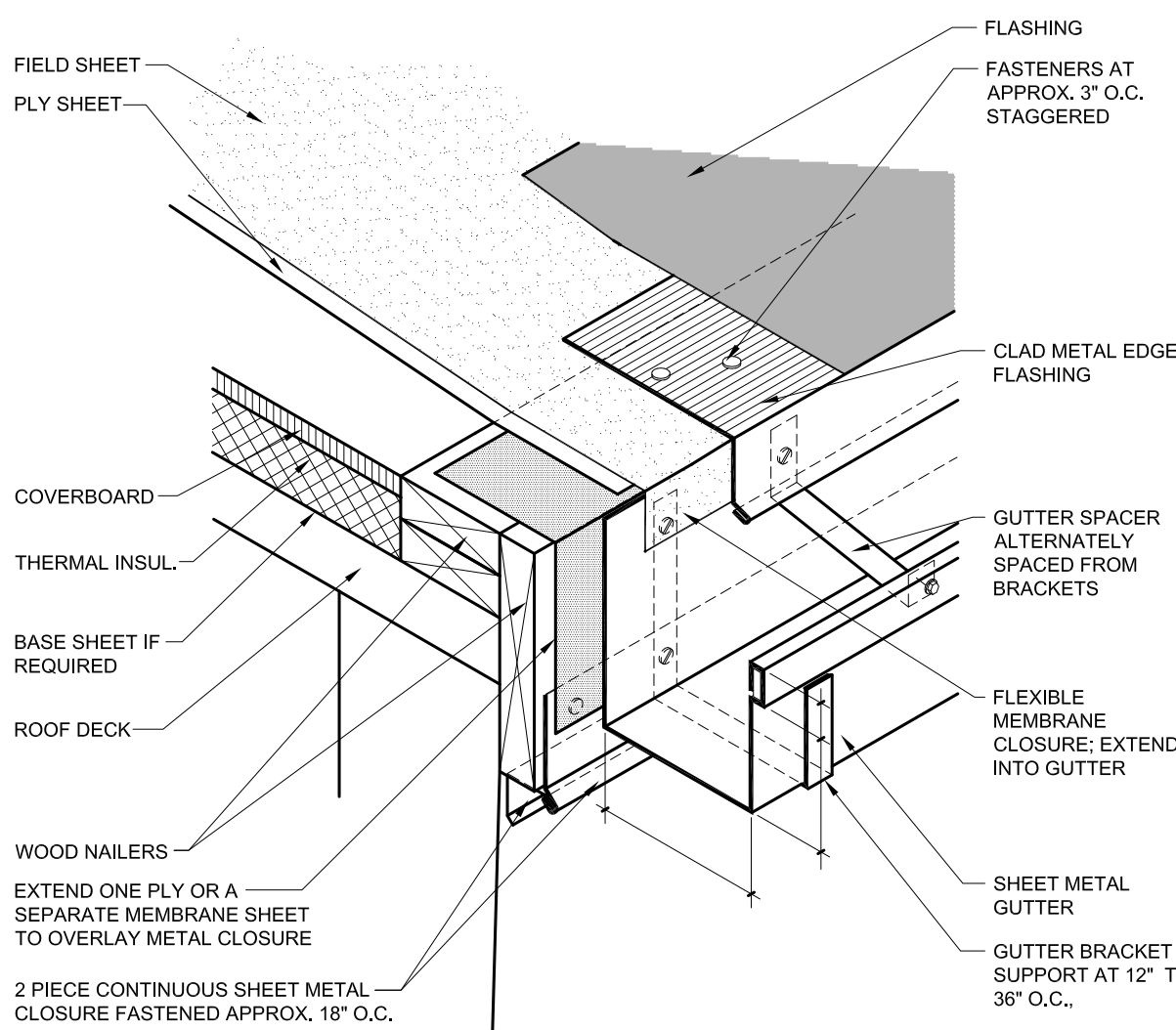
7 PIPE BOX

NOT TO SCALE



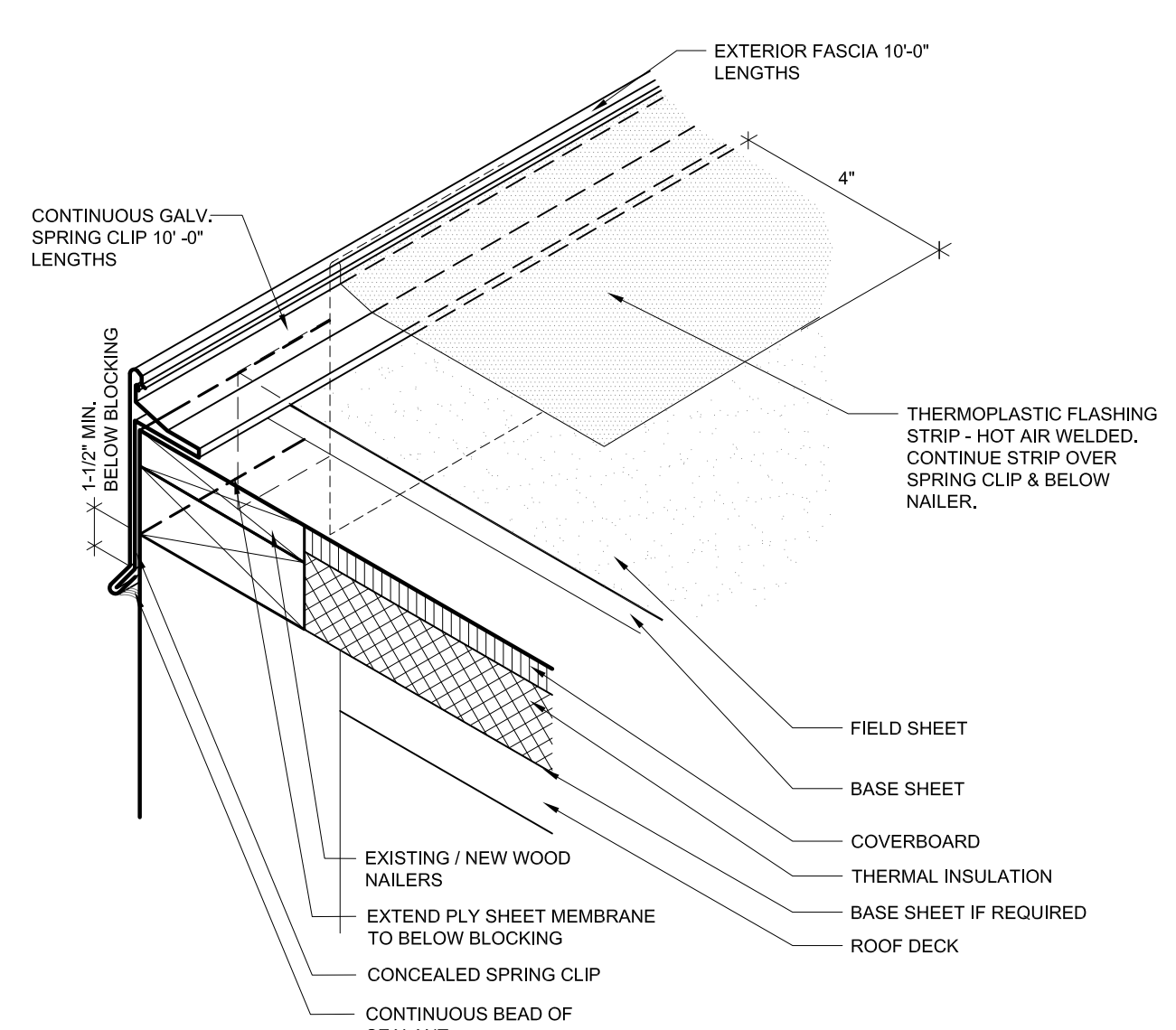
6 VENT STACK

NOT TO SCALE



5 PITCHPAN

NOT TO SCALE



4 TALL PARAPET

NOT TO SCALE

3 LOW PARAPET

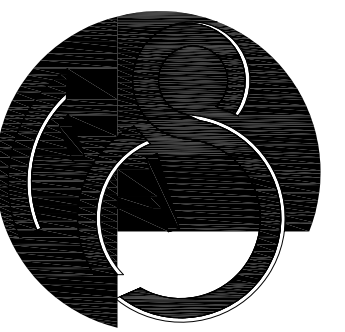
NOT TO SCALE

2 METAL EDGE GUTTER

NOT TO SCALE

1 METAL EDGE

NOT TO SCALE



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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

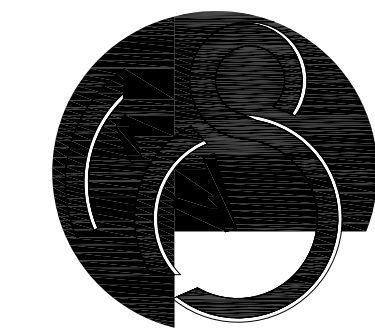
DATE
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ISSUE FOR BIDS

SHEET NUMBER

R2.01

ROOF DETAILS



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AUGUST 19, 2019

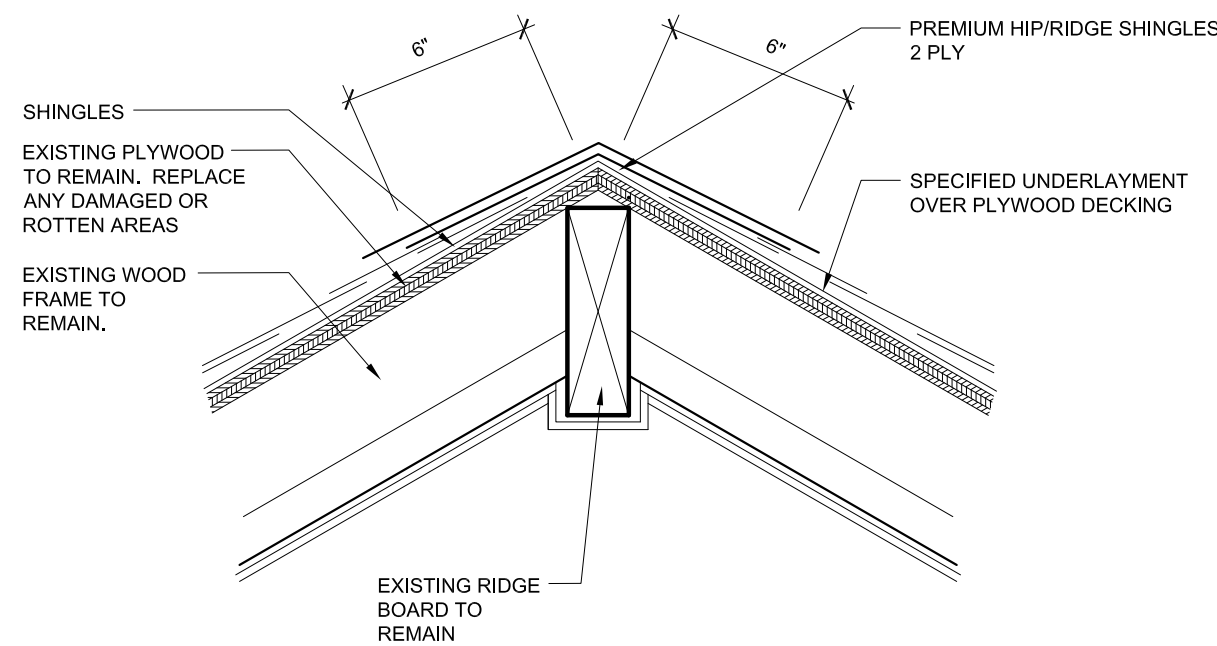
ISSUE FOR BIDS

ROOF DETAILS

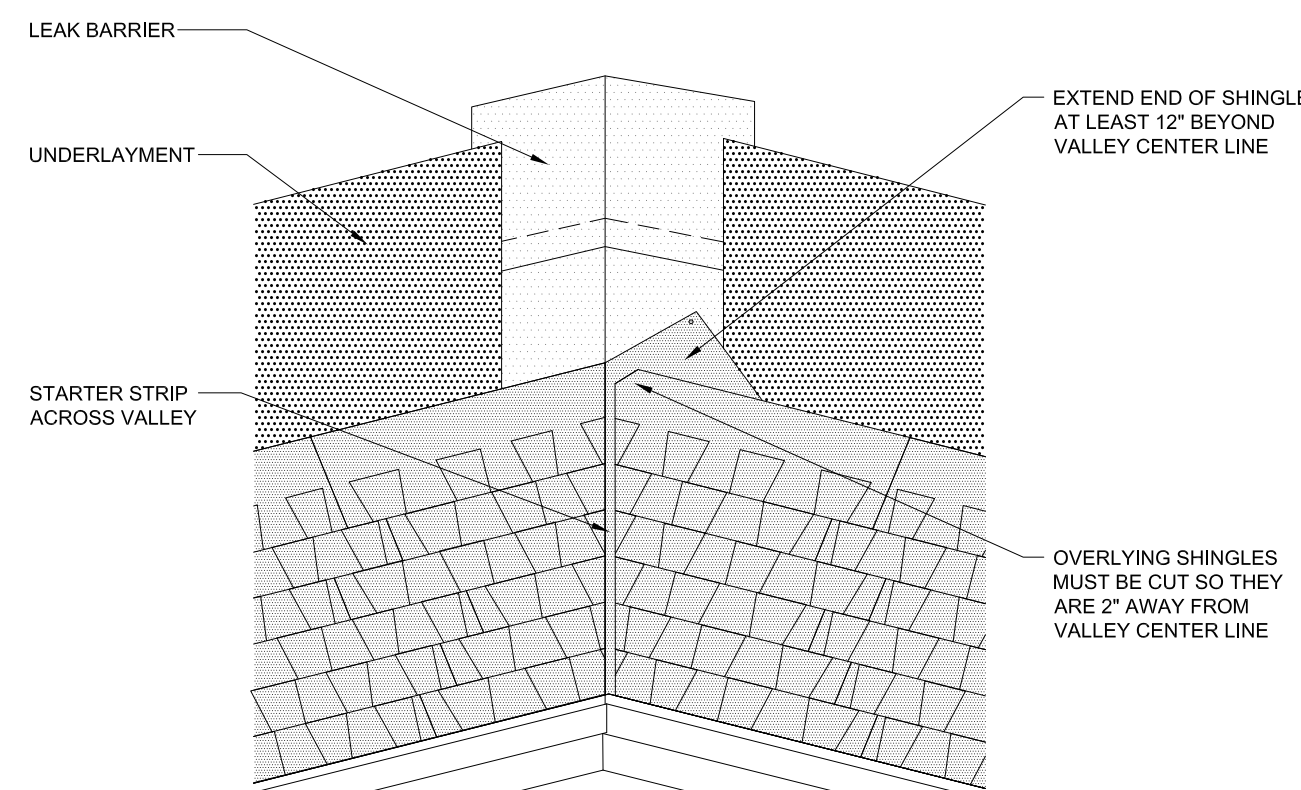
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R2.02

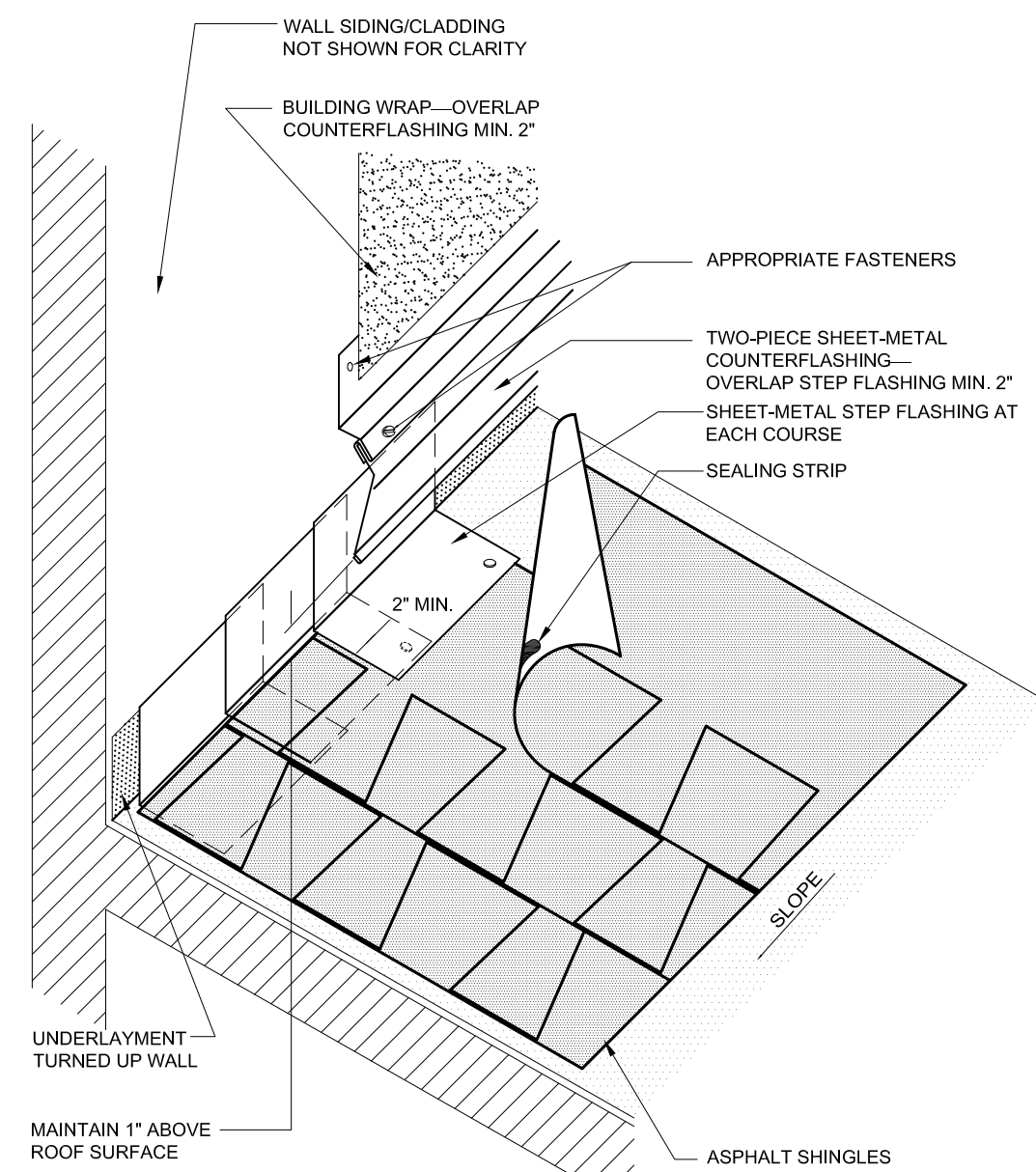
ROOF DETAILS



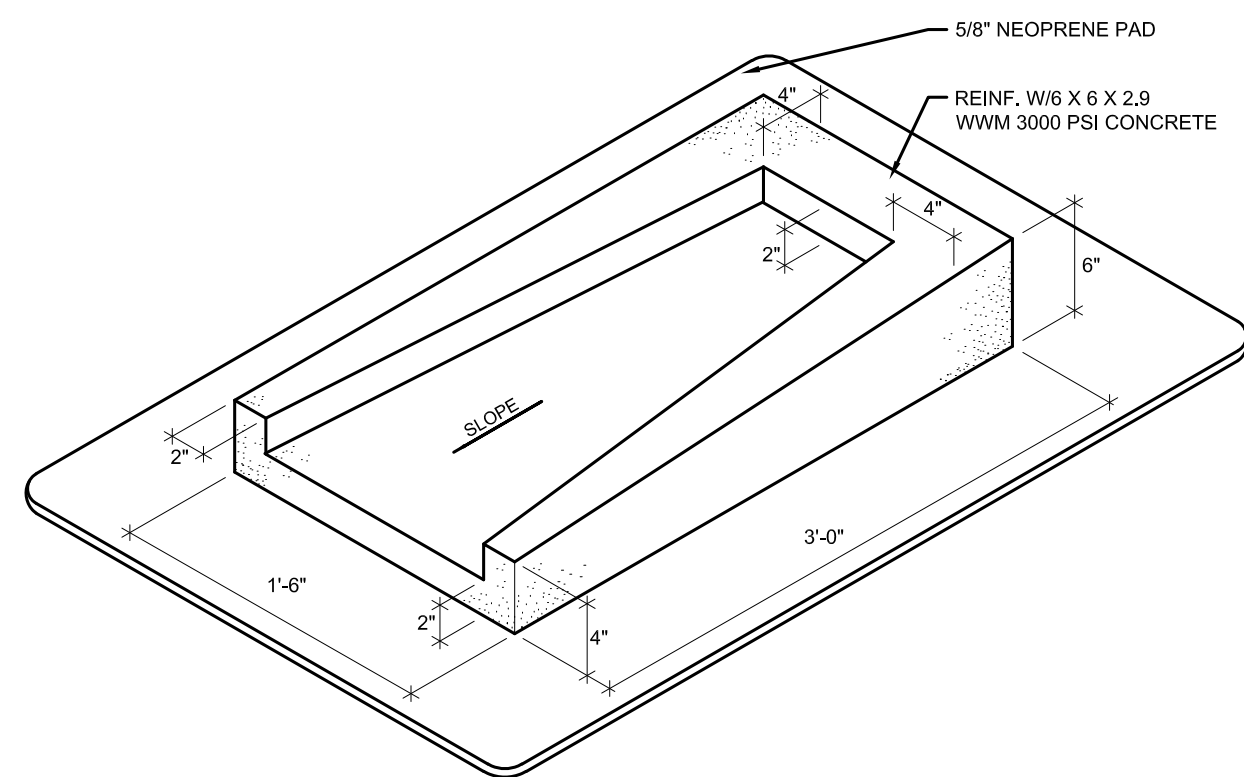
7 NON VENTED RIDGE DETAIL
NOT TO SCALE



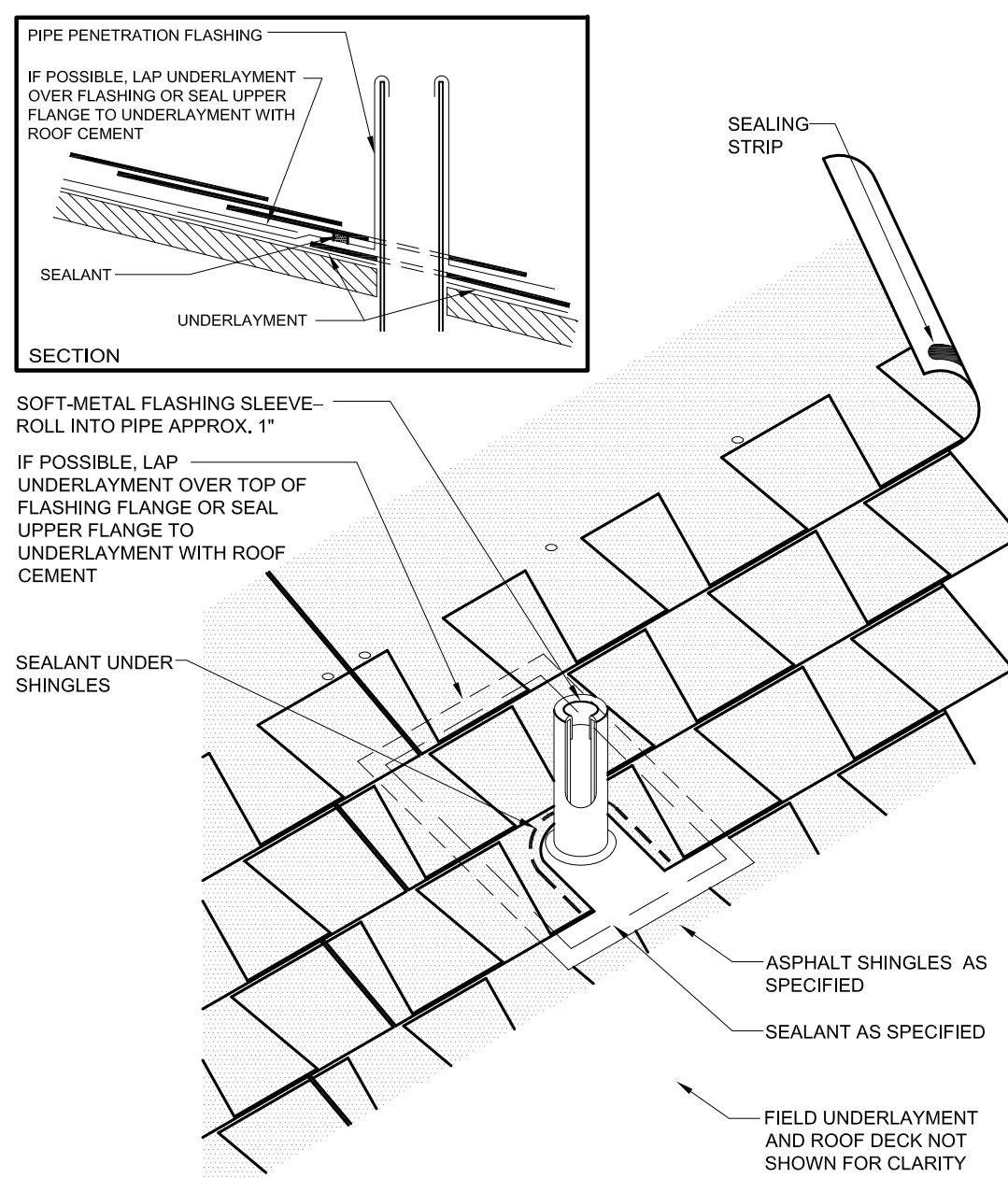
6 CLOSED VALLEY FLASHING DETAIL
NOT TO SCALE



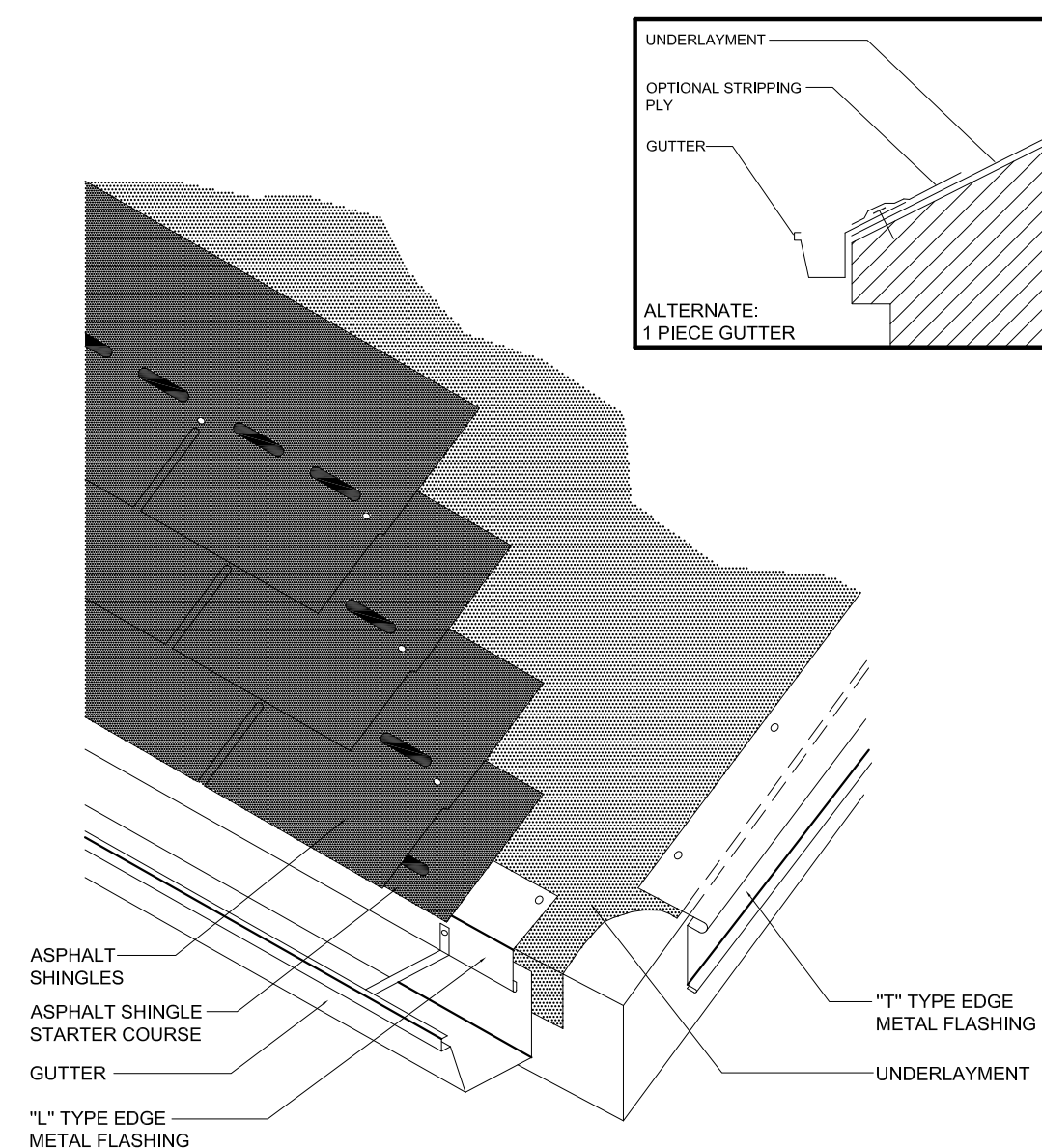
5 SIDEWALL FLASHING DETAIL
NOT TO SCALE



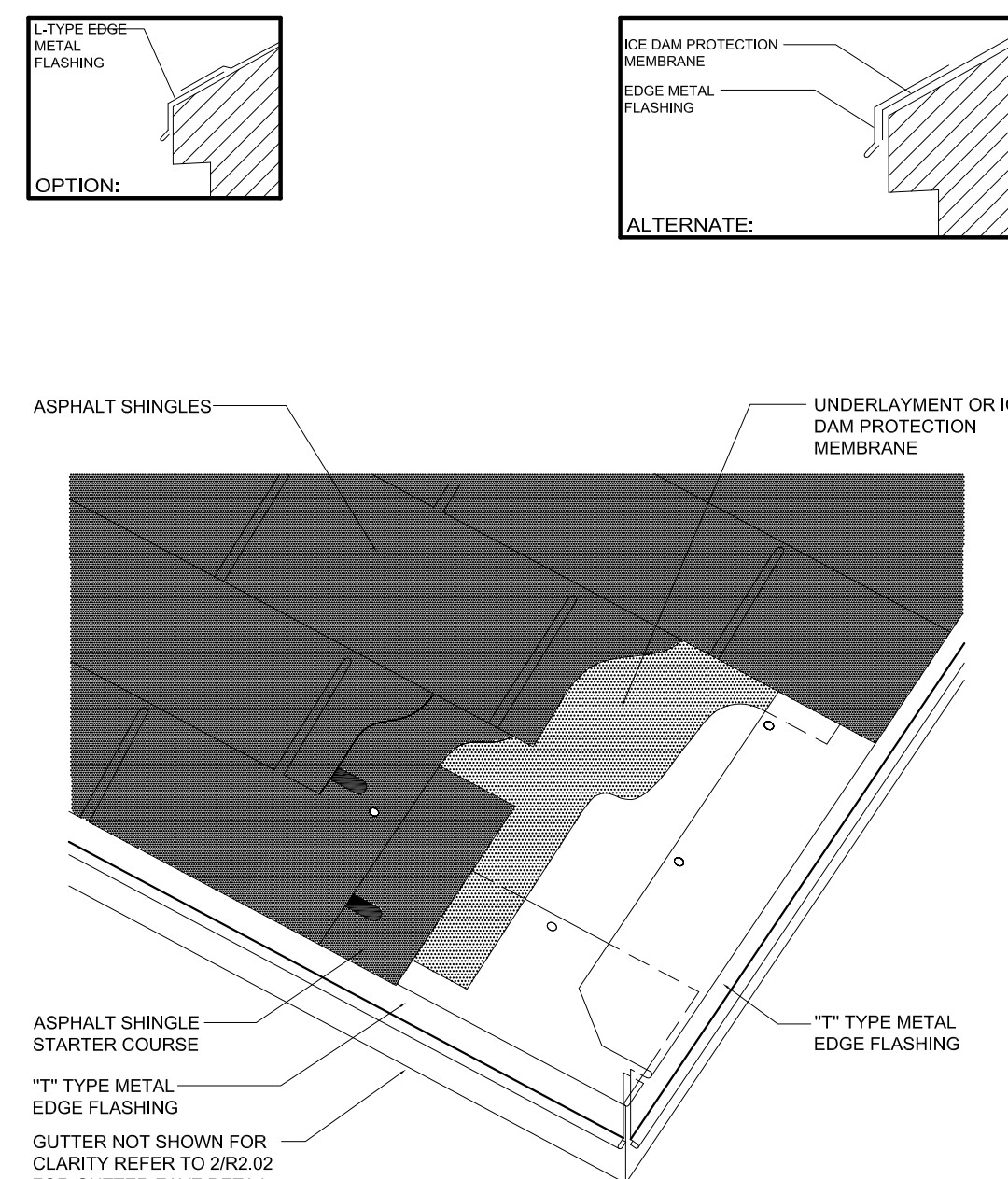
4 SPLASHBLOCK
NOT TO SCALE



3 SHINGLES - VENT STACK
NOT TO SCALE



2 SHINGLES - METAL EDGE GUTTER
NOT TO SCALE



1 SHINGLES - EAVE AND RAKE FLASHING
NOT TO SCALE



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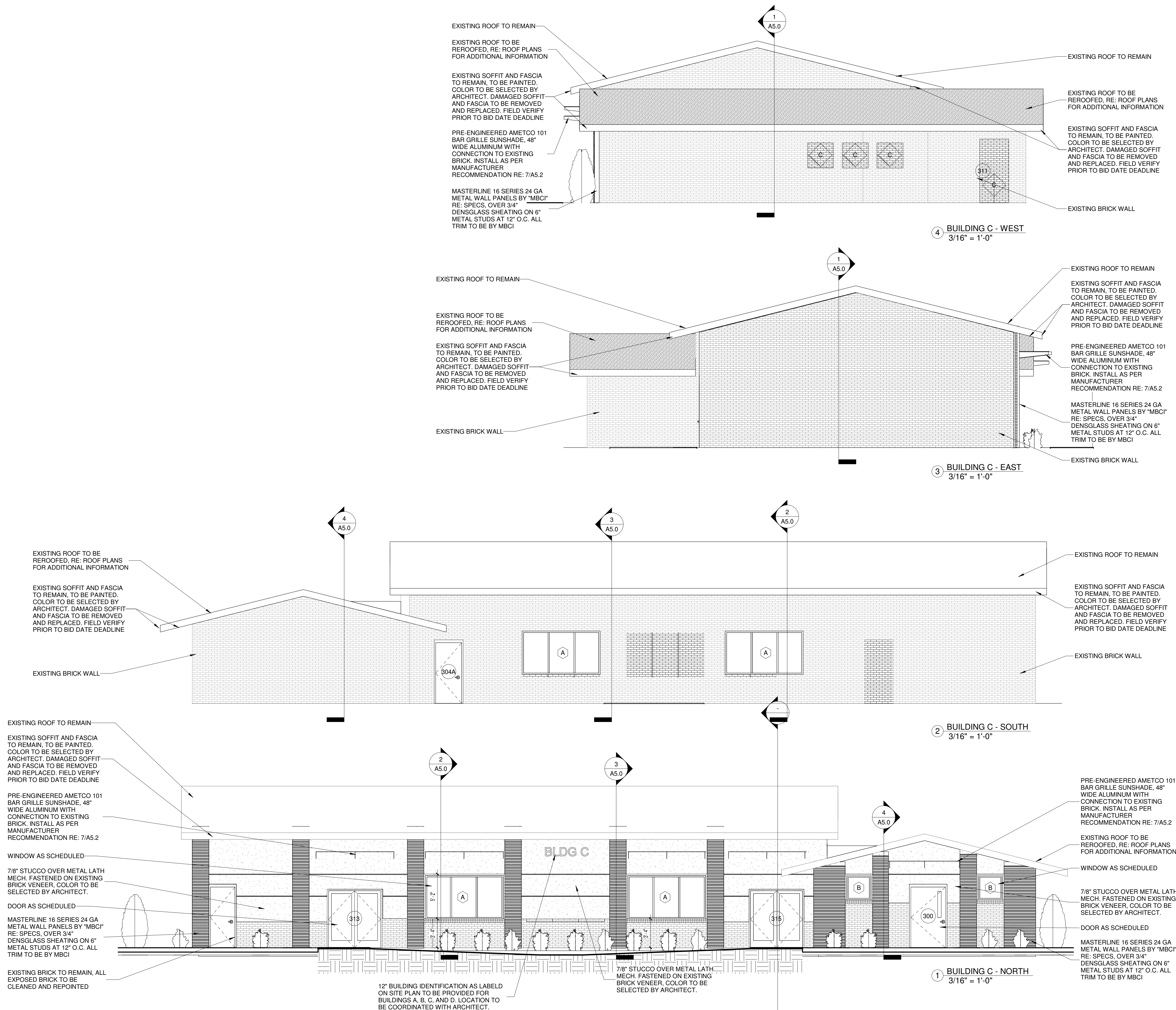
PROJECT NUMBER
219006

DATE
AUGUST 26, 2019

ISSUE FOR BIDS

SHEET NUMBER

A2.0



TOILET ACCESSORIES LEGEND

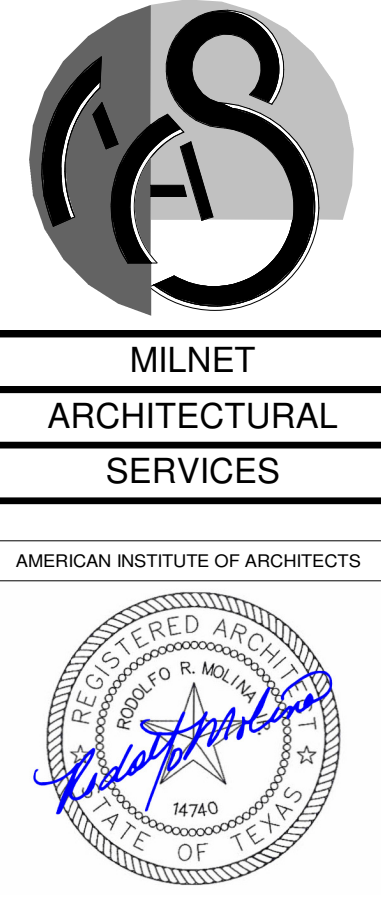
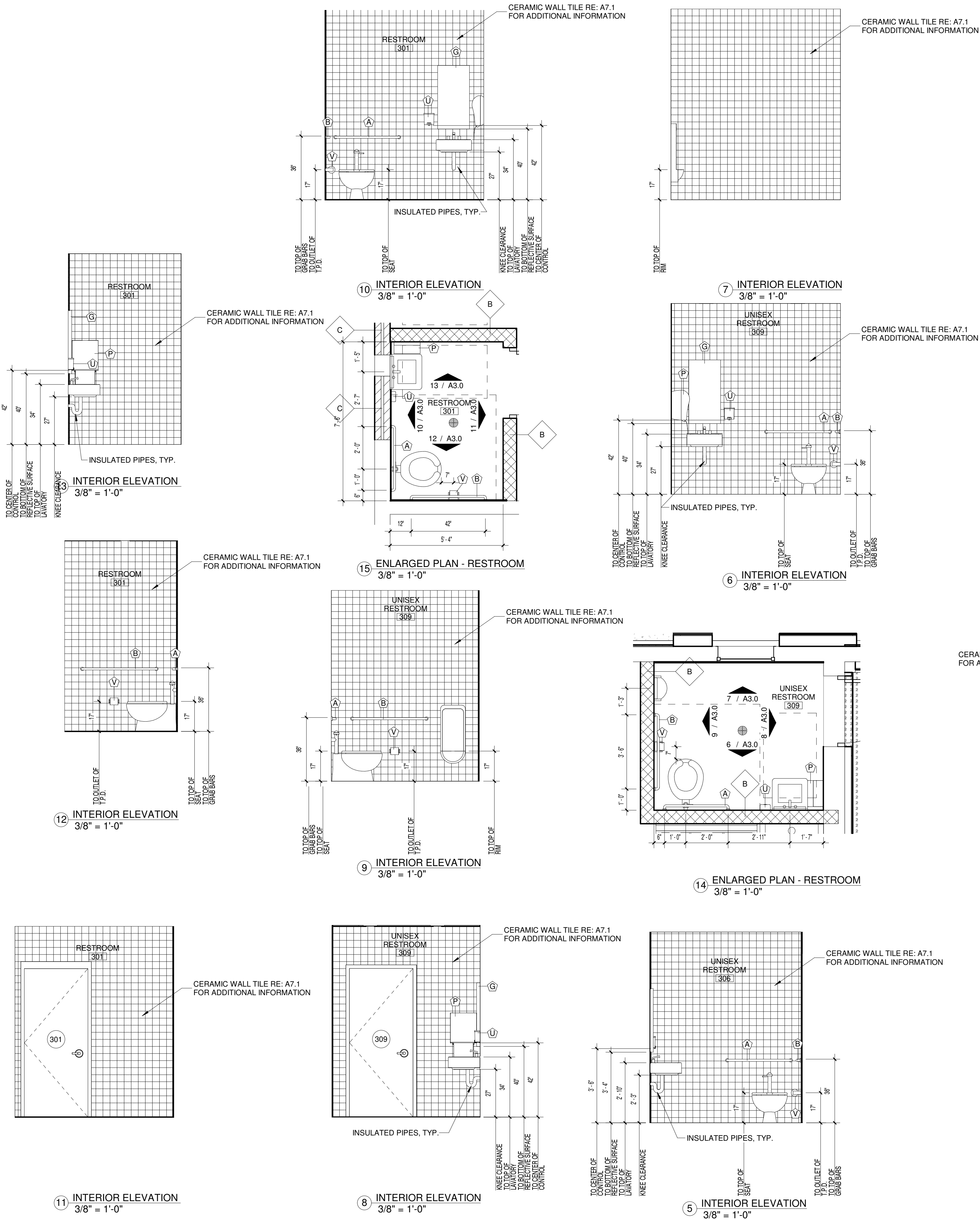
DESCRIPTION	MODEL NO.	NOTES
A STAINLESS STL GRAB BAR 36" LONG	B-6206-36	1
B STAINLESS STL GRAB BAR 42" LONG	B-6206-42	1
C NOT USED		
D NOT USED		
E NOT USED		
F NOT USED		
G FRAMED 1/4" PLATE GLASS MIRROR 18"x36"	B-290-1836	2
H NOT USED		
I STAINLESS STL MOP & BROOM HOLDER 24" LONG	B-223X24	-
J NOT USED		
K NOT USED		
L NOT USED		
M NOT USED		
N NOT USED		
P RECESSED PAPER TOWEL DISPENSER	B-369	9 & 10
Q NOT USED		
R NOT USED		
S NOT USED	B-204-2	
T NOT USED		
U BOBRICK CONTURA SERIES SURFACE MOUNTED SOAP DISPENSER	B-4112	9 & 10
V BOBRICK CLASSIC SERIES SURFACE-MOUNTED TOILET TISSUE DISPENSER FOR TWO ROLLS	B-265	

TOILET ACCESSORIES NOTES

1. PROVIDE ALL NECESSARY ANCHORING PLATES AND FASTENERS.
2. PROVIDE EXPANSION SHIELDS FOR CMU PTN OR ANCHORING PLATE AND TOGGLE BOLTS AT GYP BD WALL CONDITIONS FOR SECURE ATTCHMENT.
3. COORDINATE WITH WALL PTN CONSTRUCTION FOR RECESSED ACCESSORY.
4. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLORS.
5. COORDINATE ELECTRICAL REQUIREMENTS AND ANCHORING.
6. LENGTH OF ROD SHALL BE FIELD VERIFIED AND COORDINATED BY CONTRACTOR.
7. QUANTITY OF HOOKS AND SIZE OF CURTAIN TO BE PROVIDED AS REQUIRED TO FIT OPENING.
8. COORDINATE LOCATION WITH OTHER ACCESSORIES ON WALL.
9. UNIT SHALL BE FURNISHED BY OWNER AND INSTALLED BY THE CONTRACTOR AS PART OF BASE BID. PROVIDE THREE WEEKS NOTICE TO OWNER AND COORDINATE DELIVERY AND STORAGE UNTIL INSTALLED. SEE SPEC SECTION 10155
 - SOAP DISPENSERS
 - TOWEL DISPENSERS
 - TISSUE DISPENSERS
 - SOAP DISHES
10. RE: A3.0 FOR MOUNTING HEIGHTS

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL VISIT SITE AND FAMILIARIZE WITH ALL EXISTING CONDITIONS AND CONTRACT DOCUMENTS. CONTRACTOR SHALL REPORT TO THE ARCHITECT ANY DISCREPANCIES OR IRREGULARITIES THAT MAY EXIST PRIOR TO SUBMITTING A BID.
2. GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS AND CONSTRUCTION MATERIAL OFF OF SITE AND DISPOSE ON APPROPRIATE DUMPSITE.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, QUANTITIES, ETC. PRIOR TO BIDDING.
4. PAINT ALL (4) WALLS WHERE NEW CONSTRUCTION HAS OCCURRED
5. PROVIDE A 24X24 CEILING ACCESS PANEL AT ALL RESTROOMS.
6. PROVIDE A FLOOR DRAIN AT EVERY RESTROOM. RE: MEP FOR ADDITIONAL INFORMATION. IF PLUMBING DRAWINGS DO NOT INDICATE CONNECTION TO SEWER, CONTRACTOR TO CONNECT TO NEAREST NEW OR EXISTING PLUMBING SEWER LINE.
7. PROVIDE A STAINLESS STL. MOP & BROOM HOLDER 24" LONG. AT RM. 303
8. RE: A7.1 FOR WALL TILE ELEVATIONS AND LAYOUT.



OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055
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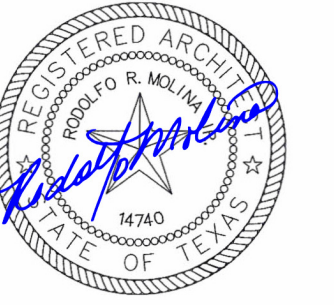
ISSUE FOR BIDS

SHEET NUMBER
A3.0



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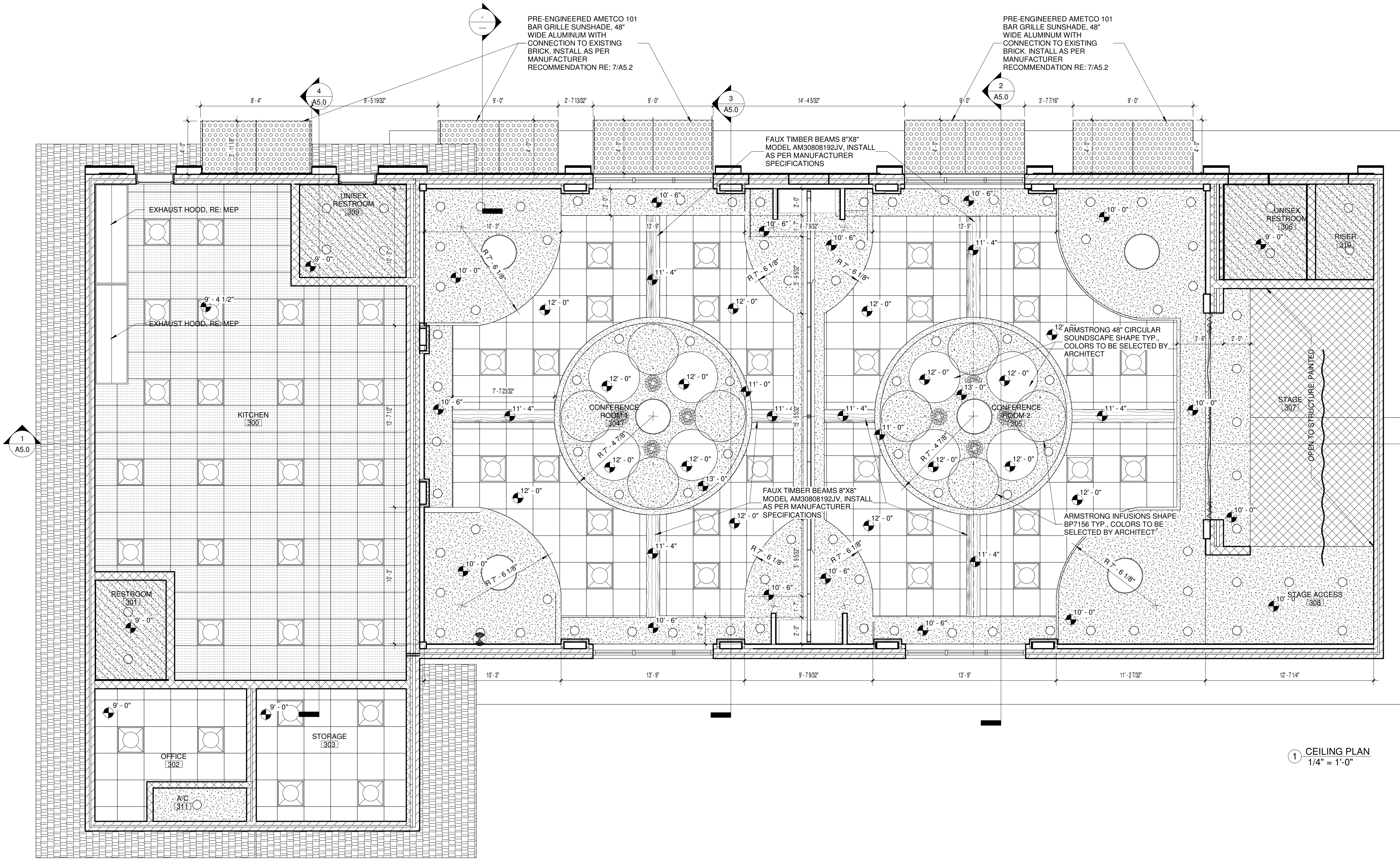
RCP GENERAL NOTES

1. ALL OUTLETS SHALL BE @ 15" A.F.F. UNLESS NOTED OTHERWISE. ALSO, OUTLETS SHALL BE PLACED 12" MAX. DISTANCE ALONG INSIDE WALLS.
2. GROUND FAULT INTERRUPTERS (GFI) ARE REQUIRED ON CONVENIENCE OUTLETS IN RESTROOMS & KITCHEN.
3. WEATHER PROOF (W.P.) CONVENIENCE OUTLETS ARE REQUIRED OUTSIDE.
4. ALL CLG. 9'-0" U.N.O. NOTED ON PLANS.
5. RE: MEP DWGS. FOR EXACT LIGHTING COUNT AND LOCATIONS.
6. PROVIDE A 24X24 ACCESS PANEL @ RESTROOMS.
7. PROVIDE 24X24 SUSPENDED ACOUSTICAL CEILING UNLESS NOTED OTHERWISE.
8. ALL EXPOSED DUCTS AND FIRE SPRINKLER LINES TO BE PAINTED, COLOR TO BE SELECTED BY ARCHITECT.
9. ALL CEILING AND SOFFIT HEIGHTS ARE GIVEN ABOVE FINISHED FLOOR ELEVATION (EL. 0'-0").
10. GENERALLY ONLY CEILING MOUNTED FIXTURES ARE SHOWN ON THIS PLAN. COORDINATE WITH MEP PLANS FOR ADDITIONAL INFORMATION.
11. IF SPRINKLER SYSTEM IS REQUIRED OR IN PLACE, SOME OR ALL SPRINKLERS MAY NOT BE SHOWN ON THIS PLAN. COORDINATE WITH MEP DRAWINGS FOR ADDITIONAL INFORMATION. SPRINKLER HEADS TO BE CENTERED ON CEILING TILE, TYP.
12. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEP DRAWINGS. COORDINATE LOCATIONS OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION. ACCESS PANEL FIRE RATINGS MUST MATCH CEILING ASSEMBLY FIRE RATINGS.
13. LIGHTING FIXTURES TO BE CENTERED AND SPACED EQUALLY UNLESS NOTED OTHERWISE.
14. LIGHT FIXTURES ARE SHOWN FOR DIMENSIONAL PURPOSES ONLY. COORDINATE WITH ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS.
15. IF PROJECT INCLUDED FIRE RATED CEILING, LIGHT FIXTURES LOCATED IN RATED CEILING ASSEMBLIES ARE TO BE TENTED OR OTHERWISE RATED TO MATCH THE CEILING.

RCP LEGEND

- | | |
|--|--|
| | SUSPENDED ACOUSTICAL CEILING
ACOUSTICAL UNITS & SUSPENSION SYSTEM(S)
2'-0" X 2'-0" SUSPENDED ACOUSTICAL CEILING SYSTEM. |
| | SUSPENDED ACOUSTICAL CEILING
ACOUSTICAL UNITS & SUSPENSION SYSTEM(S)
2'-0" X 2'-0" SUSPENDED ACOUSTICAL CEILING SYSTEM. CERAMA GUARD (MOISTURE RESISTANT). |
| | GYPSUM BOARD ASSEMBLIES
5/8" GYPSUM BOARD, (TAPE, FLOAT, TEXTURE & PAINT) ON DRYWALL GRID SYSTEM SUSPENDED FROM STRUCTURE. |
| | GYPSUM BOARD ASSEMBLIES
5/8" MOISTURE RESISTANT GYPSUM BOARD, (TAPE, FLOAT, TEXTURE & PAINT) ON DRYWALL GRID SYSTEM SUSPENDED FROM STRUCTURE. |
| | CEILING ASSEMBLIES
ARMSTRONG INFUSIONS SHAPES BP 7156, COLOR TO BE SELECTED BY ARCHITECT. INSTALL AS PER MANUFACTURE SPECIFICATIONS. |
| | LED LIGHT FIXTURE
PENDANT LIGHT, RE: ELECTRICAL. |
| | SEMI-FLUSH LED LIGHT FIXTURE
14" CEILING MOUNTED, RE: ELECTRICAL. |
| | RECESSED LIGHT FIXTURE
6" RECESSED LIGHT FIXTURE, RE: ELECTRICAL. |
| | LED LIGHT FIXTURE
2X2 TROFFER LIGHT, RE: ELECTRICAL. |

1 CEILING PLAN
1/4" = 1'-0"



OLD SORENSEN ELEMENTARY
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A4.0



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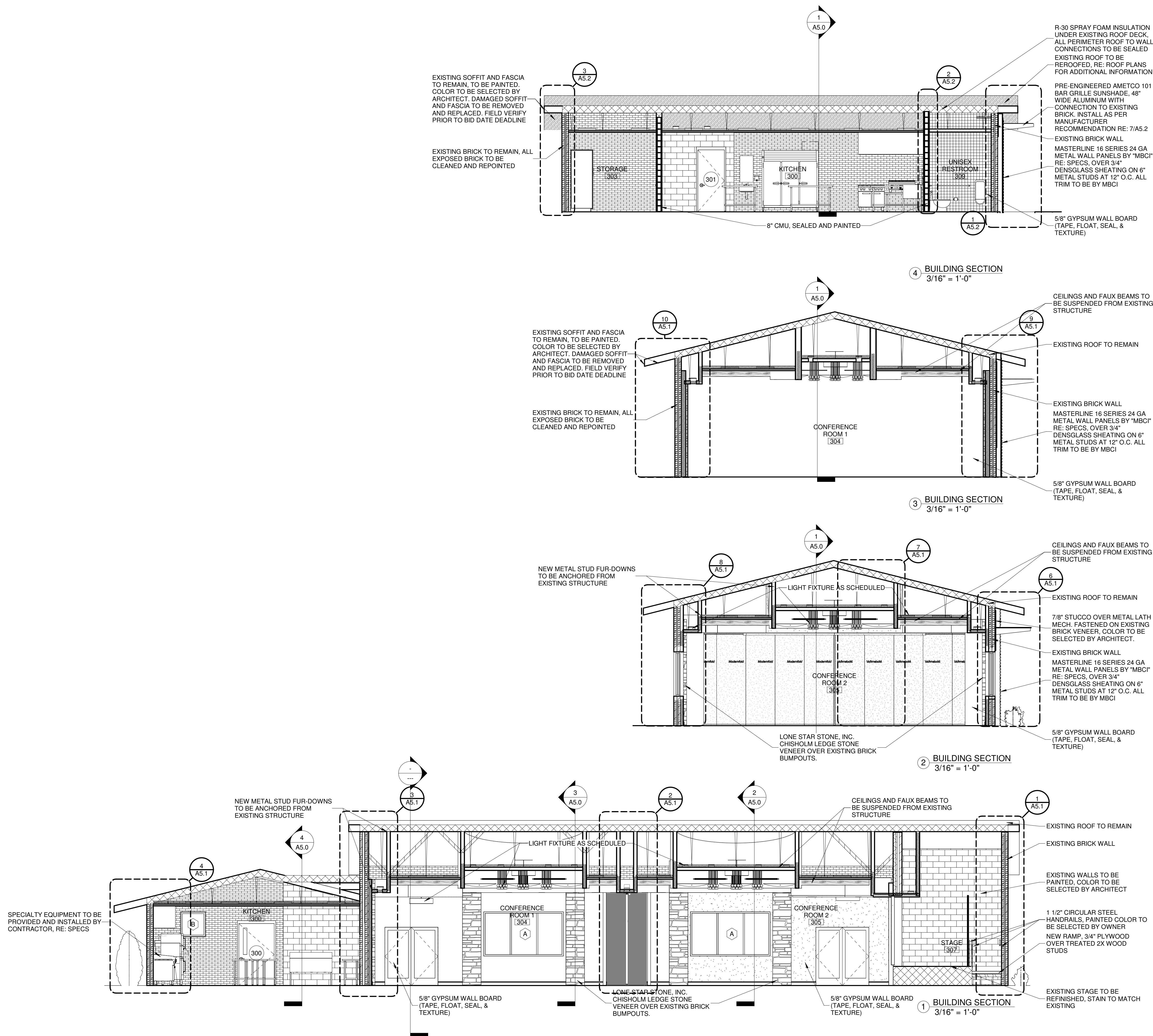
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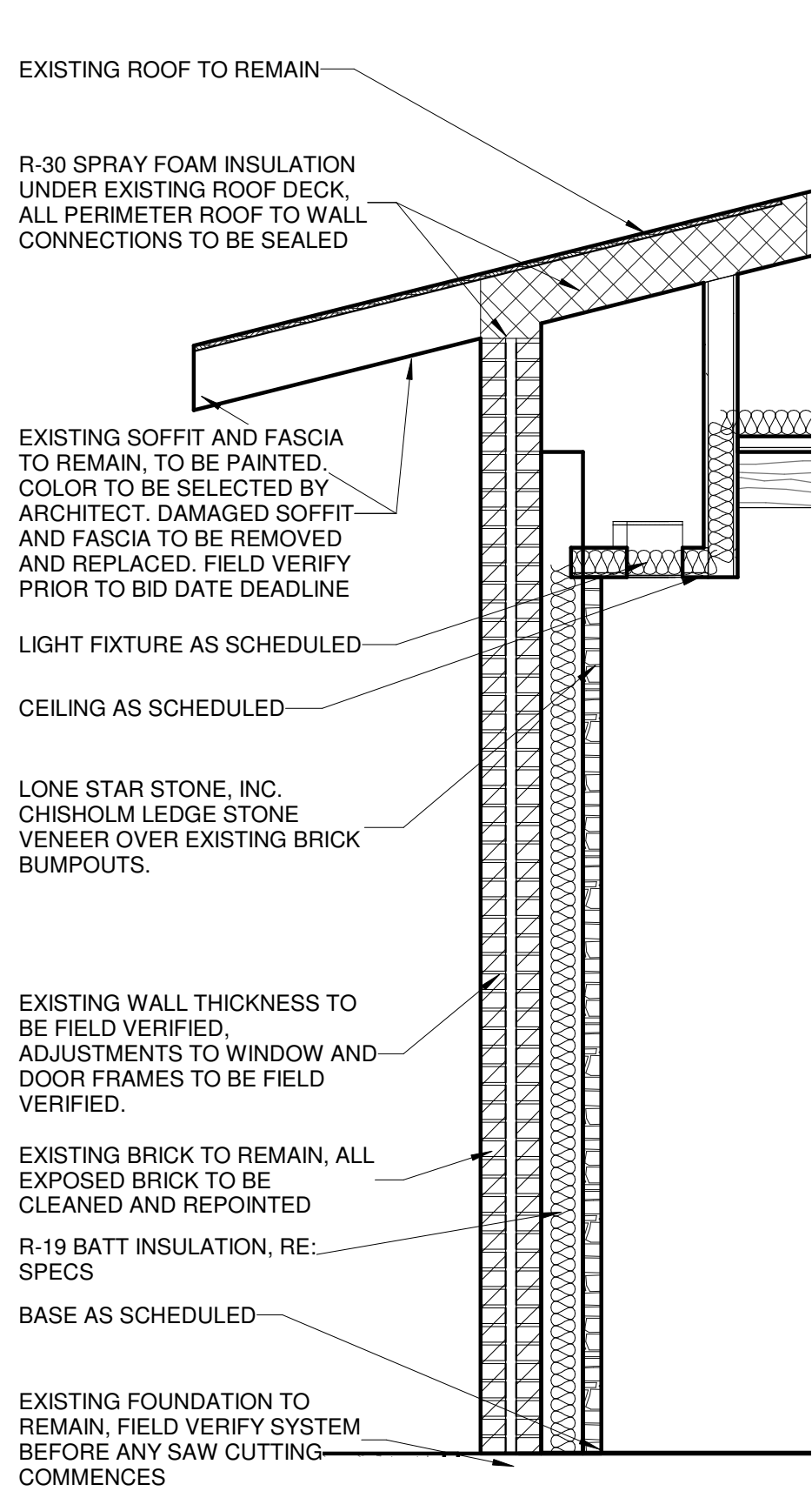
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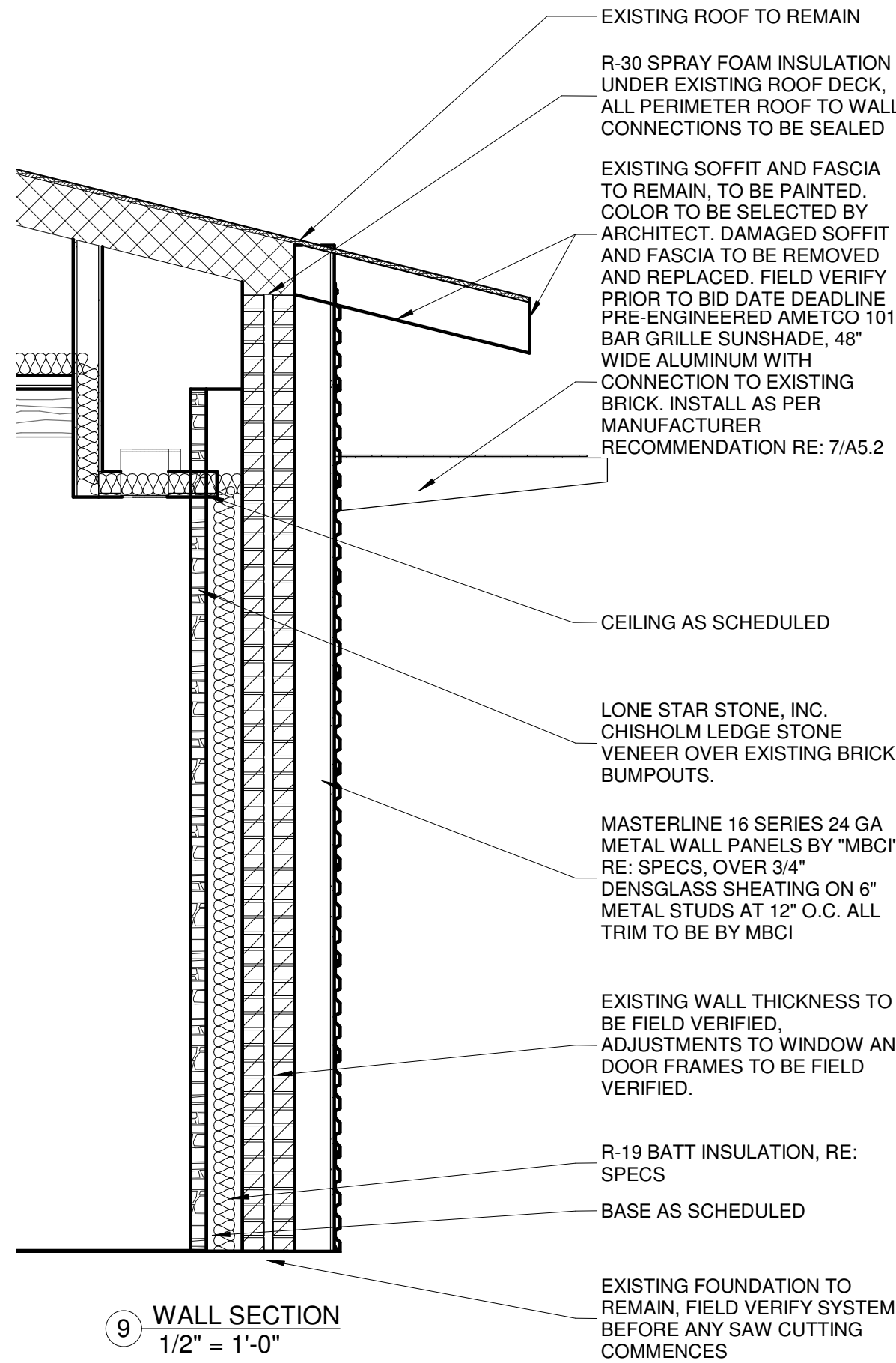
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A5.0

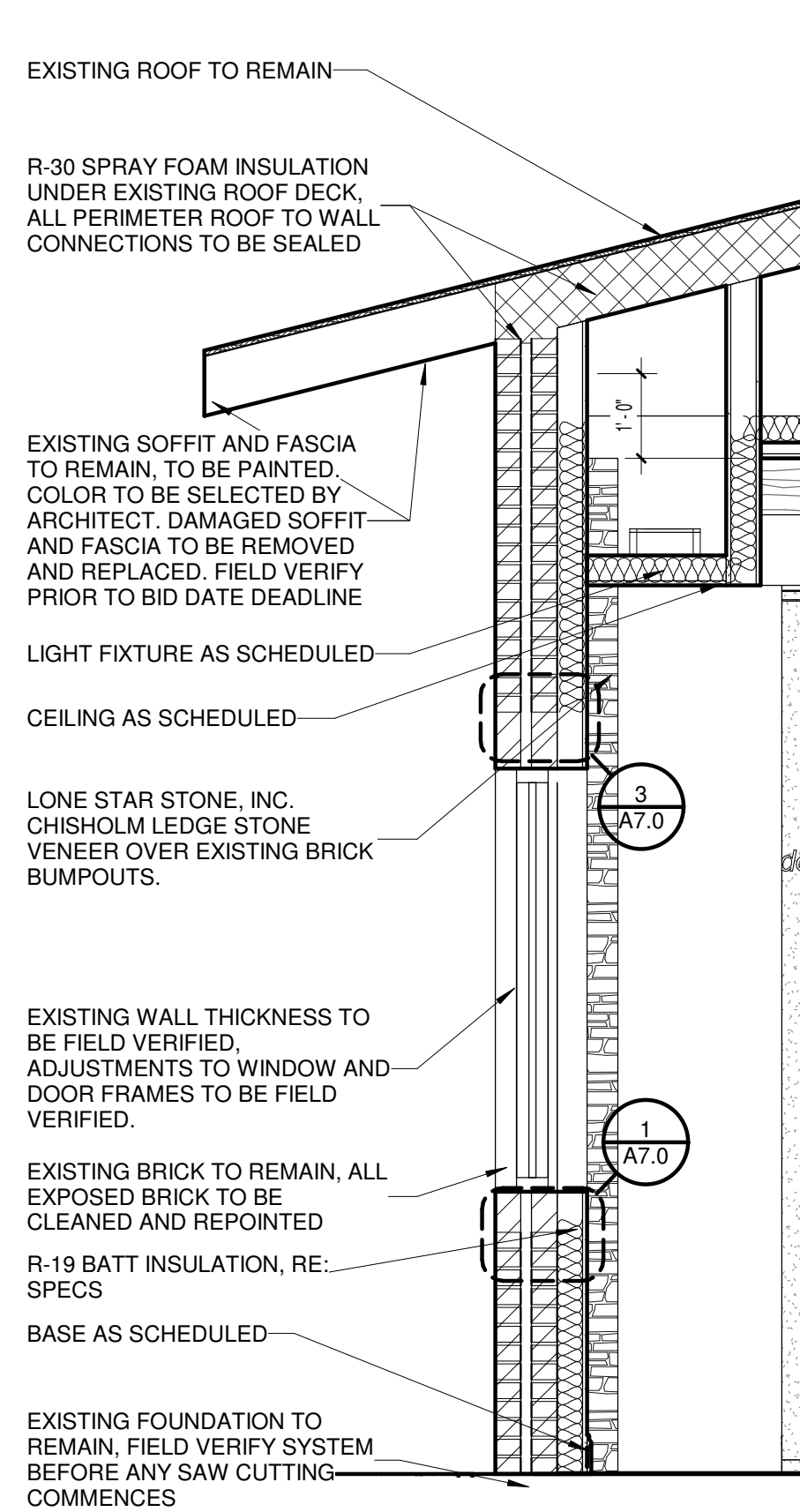




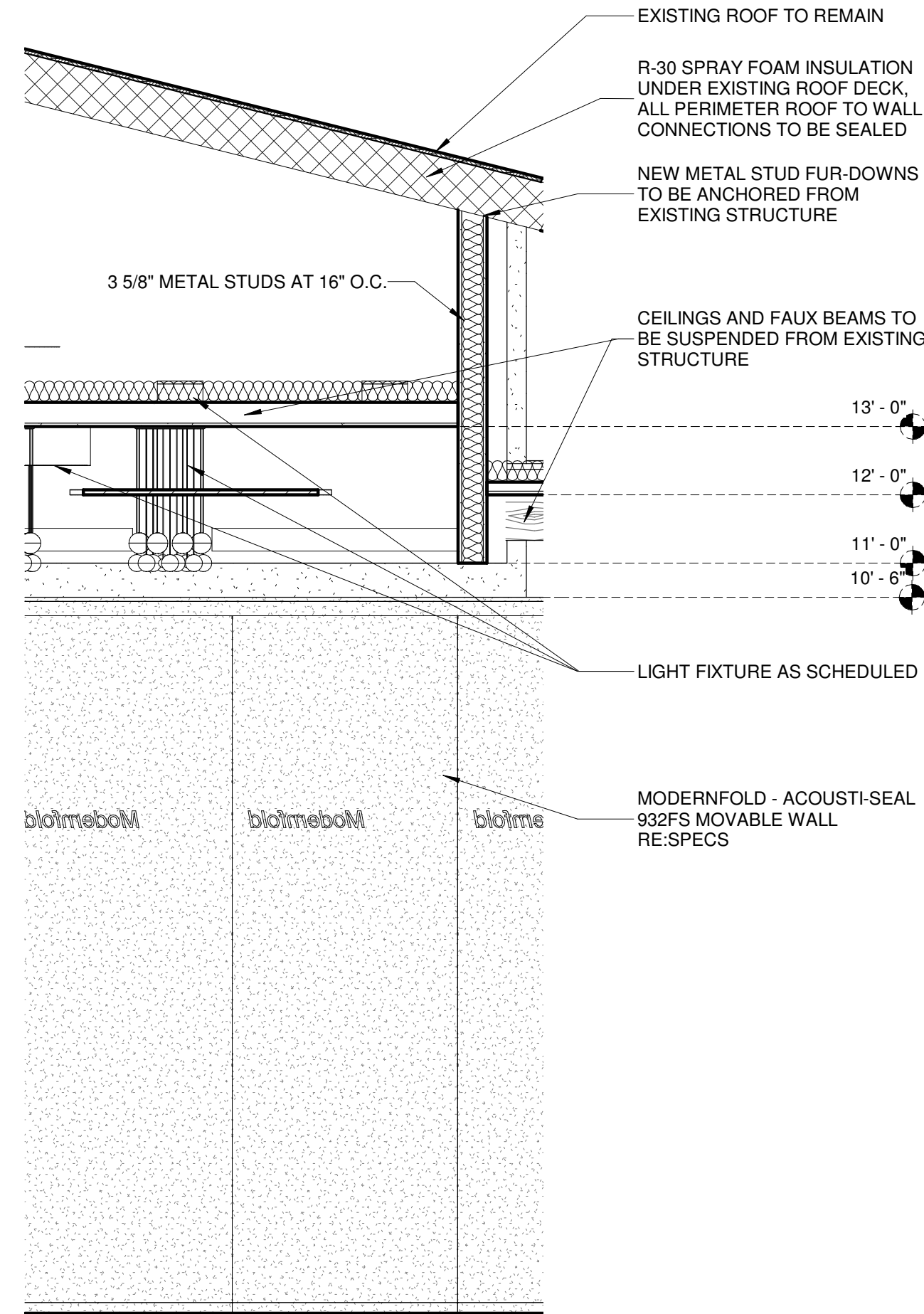
10 WALL SECTION
1/2" = 1'-0"



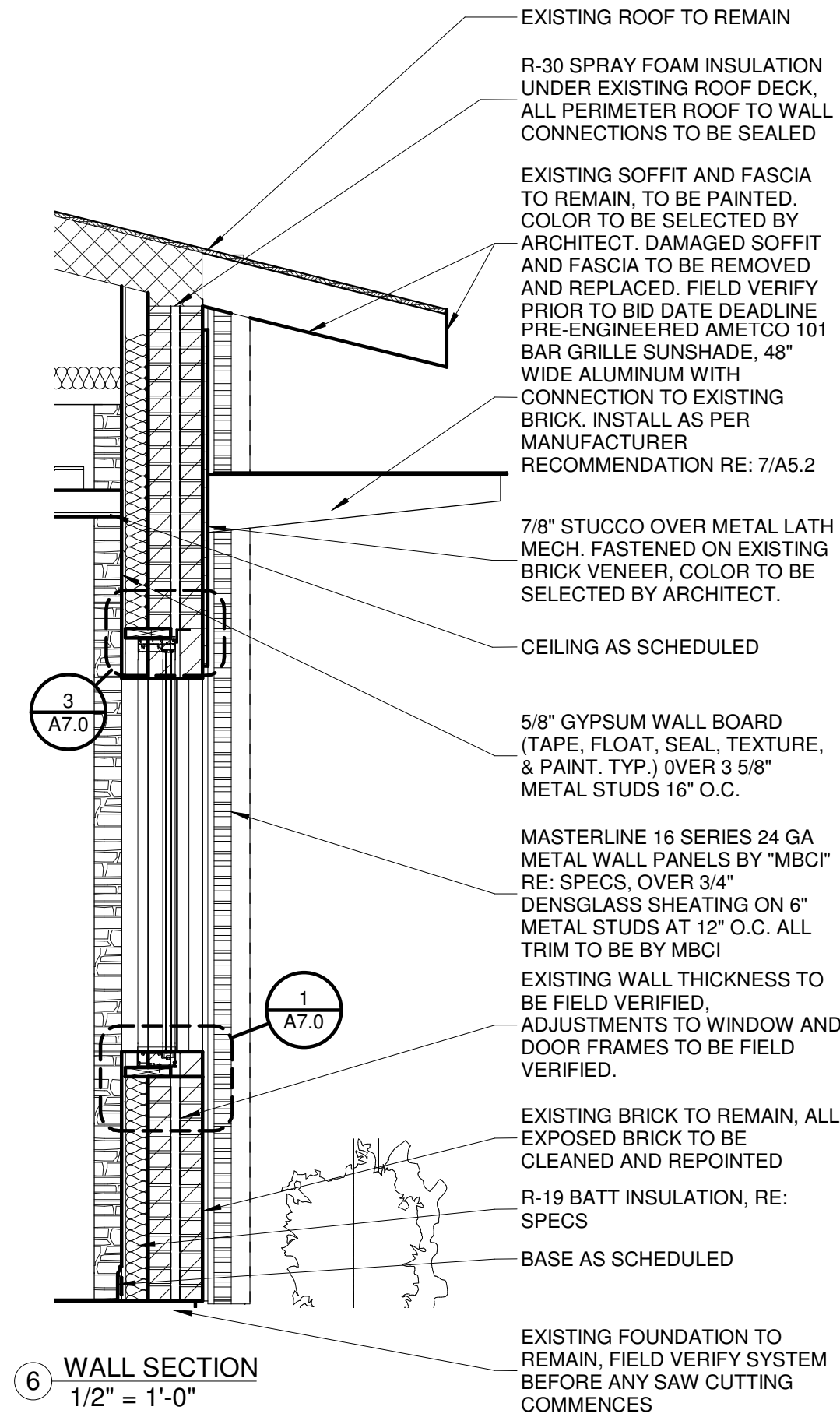
9 WALL SECTION
1/2" = 1'-0"



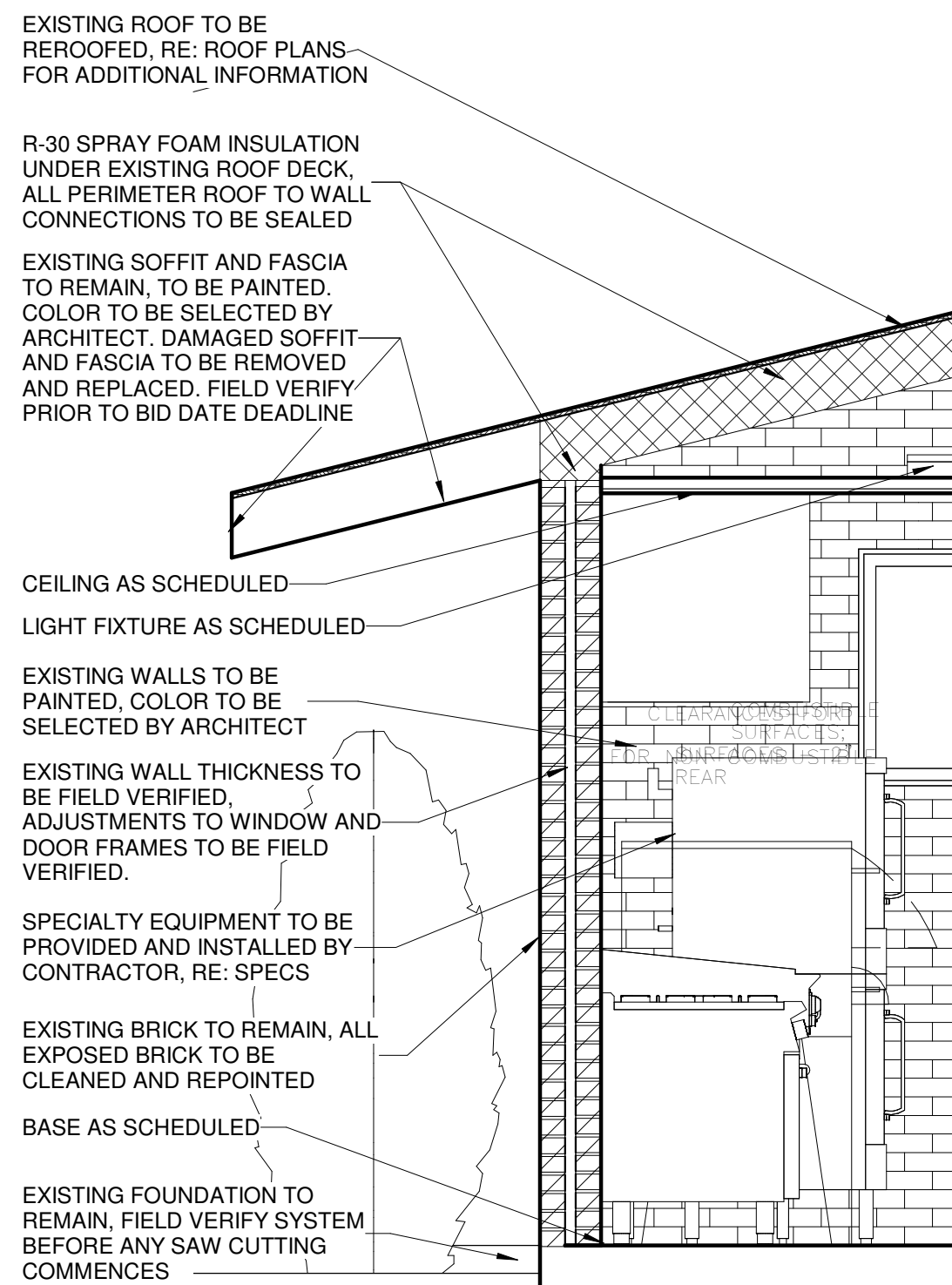
8 WALL SECTION
1/2" = 1'-0"



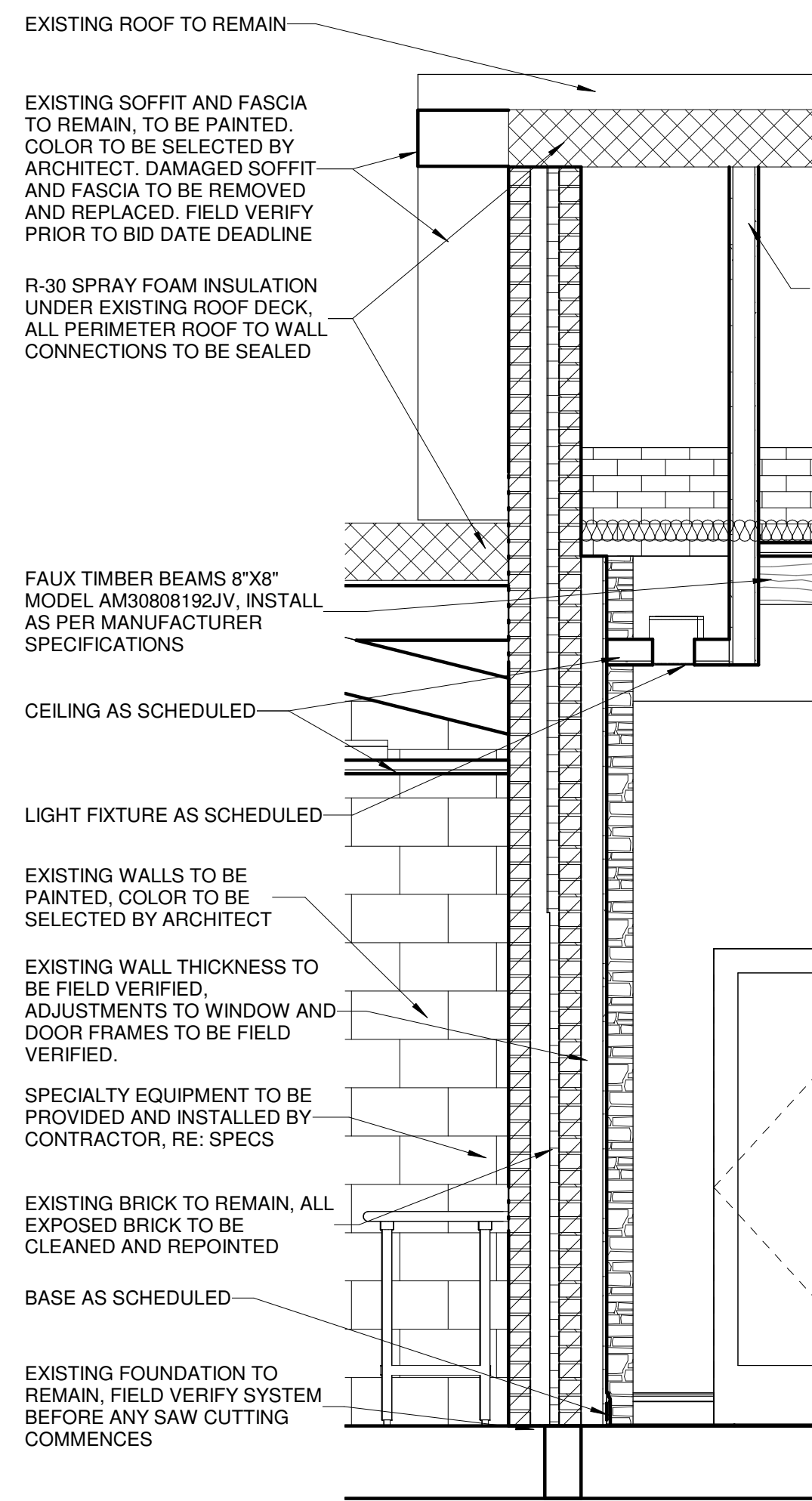
7 WALL SECTION
1/2" = 1'-0"



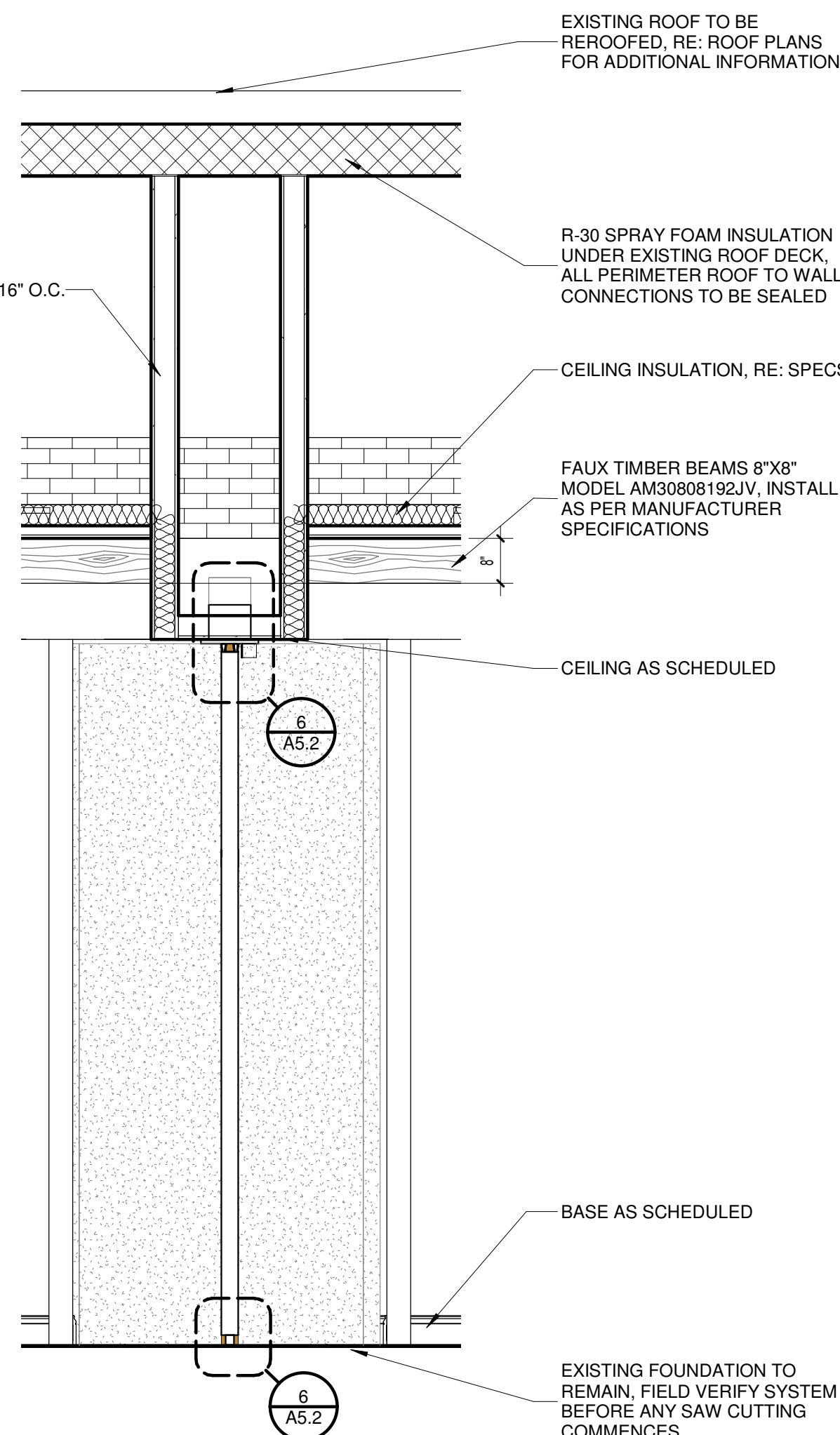
6 WALL SECTION
1/2" = 1'-0"



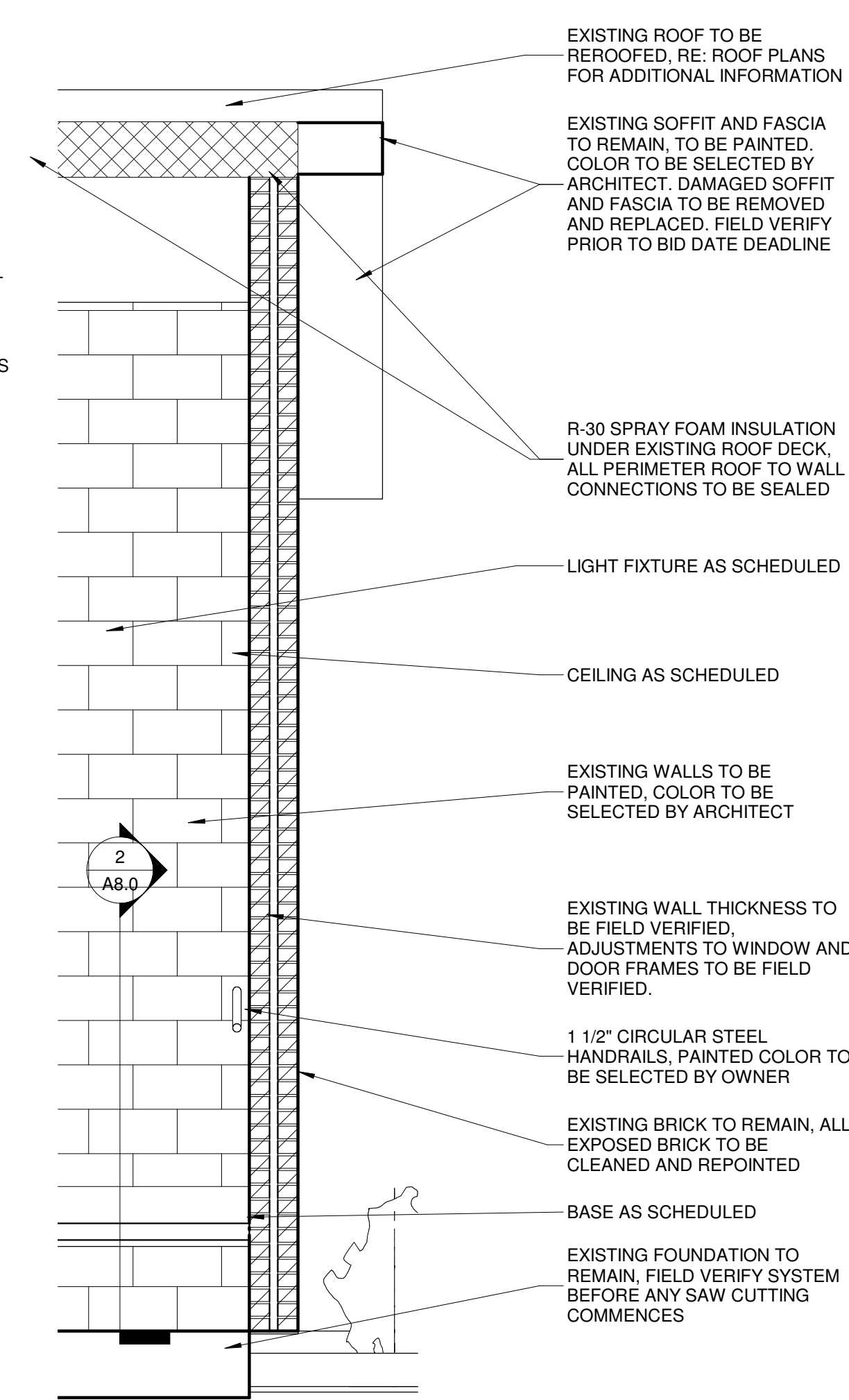
4 WALL SECTION
1/2" = 1'-0"



3 WALL SECTION
1/2" = 1'-0"



2 WALL SECTION
1/2" = 1'-0"



1 WALL SECTION
1/2" = 1'-0"



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A5.1



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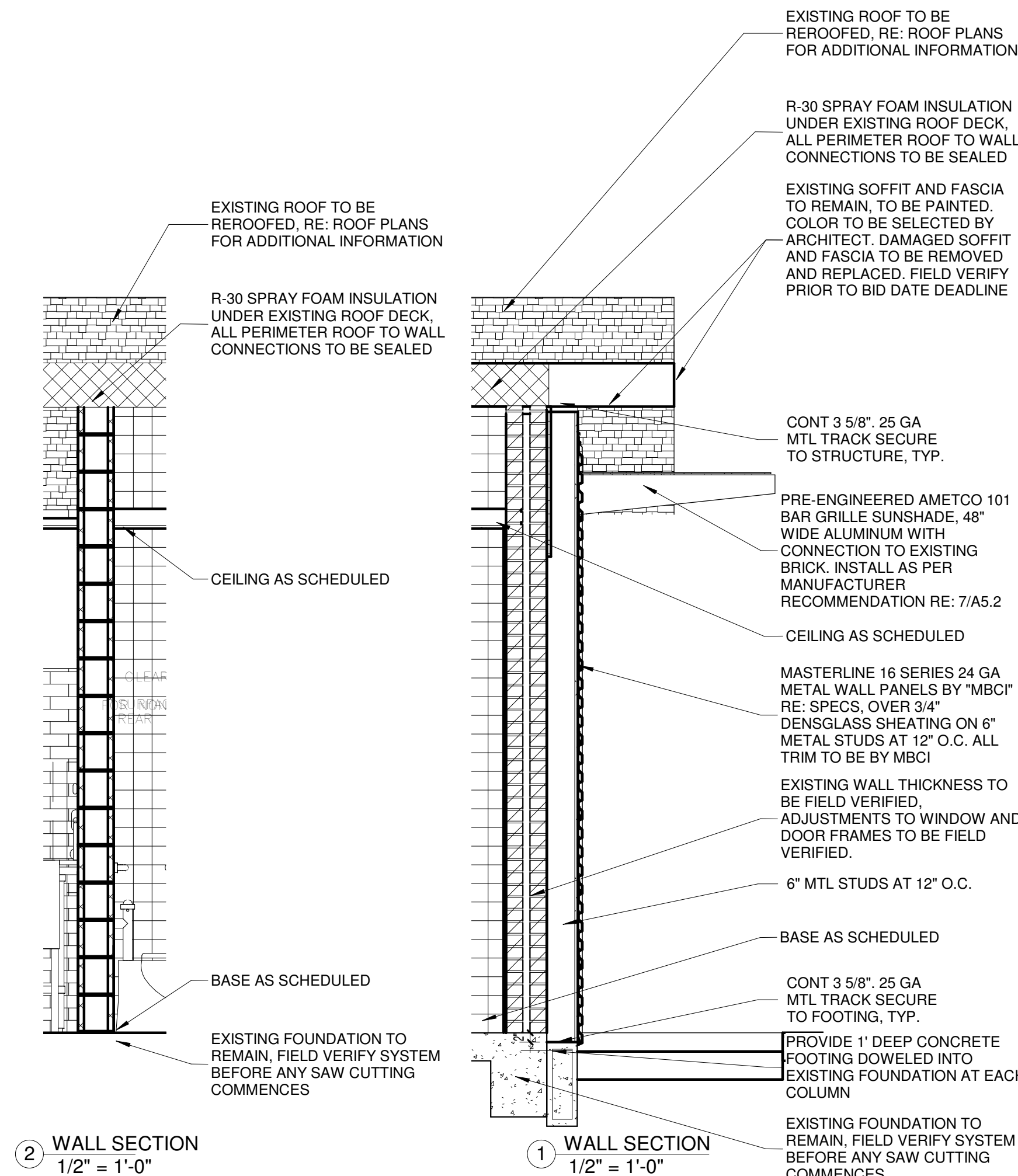
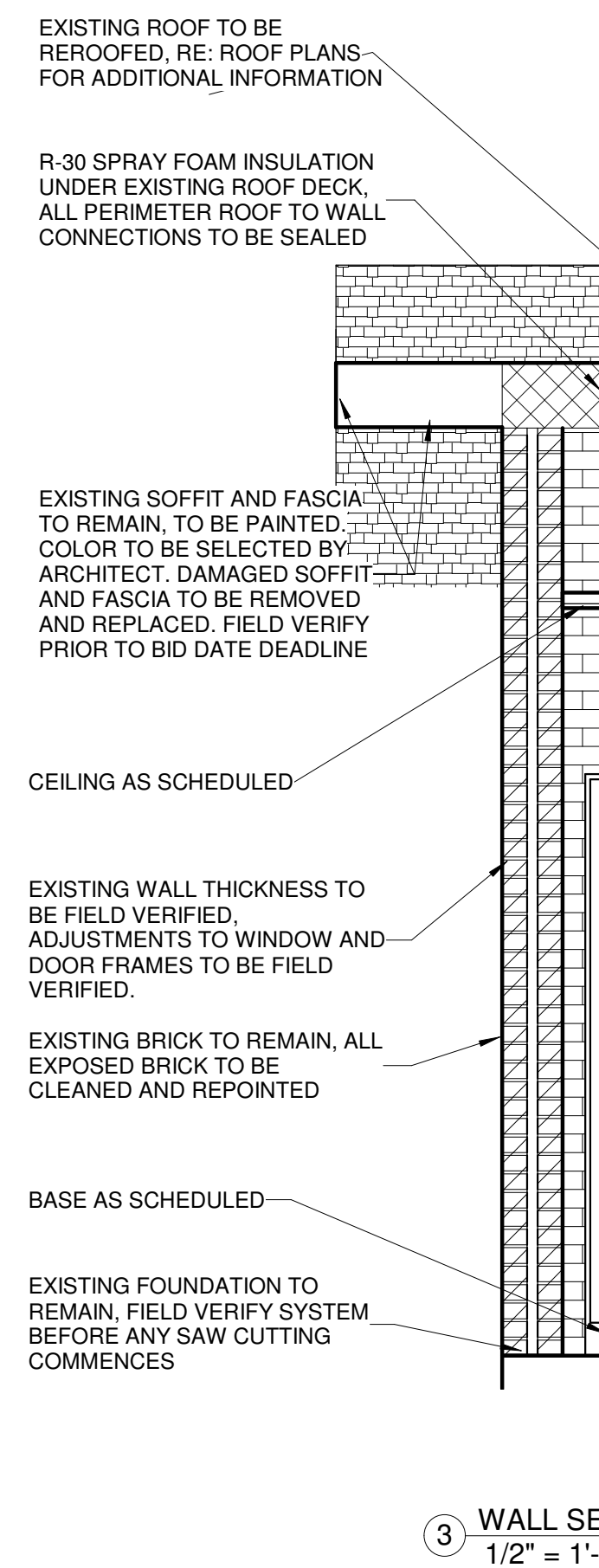
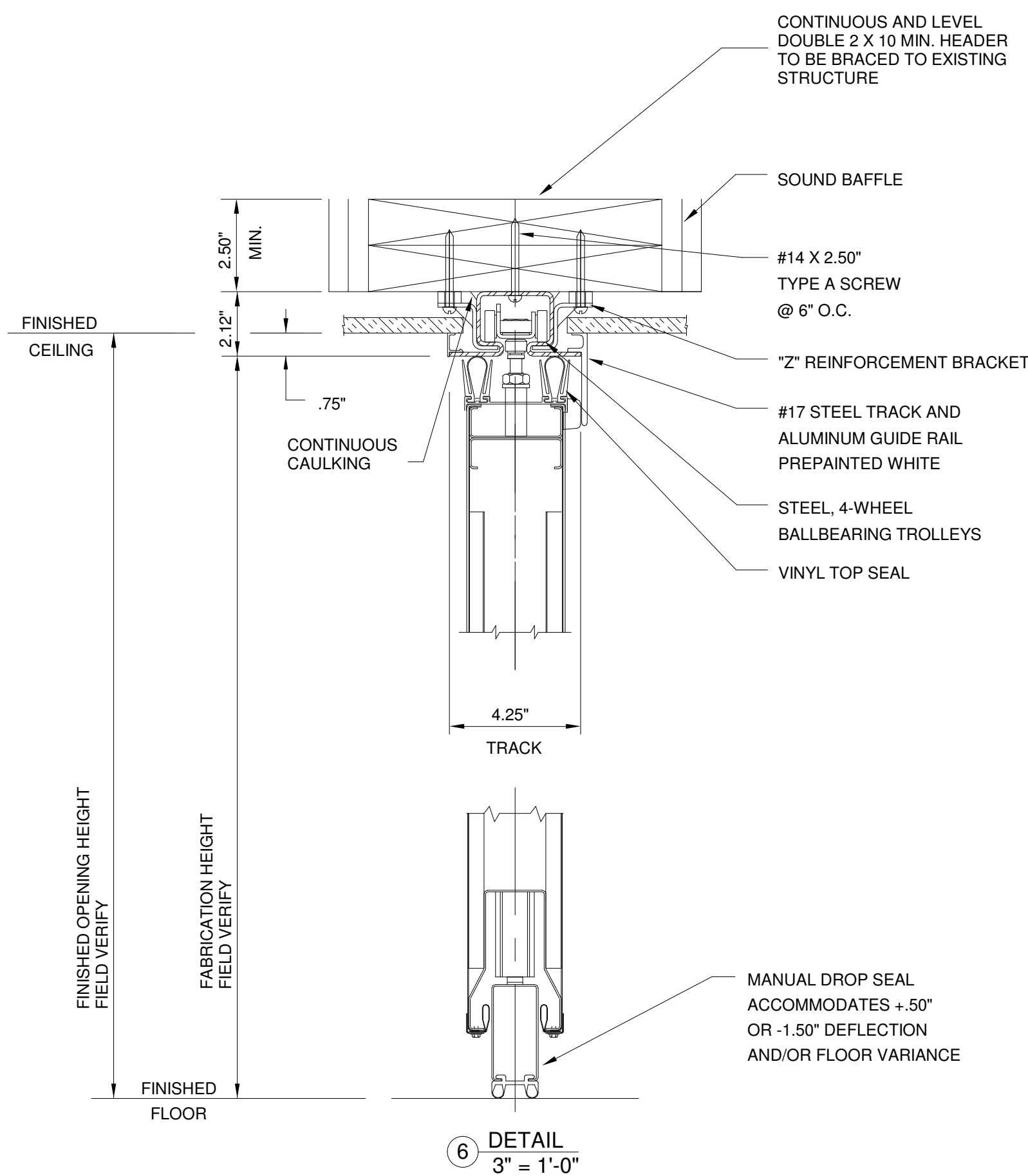
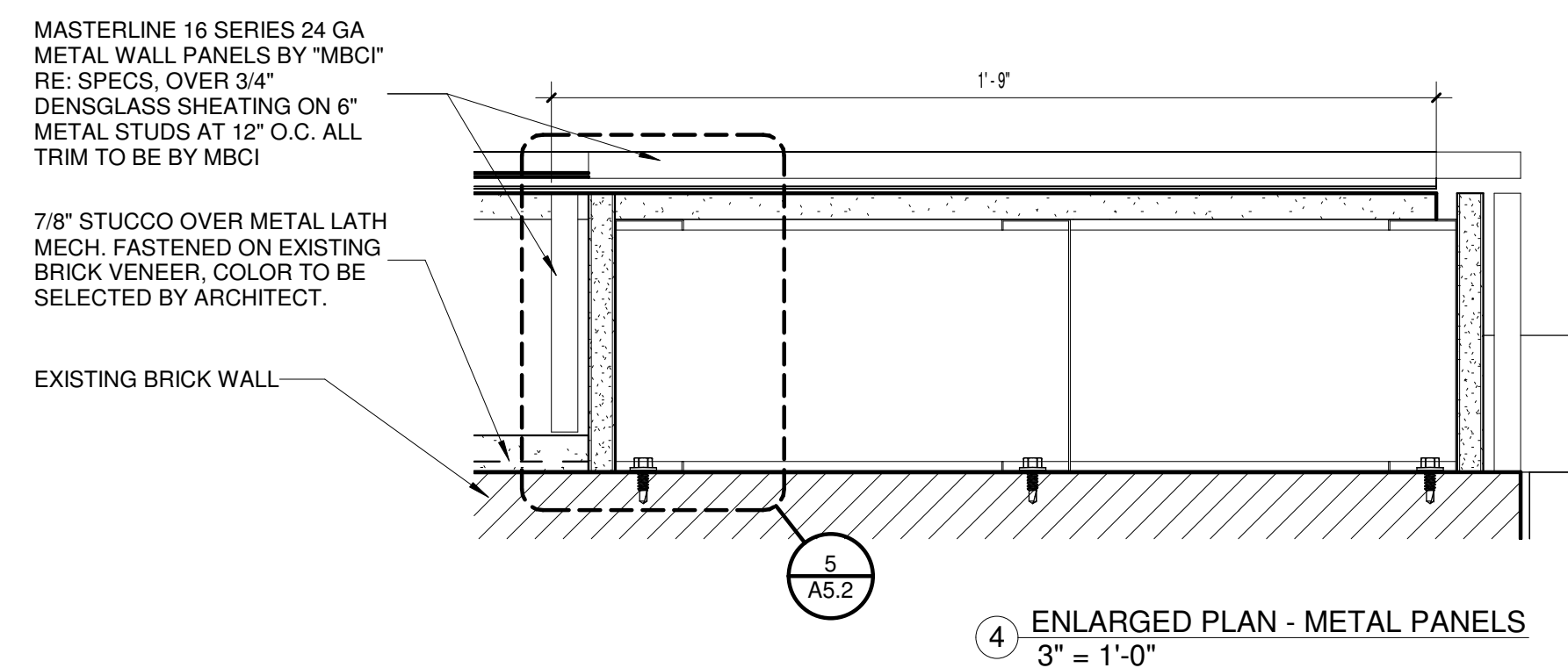
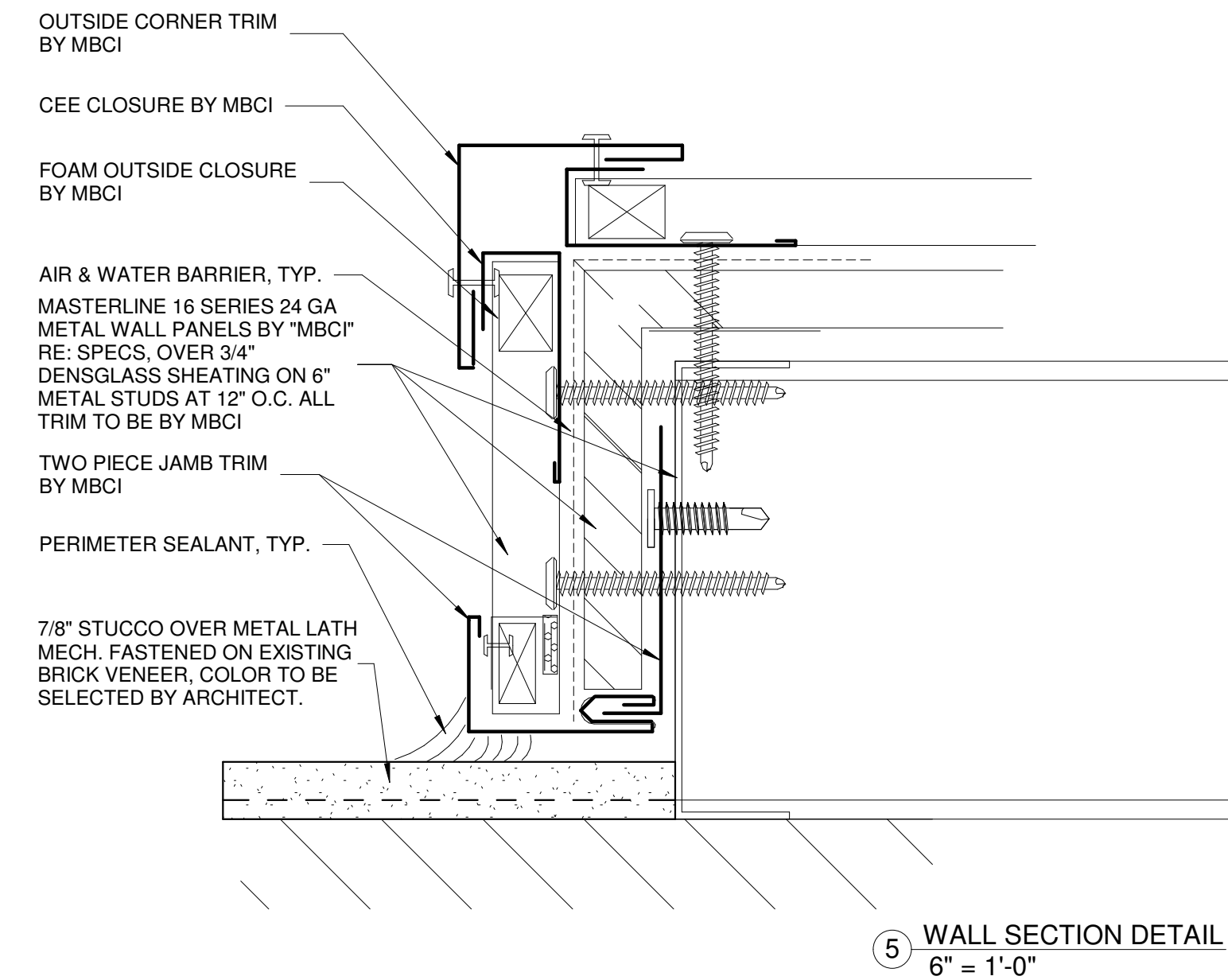
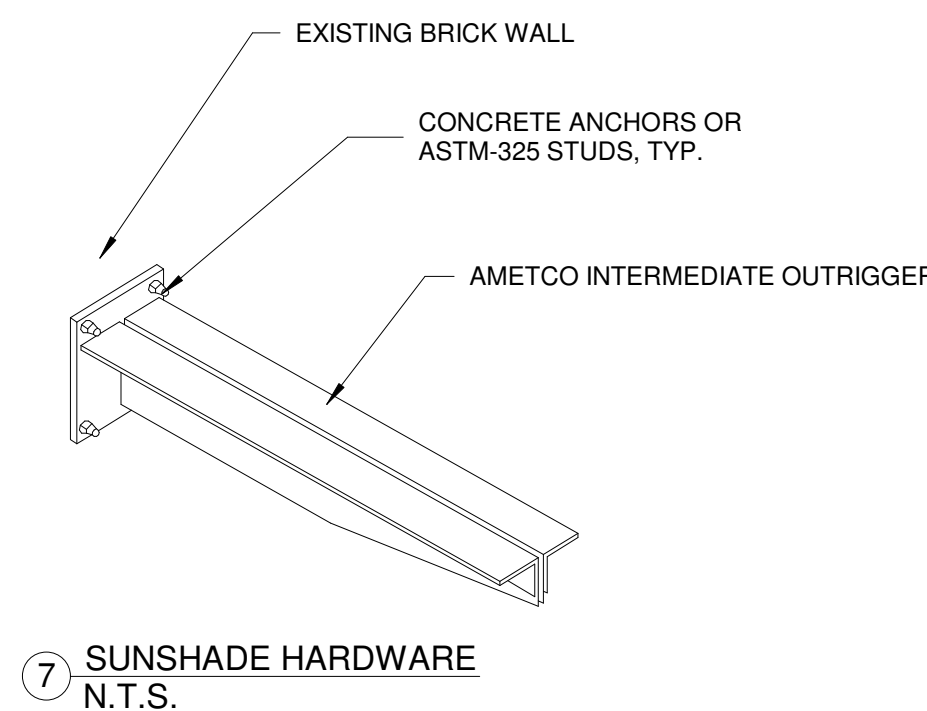
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SHEET NUMBER

A5.2



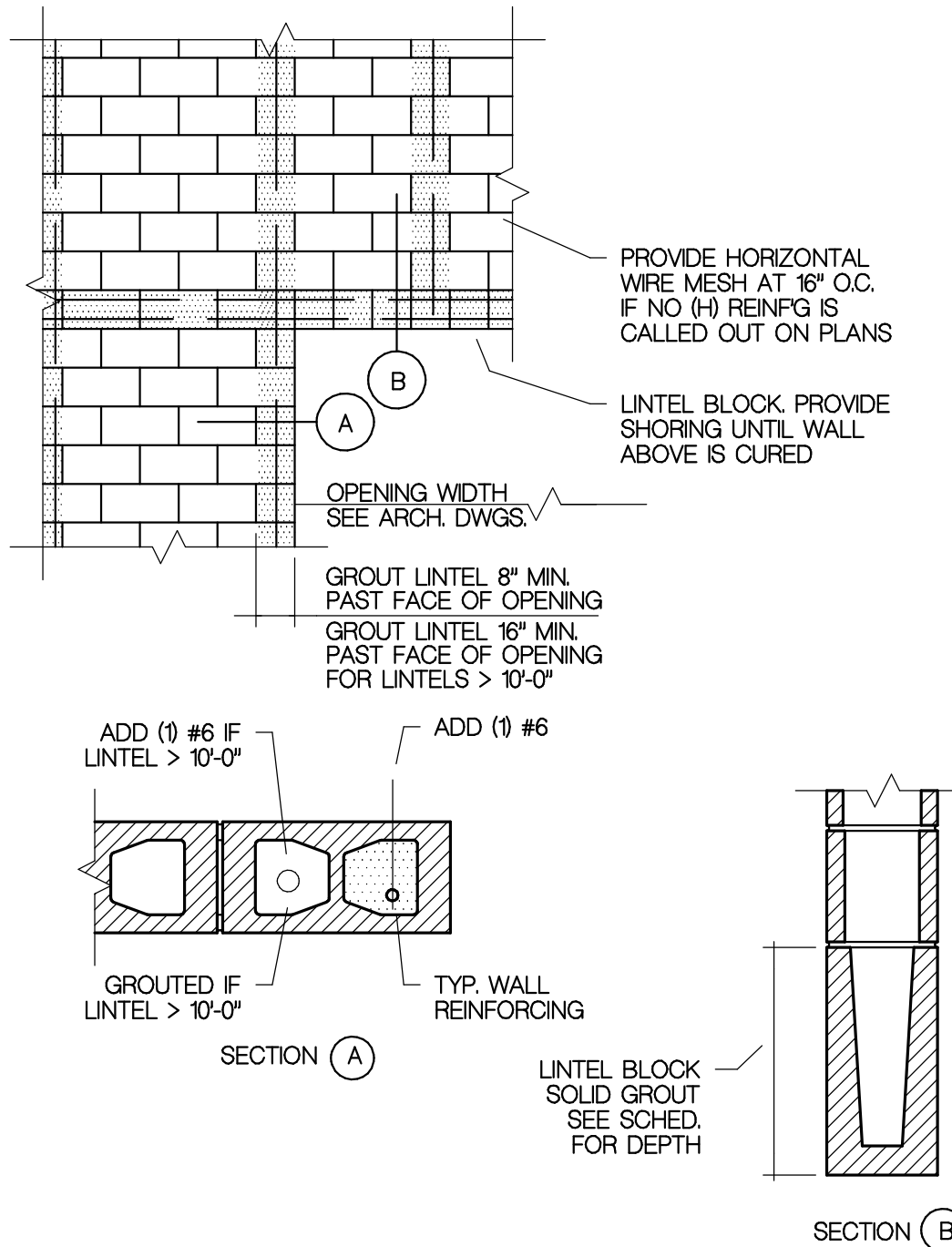


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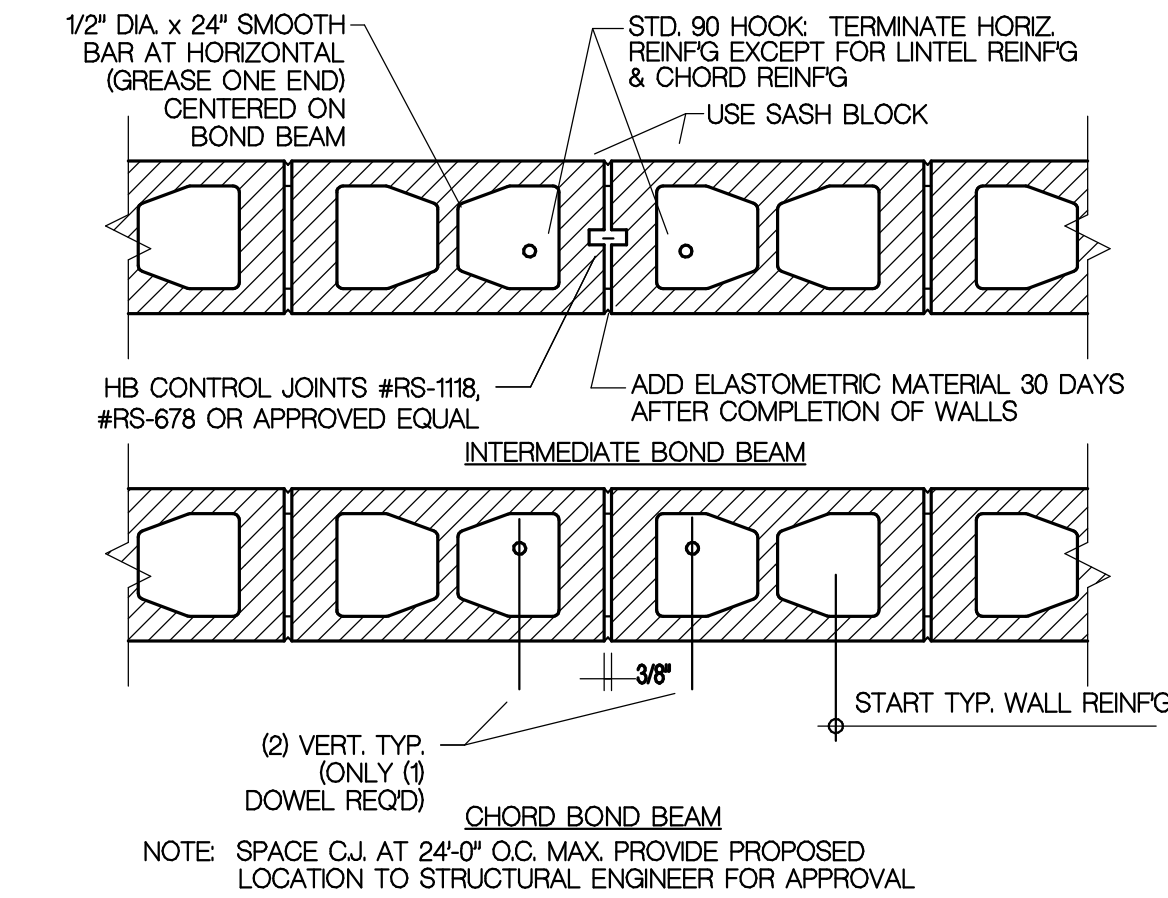
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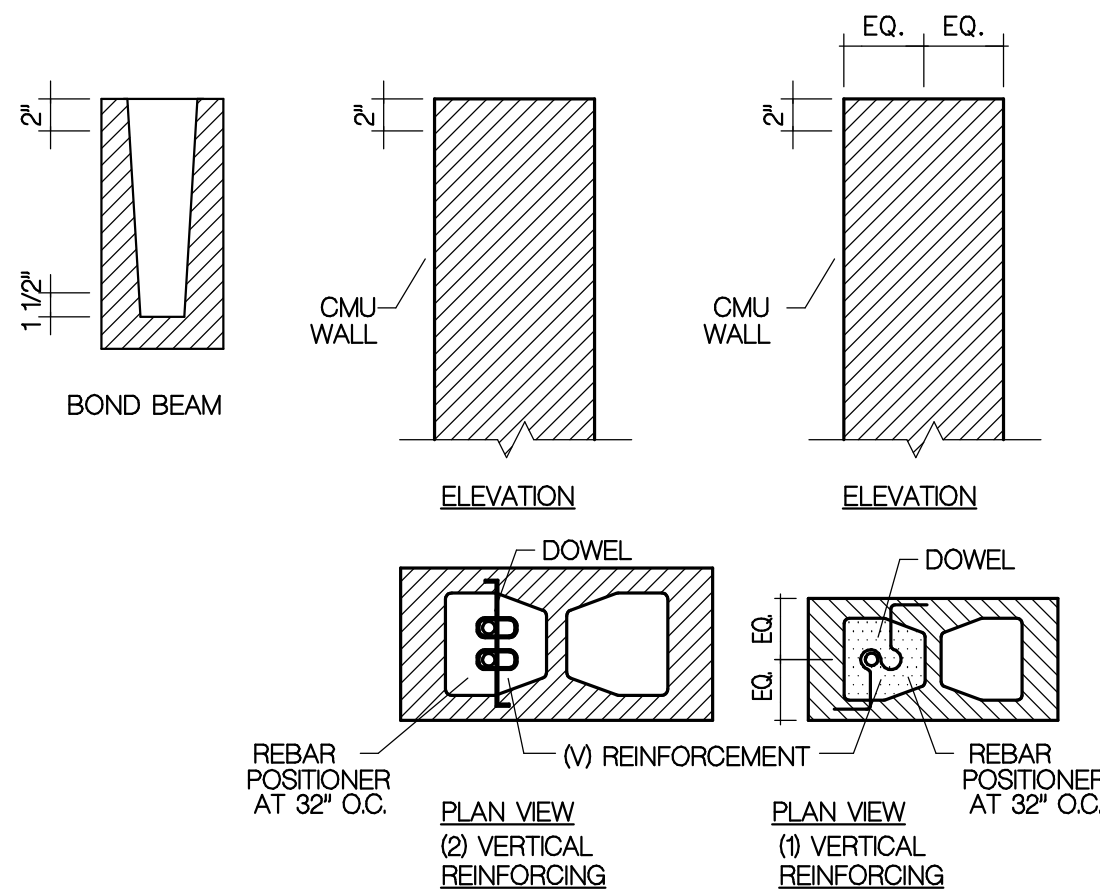
CLEAR SPAN	WIDTH	DEPTH	REINFORCING	#3 TIES AT:	REMARKS
<3'-4"	8"	8"	(1) #6		
<4'-8"	8"	16"	(1) #6 (T) & (B)	8"	
<6'-8"	8"	24"	(1) #7 (T) & (B)	8"	
<10'-0"	8"	32"	(1) #7 (T) & (B)	8"	
<3'-4"	12"	8"	(2) #5		
<4'-6"	12"	16"	(2) #5 (T) & (B)	8"	
<6'-8"	12"	24"	(2) #7 (T) & (B)	8"	
<12'-0"	12"	32"	(2) #7 (T) & (B)	8"	
>12'-0"	12"	48"	(2) #7 (T) & (B)	8"	



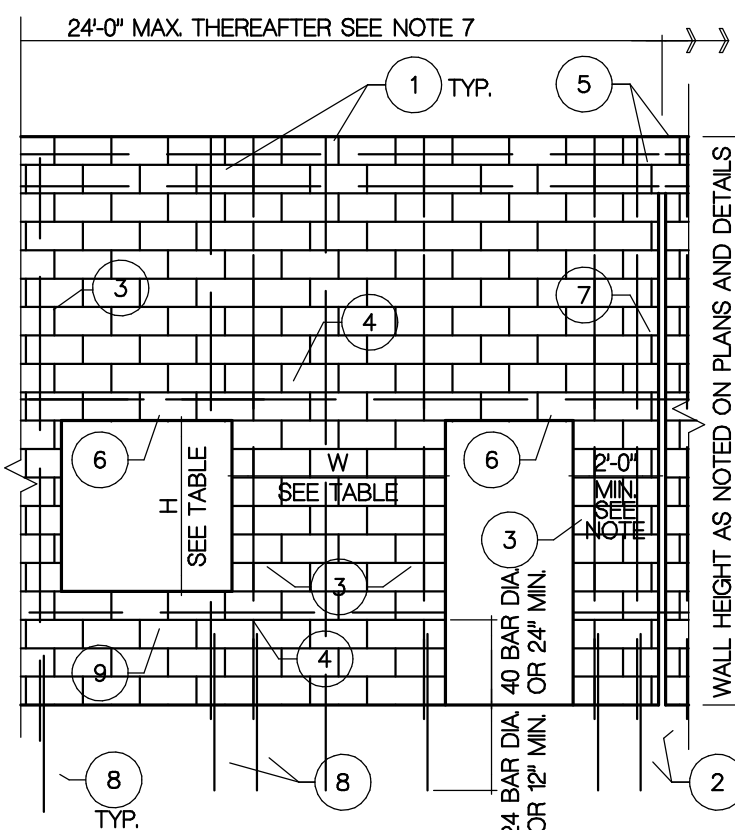
2 TYPICAL CMU LINTEL SCH. & DETAILS
N.T.S.



5 TYPICAL CMU CONTROL JOINT (C.J.)
N.T.S.



4 TYPICAL REINFORCING PLACEMENT
AND CLEARANCES
N.T.S.



6 ELEVATION OF TYPICAL MASONRY
WALL REINFORCING
N.T.S.

WALL THICKNESS (T)	DIMENSIONAL LIMITS		
	CLEAR	PIER	COLUMN
8"	H > 24" AND W > 32"	H > 24" AND 32" > W > 24"	H > 24" AND W < 24"
8"	H > 32" AND W > 40"	H > 32" AND 40" > W > 24"	H > 32" AND W < 24"
12"	H > 38" AND W > 54"	H > 48" AND 64" > W > 40"	H > 48" AND W < 40"

4 (V) BARS TO MATCH TYPICAL WALL REINFORCING

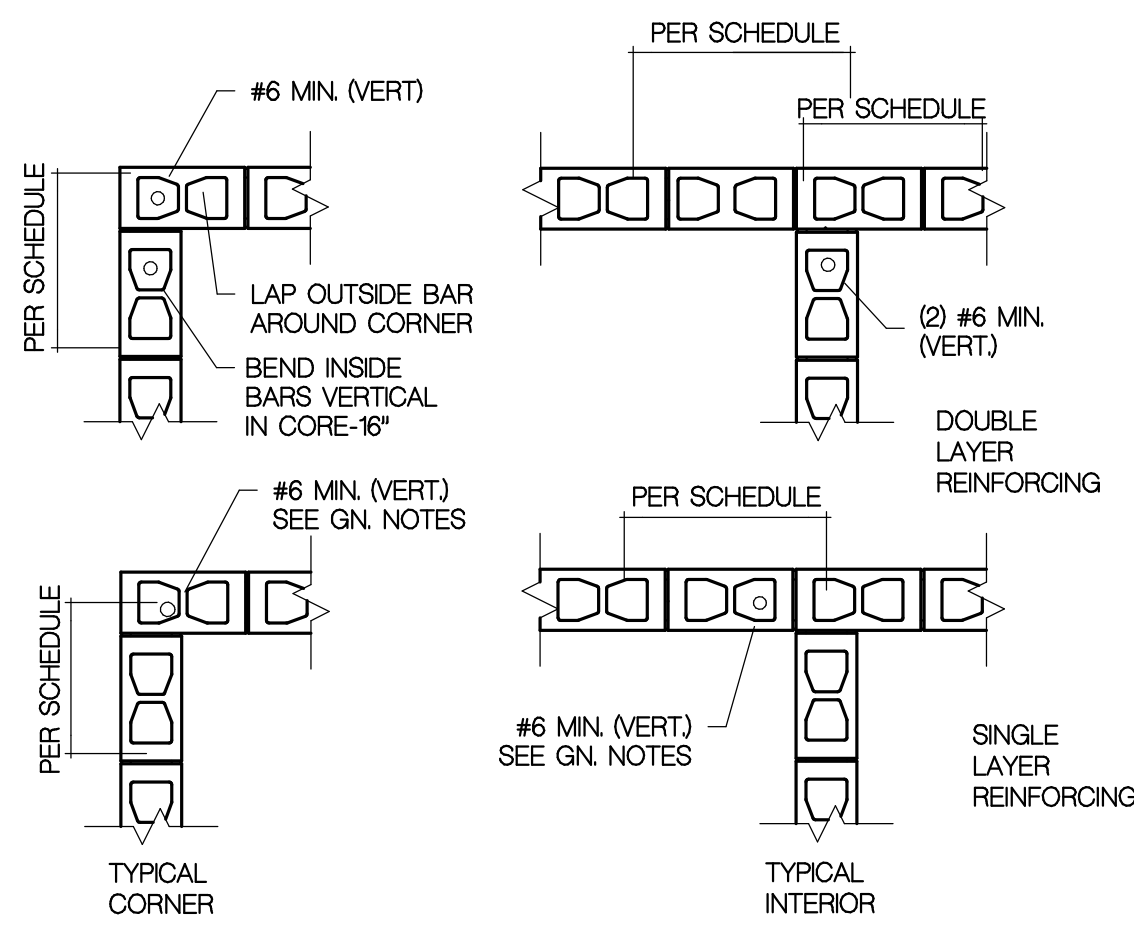
COLUMN DETAIL

1/4" DIA. SMOOTH BAR TIES W/ HOOKED END AT 8" O.C., SET IN CMU JOINTS

VERTICAL BARS EACH CELL TO MATCH TYPICAL WALL REINFORCING

PIER DETAIL

- NORMAL WALL REINFORCING AS NOTED ON DETAILS AND DESCRIBED IN GENERAL NOTES.
- ADDITIONAL VERTICAL REINFORCING AT CONTROL JOINTS - SEE TYPICAL CONTROL JOINT DETAIL.
- ADDITIONAL VERTICAL REINFORCING AT JAMBS OF ALL WALL OPENINGS.
- INTERMEDIATE BOND BEAM REINFORCED AND SPACED AS REQUIRED ON DRAWINGS. ONE INTERMEDIATE BOND BEAM SHALL BE PLACED AT WINDOW LINTEL ELEVATION AND AT 8'-0" O.C.
- ROOF LEVEL BOND BEAM REINFORCED AS NOTED ON DETAILS. CONTINUE ALL REINFORCING UN-CUT THROUGH CONTROL JOINTS.
- LINTEL REINFORCING AS DETAILED AND/OR SCHEDULED.
- CONTROL JOINTS (C.J.) UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS, THE C.J. SPACING NOTED IS THE MAXIMUM PERMITTED. THE SPACING OF CJS SHALL BE COORDINATED WITH THE WALL OPENING LOCATIONS AND IN NO CASE SHALL A C.J. BE LOCATED CLOSER THAN 24" TO THE JAMB OF ANY WALL OPENING.
- FOUNDATION DOWELS TO MATCH VERTICAL WALL REINFORCING SIZE AND SPACING.
- SILL LEVEL BOND BEAM REINFORCED AS NOTED IN MASONRY GENERAL NOTES.



3 TYPICAL REINFORCING AT INT OF CMU
WALLS
N.T.S.

LOOSE ANGLE LINTEL SCHEDULE			
* ANGLE SIZE (LLV)	CLEAR OPENING		REMARKS
	GREATER THAN	UP TO	
8" x 6" x 7/16"	—	3'-0"	8" MIN. BRG. EA. END
8" x 6" x 7/16"	3'-1"	6'-0"	12" MIN. BRG. EA. END
8" x 6" x 7/16"	6'-1"	8'-0"	12" MIN. BRG. EA. END
8" x 6" x 7/16"	8'-1"	9'-0"	16" MIN. BRG. EA. END
8" x 6" x 7/16"	9'-1"	10'-0"	16" MIN. BRG. EA. END
8" x 6" x 7/16"	10'-1"	11'-0"	16" MIN. BRG. EA. END
8" x 6" x 7/16"	11'-1"	12'-0"	16" MIN. BRG. EA. END

*FOR EACH 4" WIDTH OF MASONRY
SEE ARCHITECTURAL PLANS FOR MASONRY OPENING DIMENSIONS,
LOCATION, AND QUANTITIES.
1. CUT HORIZONTAL LEG 1/4" FROM OUTSIDE FACE OF VENEER
NOTE: ALL STEEL SHALL BE HOT DIP GALVANIZED

1 LOOSE ANGLE LINTEL SCHEDULE
N.T.S.

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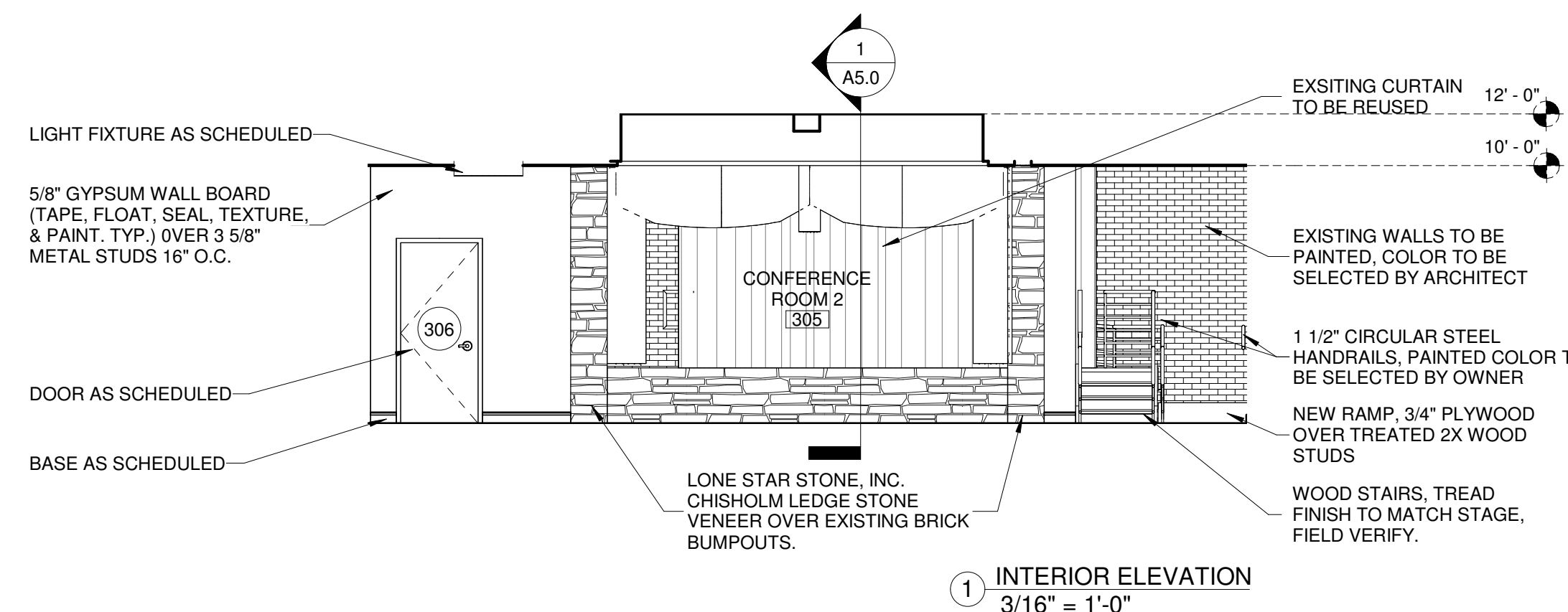
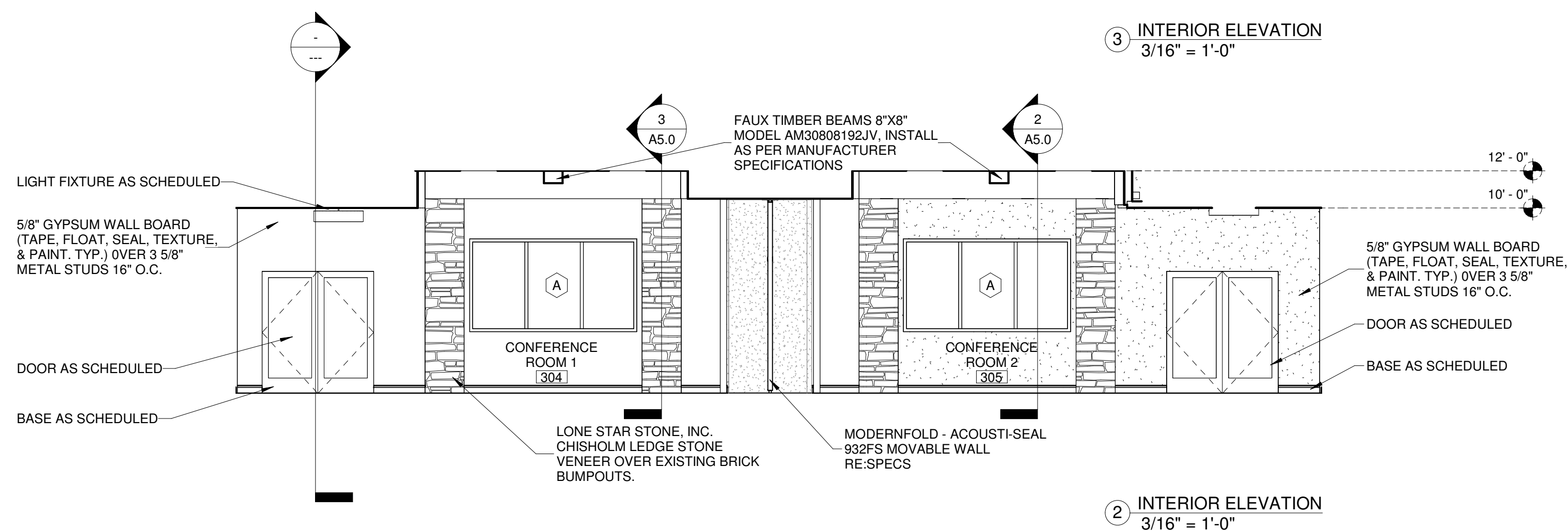
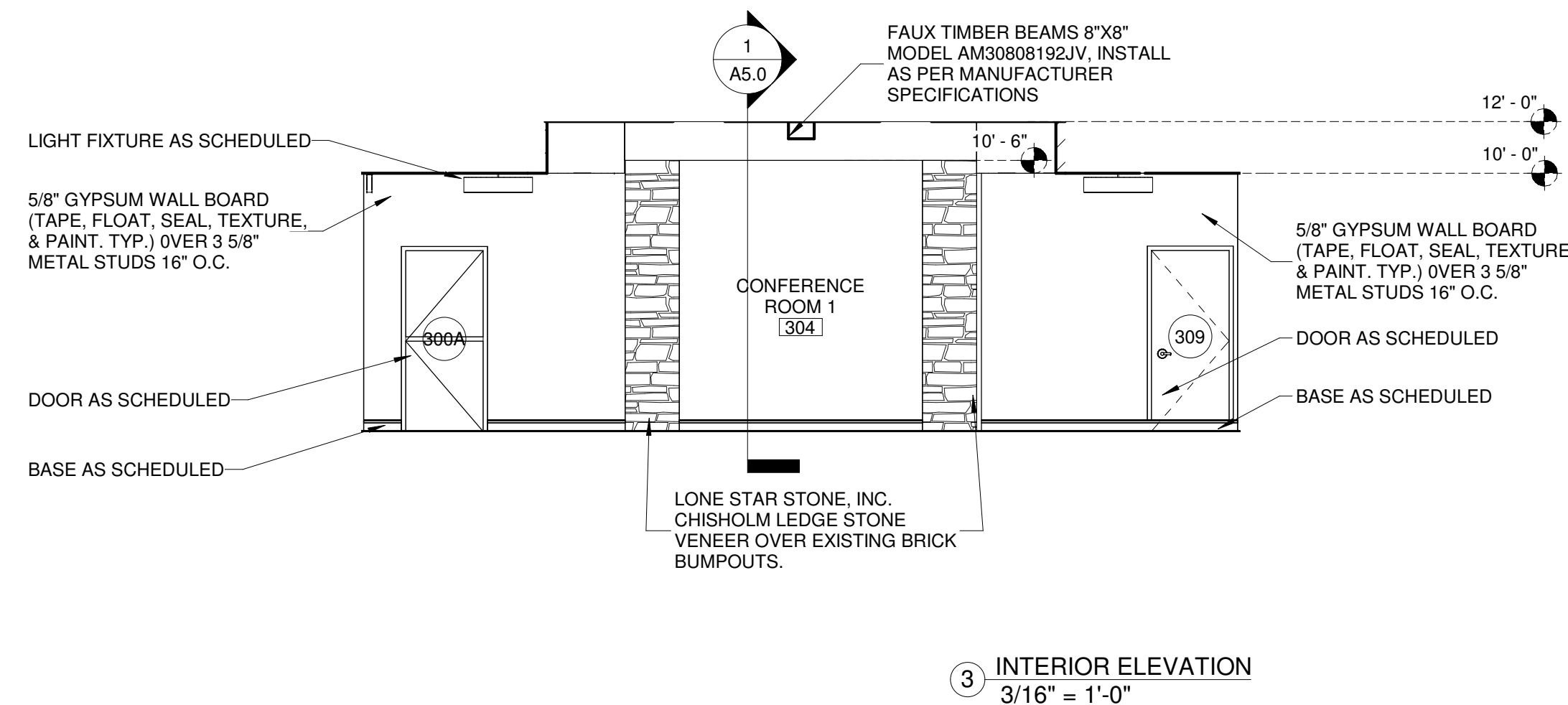
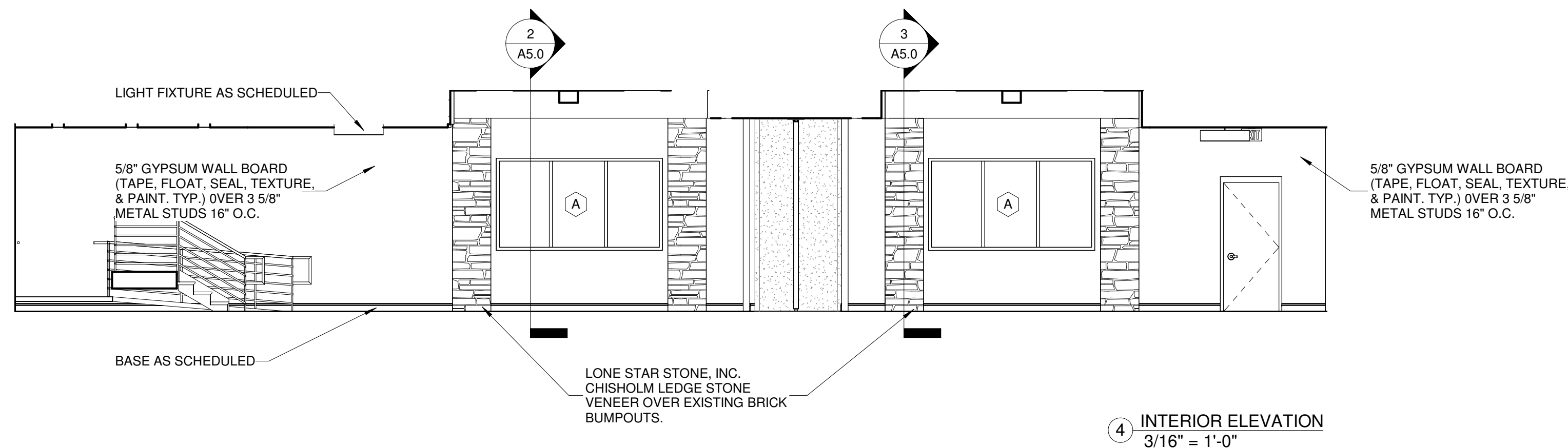
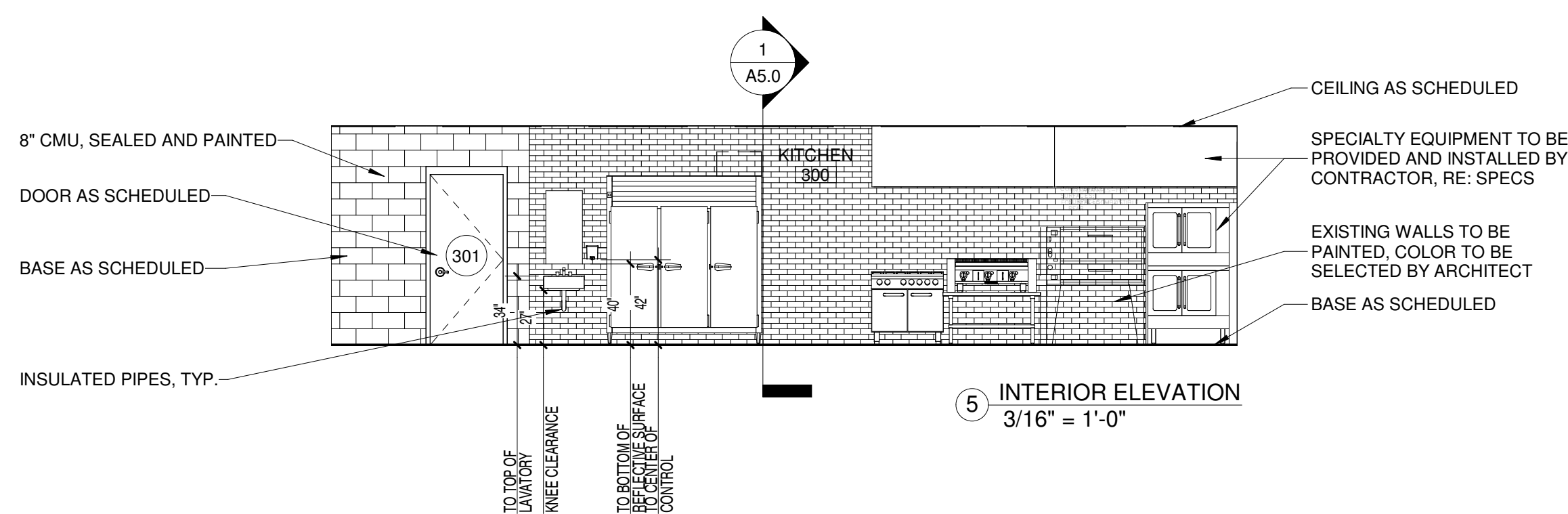
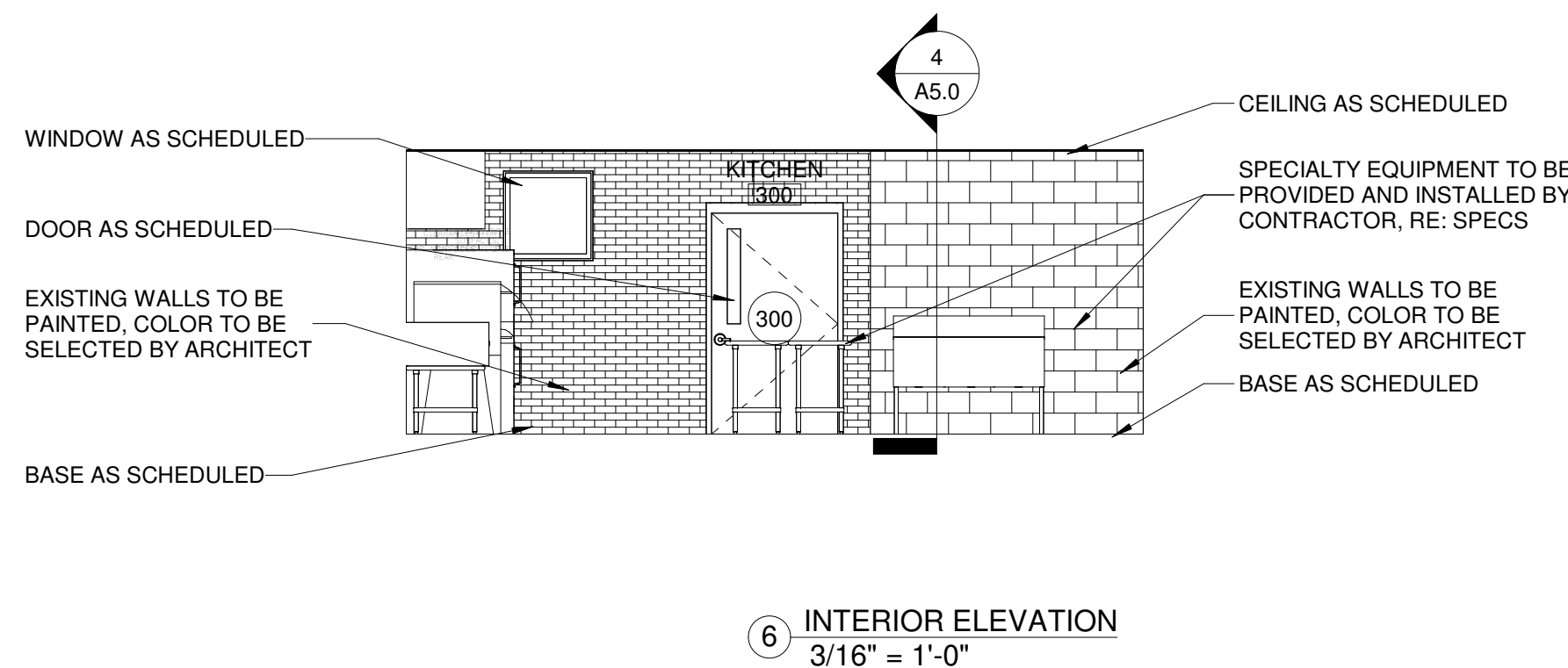
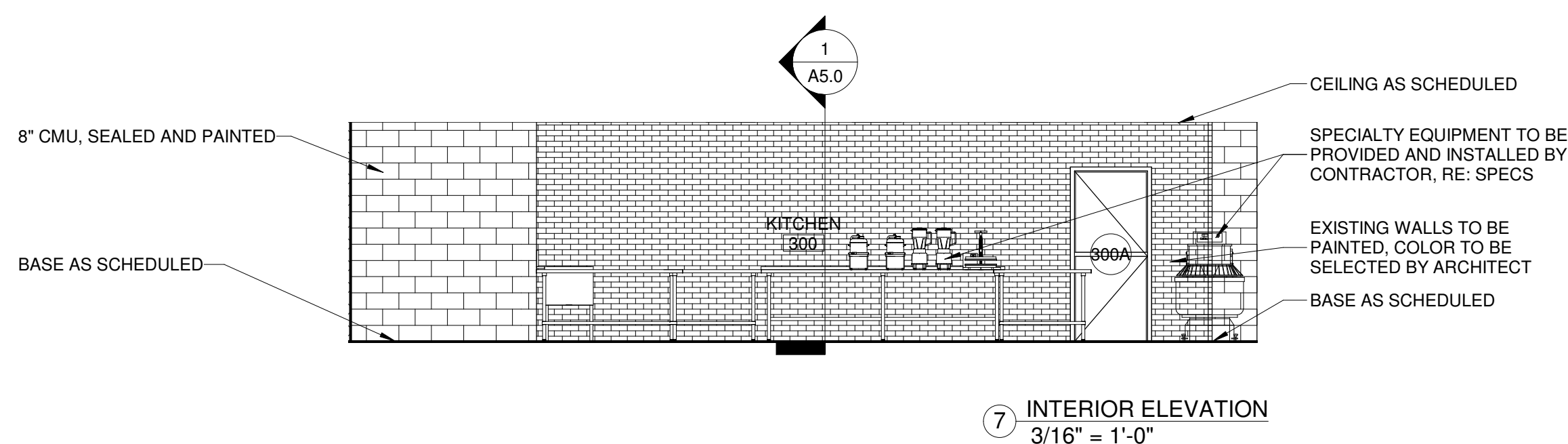
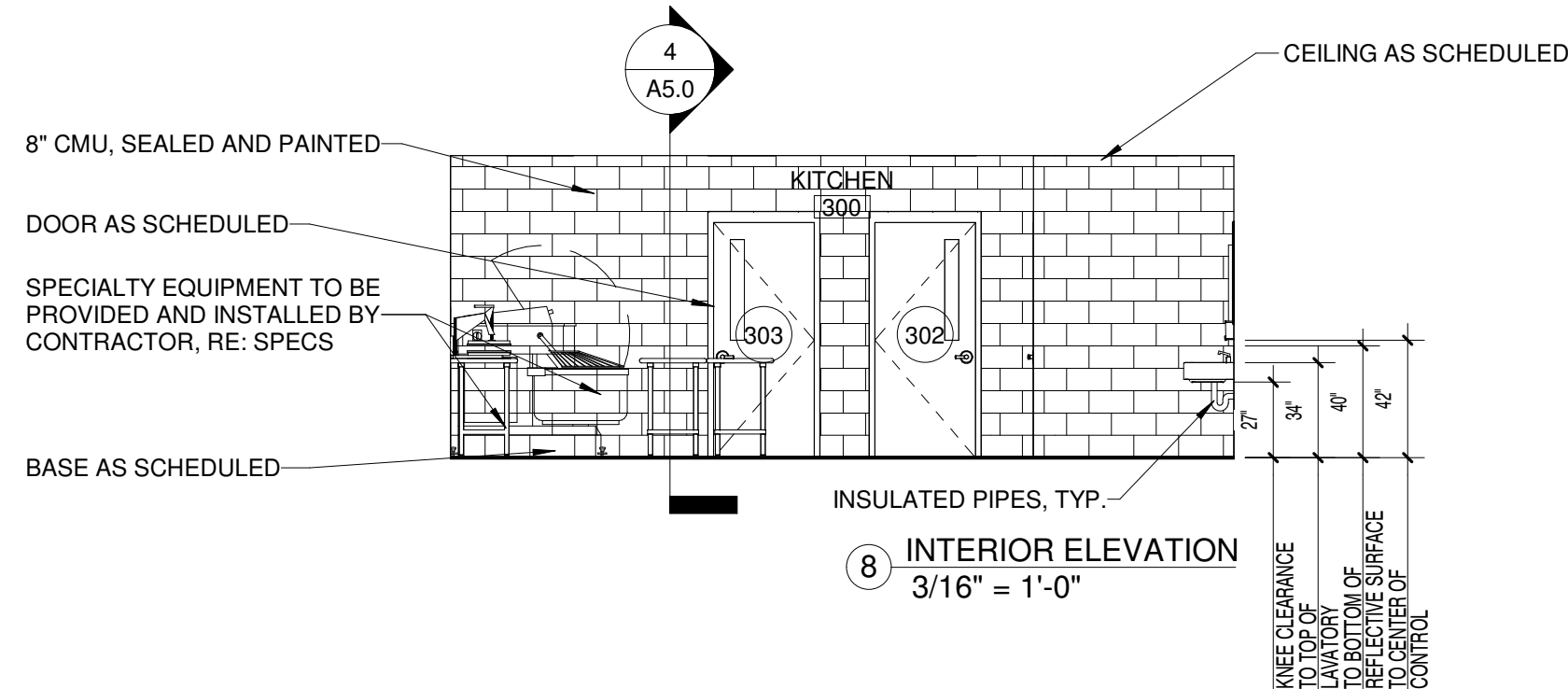
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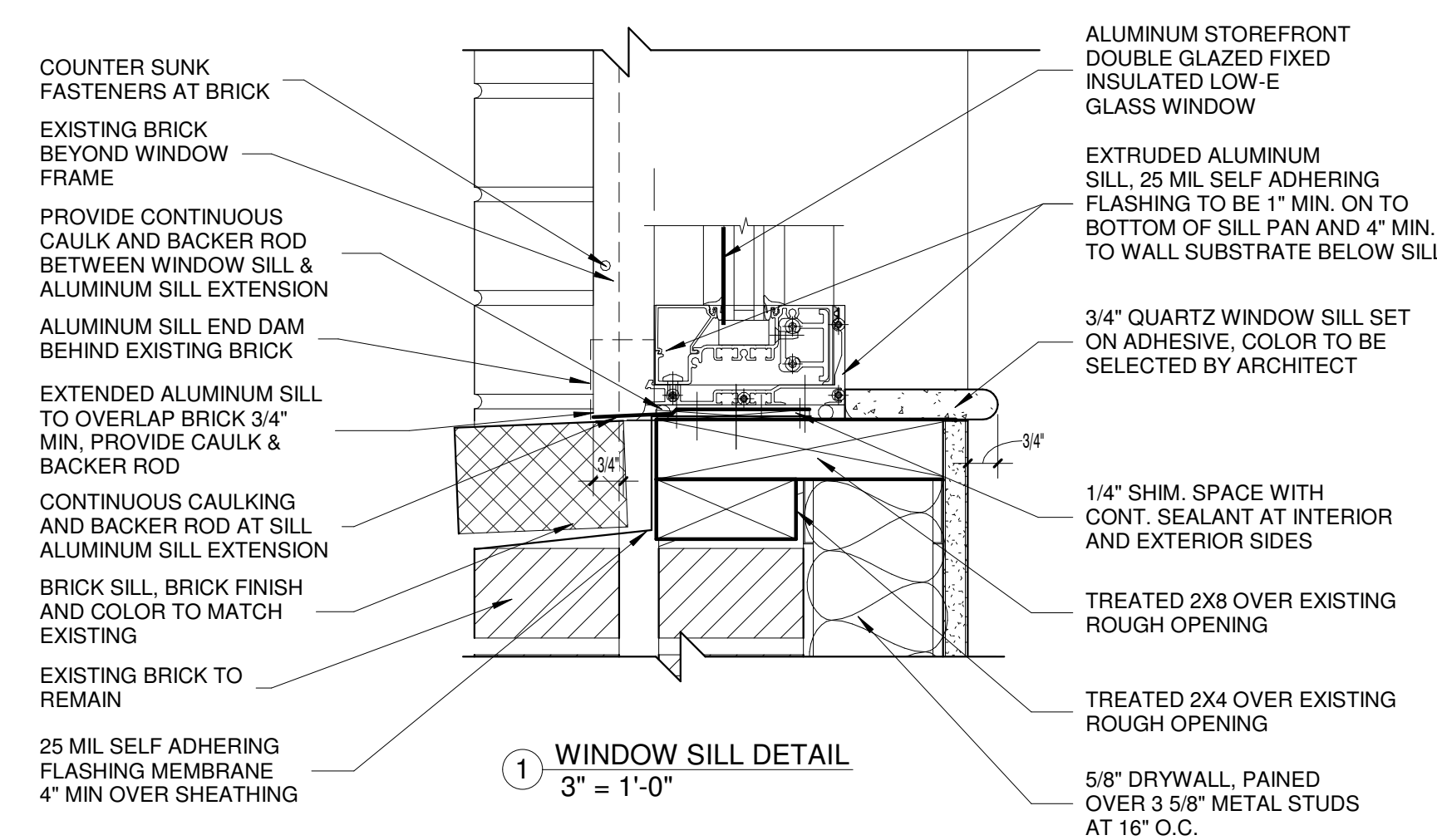
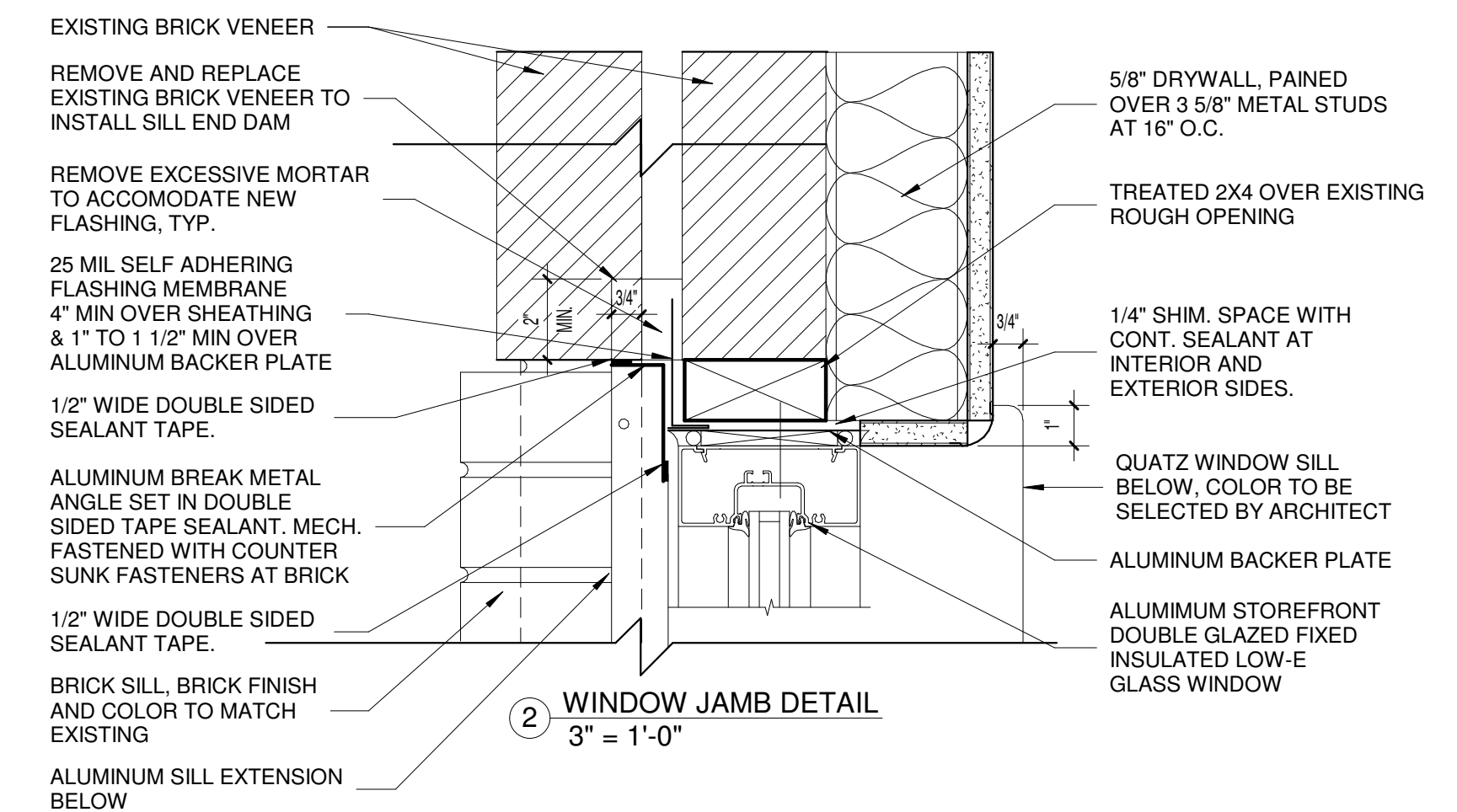
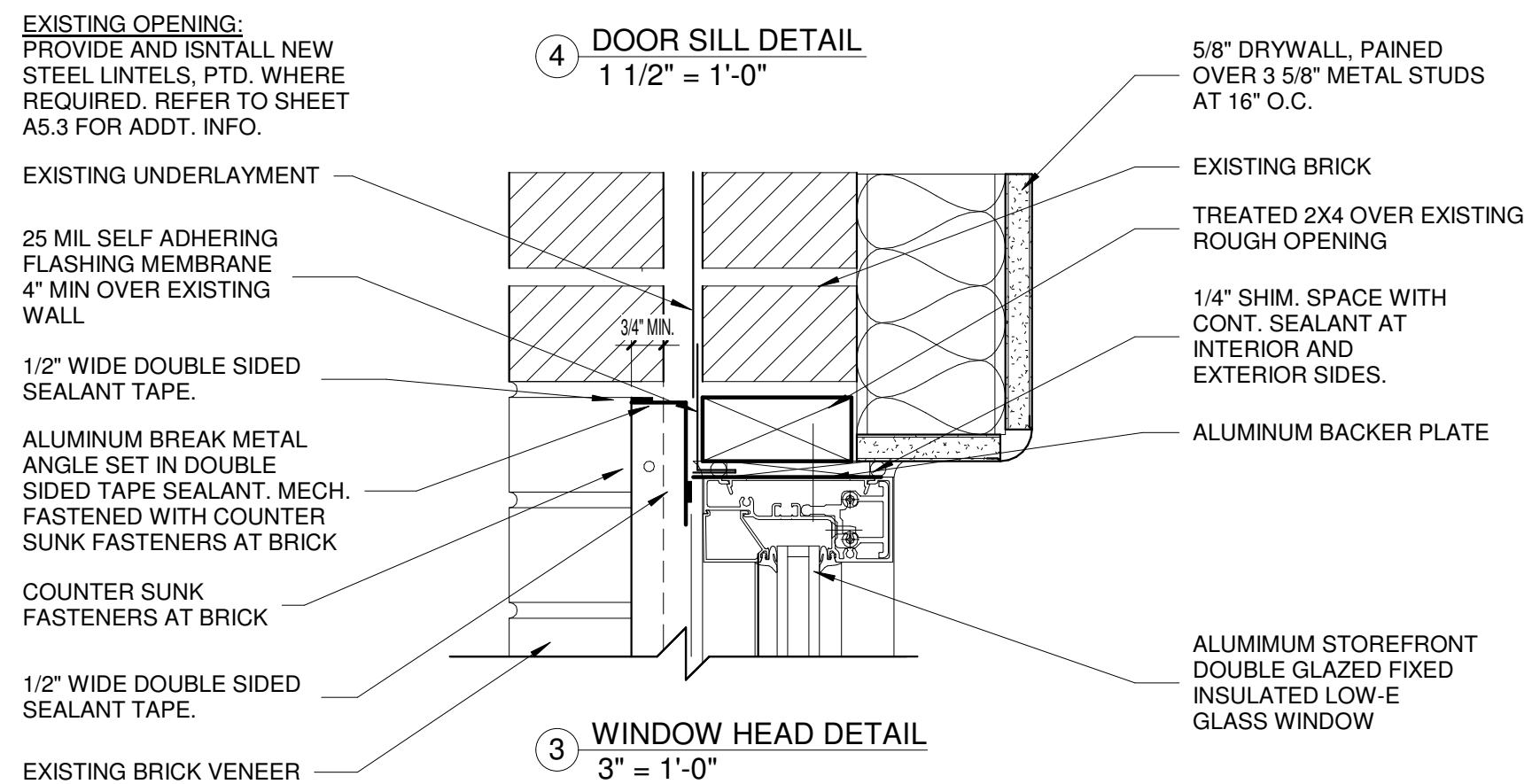
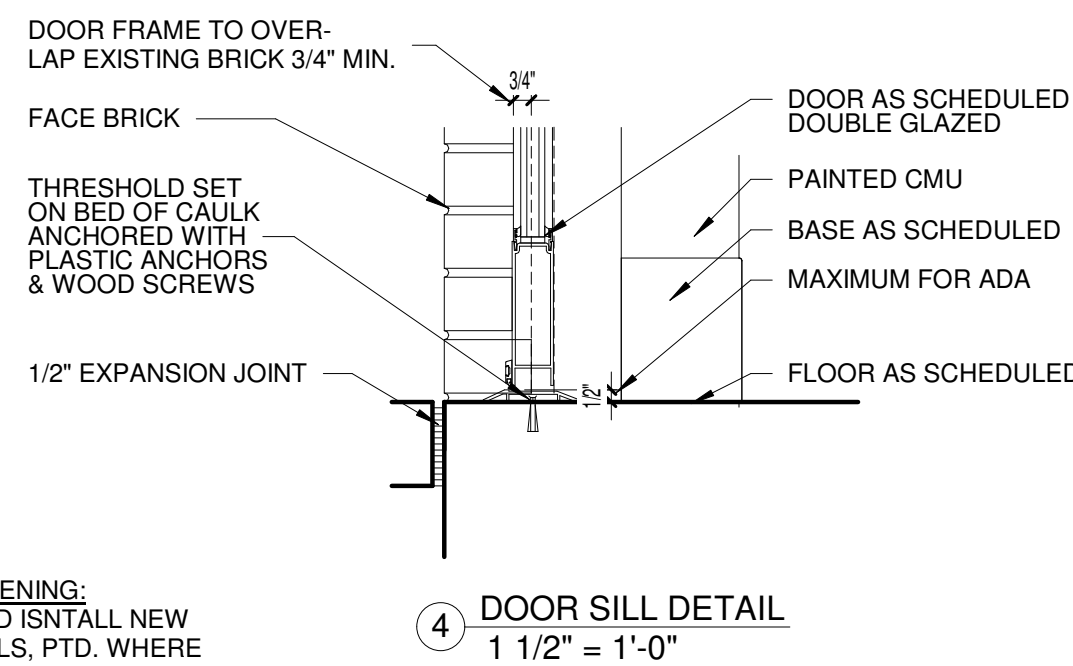
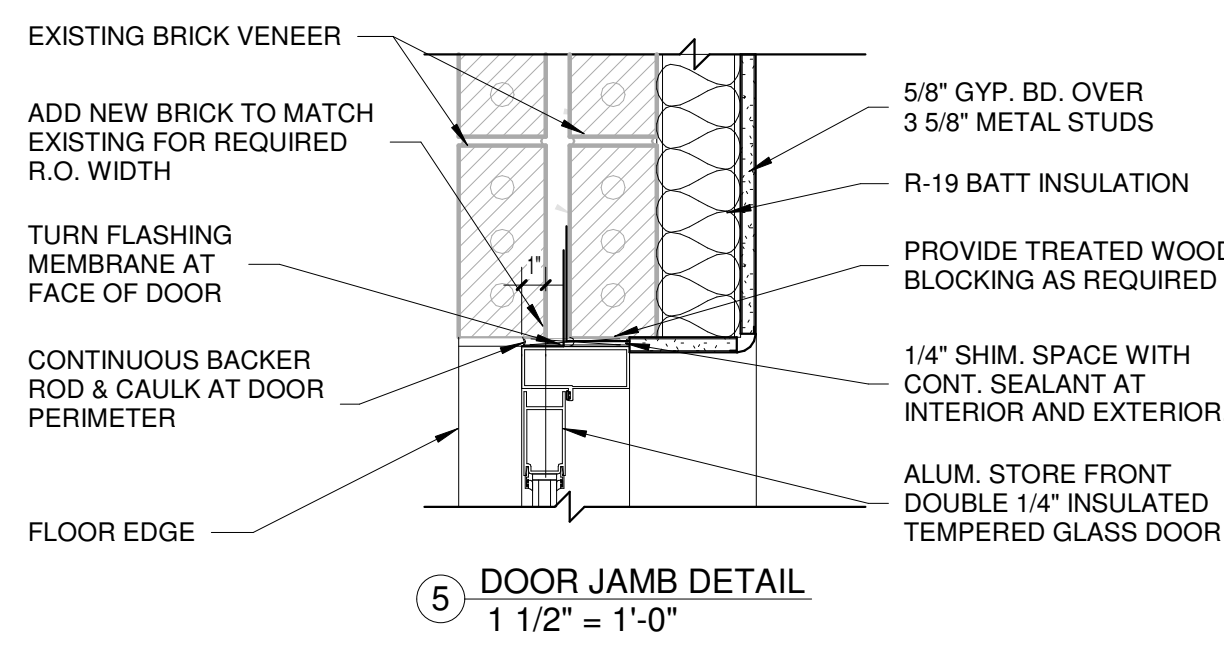
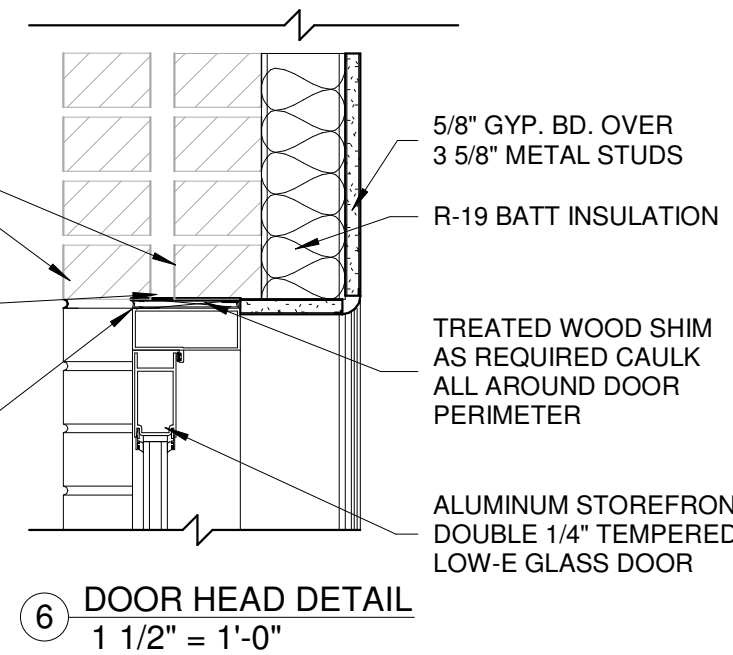
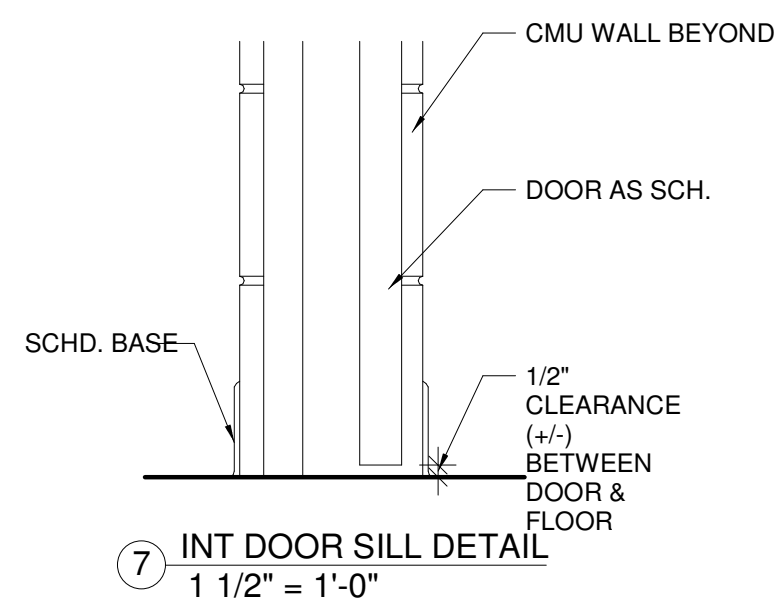
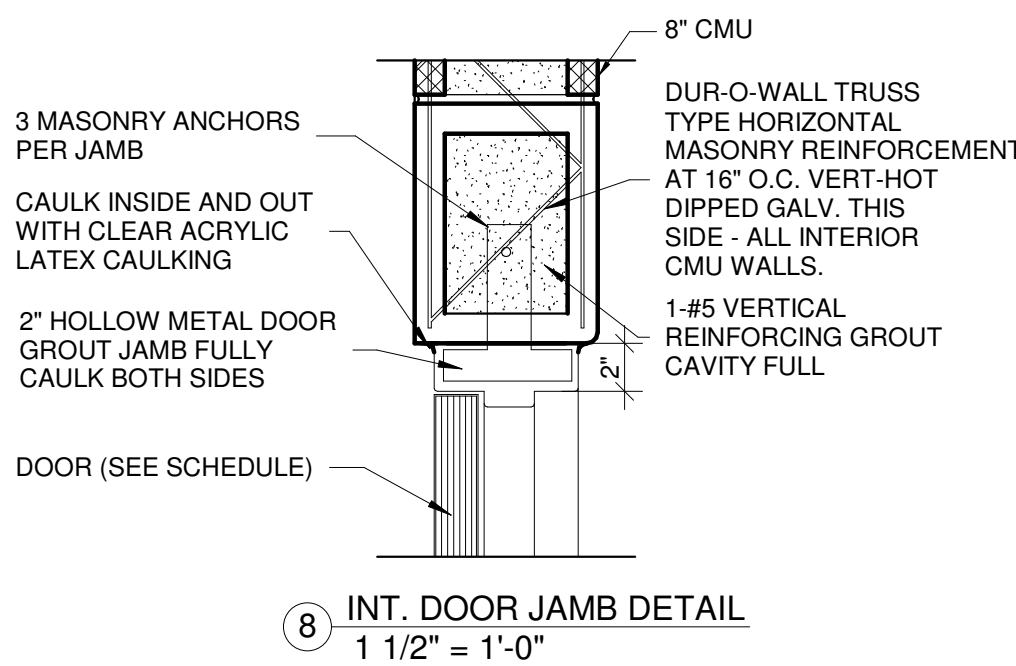
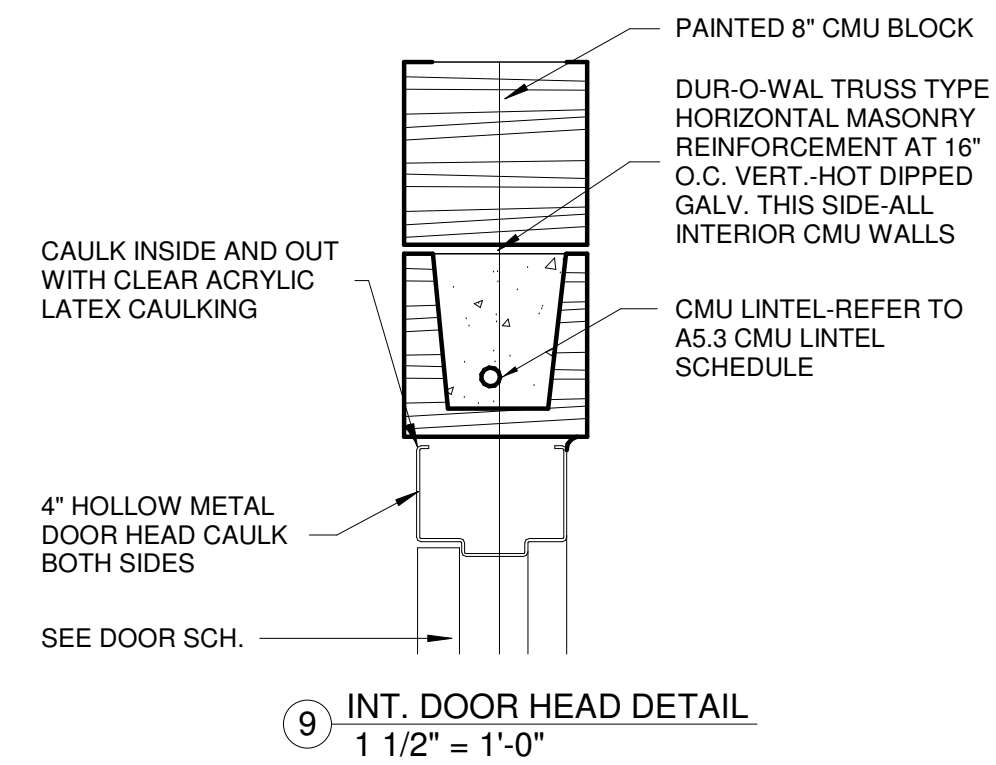
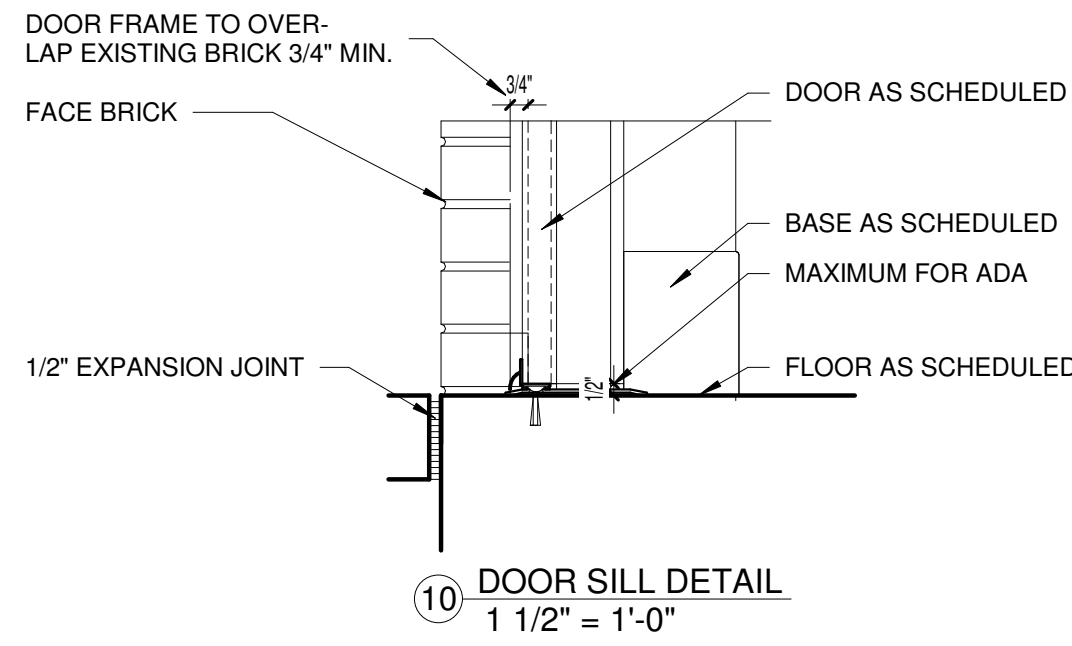
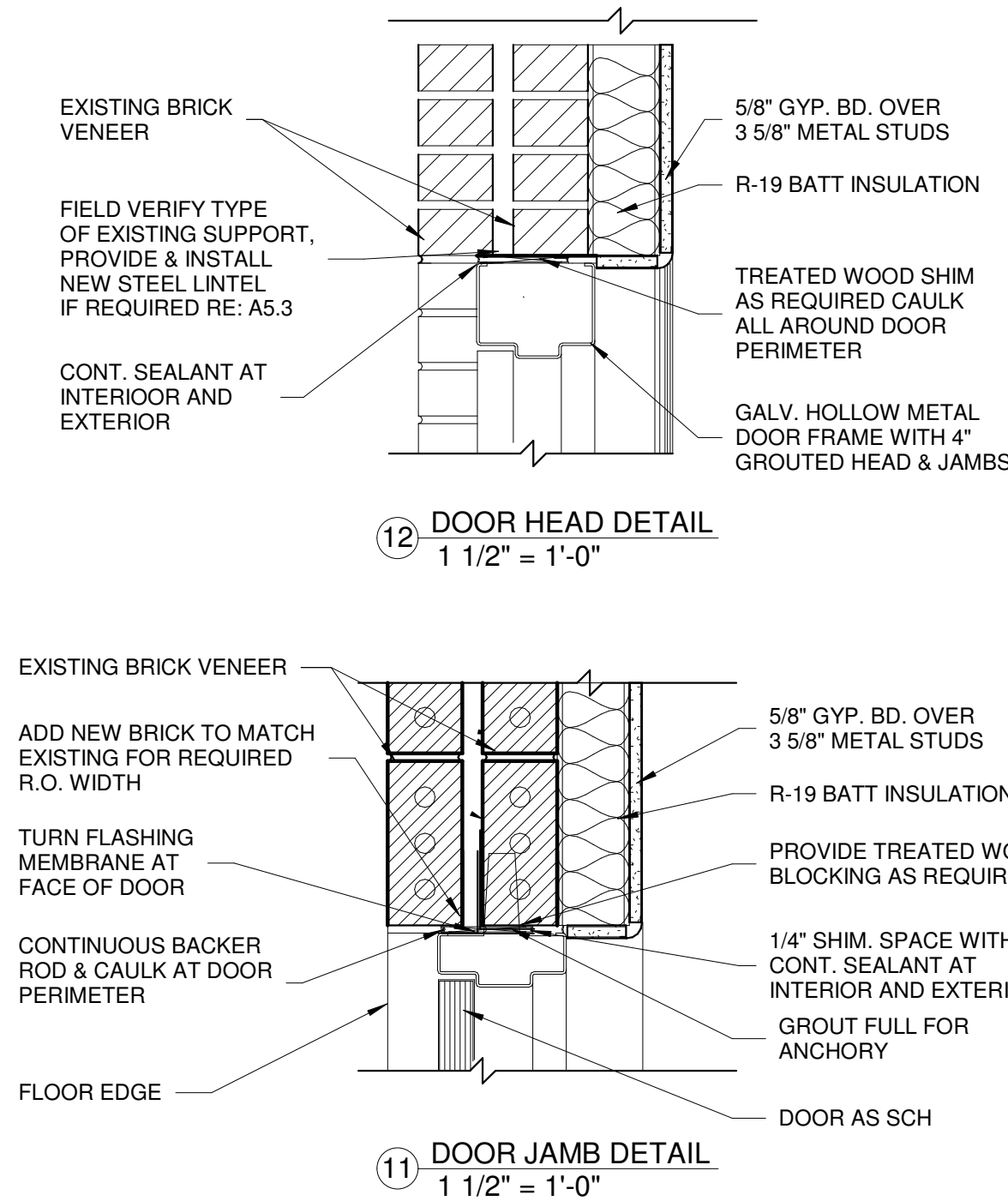
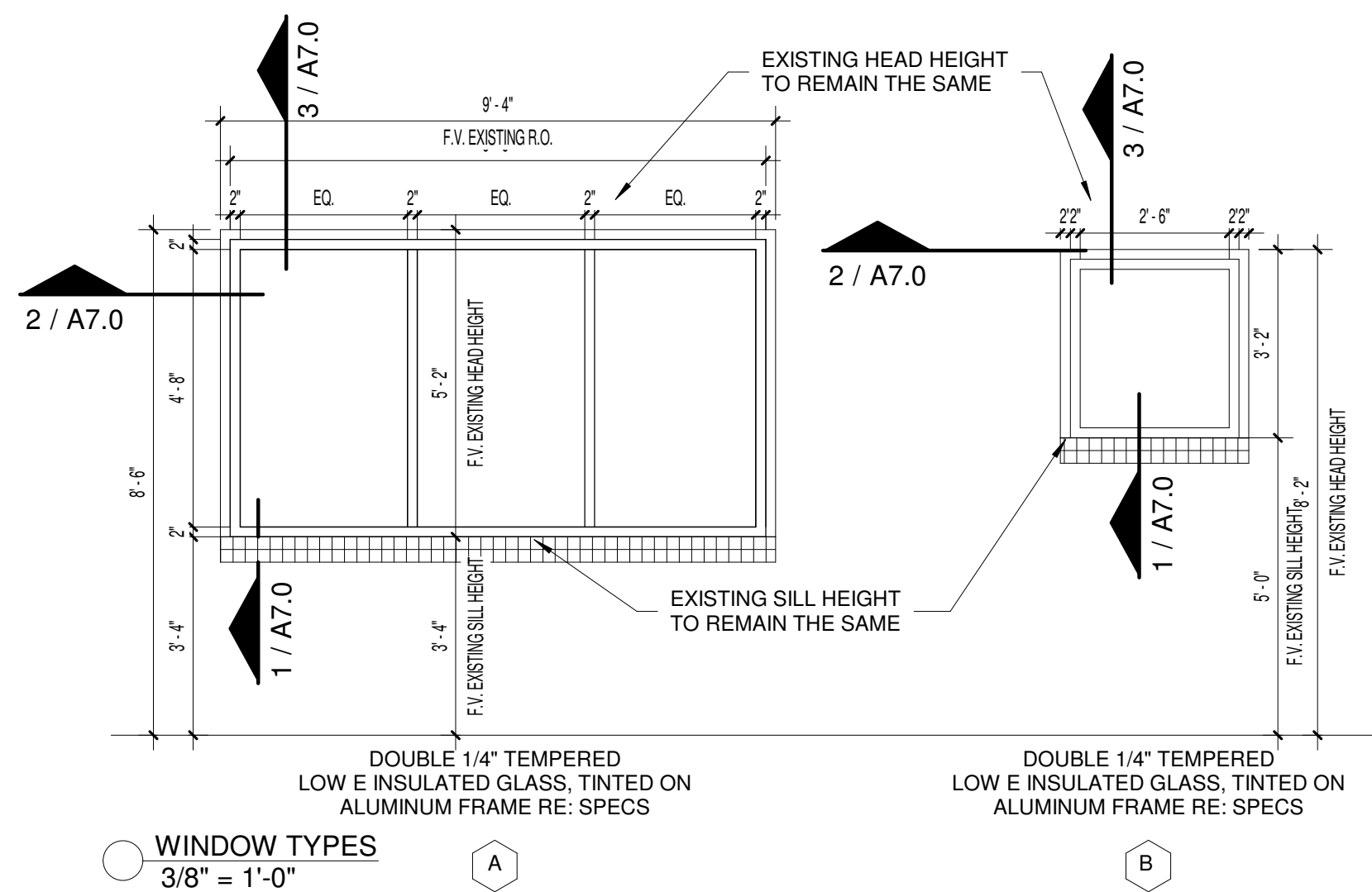
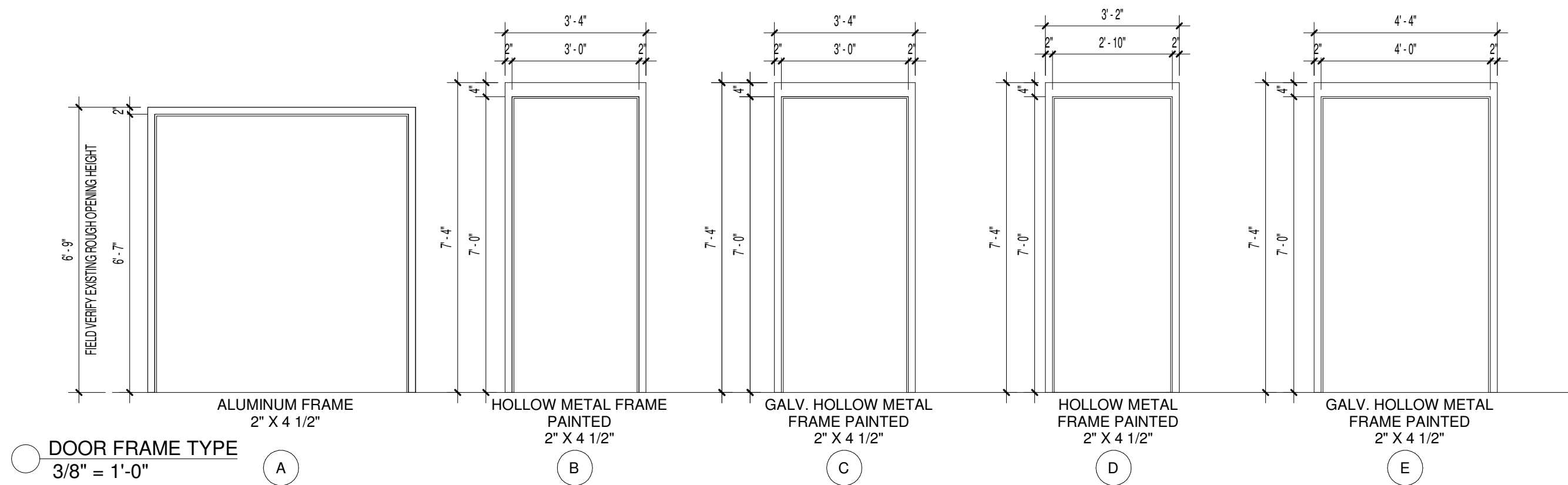
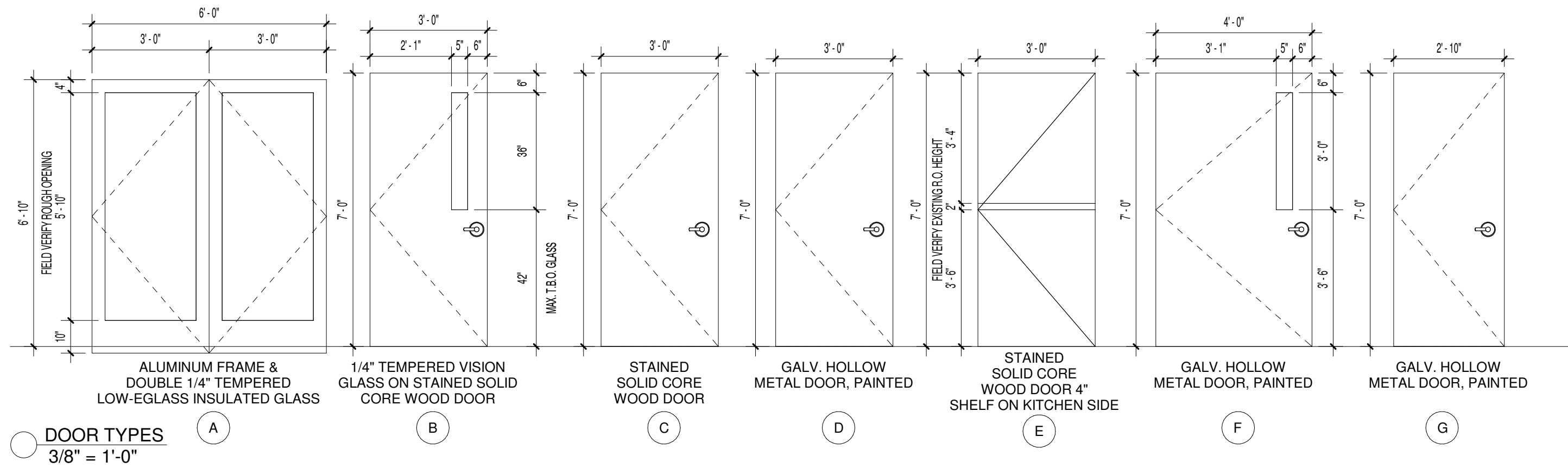
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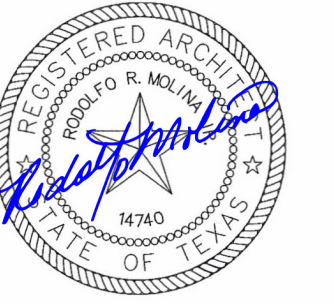


DOOR SCHEDULE														
Mark	DESCRIPTION	Type Mark	Width	Height	Thickness	PAIR OR SINGLE	MATERIAL	FINISH	FRAME TYPE	DOOR HARDWARE	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	Comments
300	KITCHEN	F	4'-0"	7'-0"	0' - 1 3/4"	SINGLE	HOLLOW METAL	PAINTED	E	RE: SPECS	12/A7.0	11/A7.0	10/A7.0	
300A	KITCHEN	E	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
301	RESTROOM	C	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
302	OFFICE	B	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
303	STORAGE	B	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
304A	CONFERENCE ROOM 1	D	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	ALUMINUM	ANODIZED	C	RE: SPECS	12/A7.0	11/A7.0	10/A7.0	
306	RESTROOM	C	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	HOLLOW METAL	PAINTED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
309	RESTROOM	C	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	ALUMINUM	ANODIZED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
310	RISER	G	2'-10"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	D	RE: SPECS	12/A7.0	11/A7.0	10/A7.0	
311	A/C	C	3'-0"	7'-0"	0' - 1 3/4"	SINGLE	SOLID CORE WOOD	STAINED	B	RE: SPECS	9/A7.0	8/A7.0	7/A7.0	
313	CONFERENCE ROOM 2	H	6'-0"	6'-7"	0' - 1 3/4"	PAIR	HOLLOW METAL	PAINTED	A	RE: SPECS	6/A7.0	5/A7.0	4/A7.0	
315	CONFERENCE ROOM 1	H	6'-0"	6'-7"	0' - 1 3/4"	PAIR	SOLID CORE WOOD	STAINED	A	RE: SPECS	6/A7.0	5/A7.0	4/A7.0	



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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055
PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

DATE
AUGUST 26, 2019

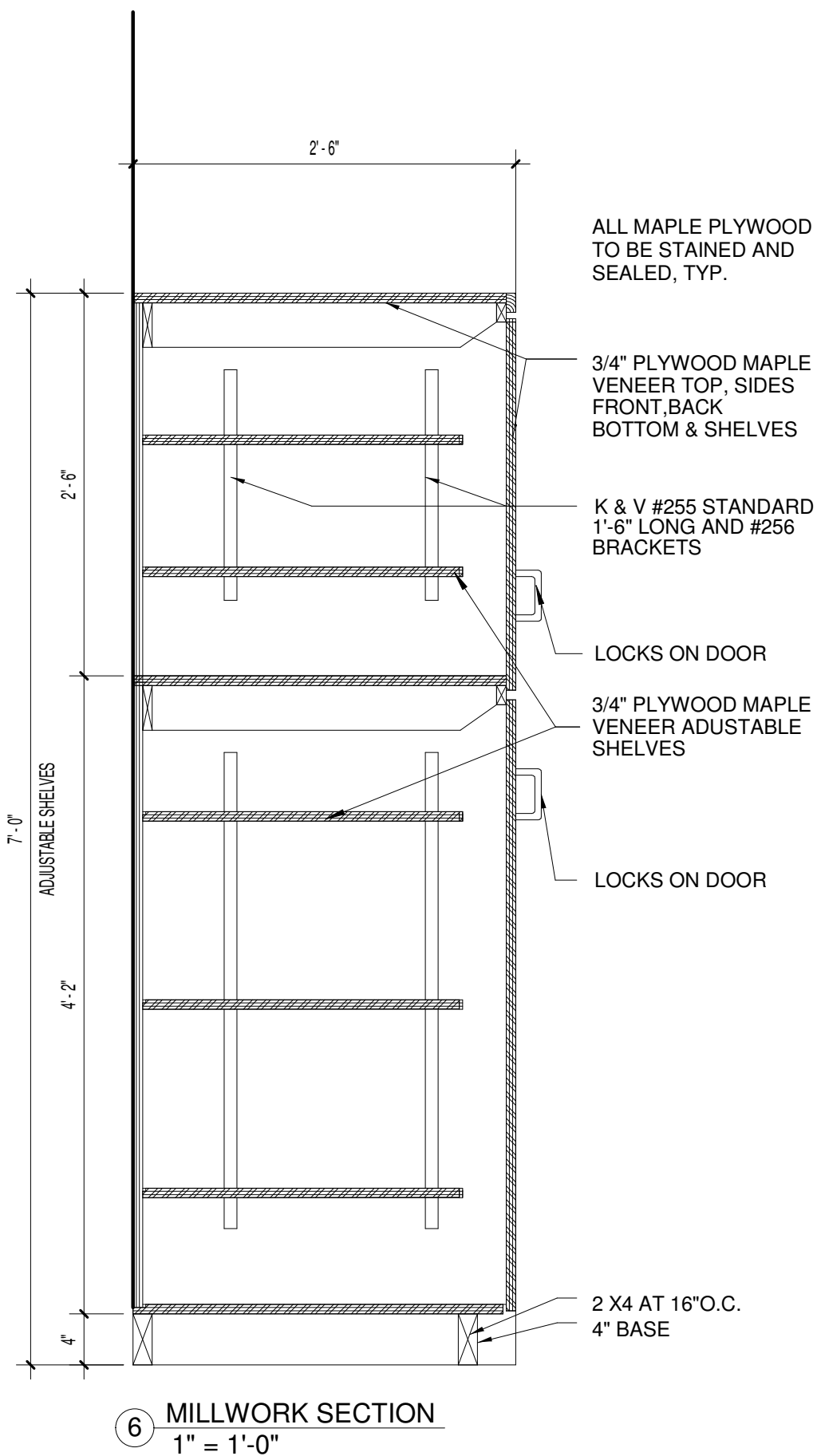
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A7.0

ROOM SCHEDULE							
Number	Name	FINISH KEY NOTE	WALLS	BASE	FLOOR	CEILING	Comments
300	KITCHEN	F3	P-2	B-3	F-3	C-4	
301	RESTROOM	F2	P-3	B-2	F-1	C-3	
302	OFFICE	F1	P-1	B-1	F-2	C-1/C-2	
303	STORAGE	F1	P-1	B-1	F-2	C-1/C-2	
304	CONFERENCE ROOM 1	F1	P-1	B-1	F-2	C-1/C-2	
305	CONFERENCE ROOM 2	F1	P-1	B-1	F-2	C-1/C-2	
306	UNISEX RESTROOM	F2	P-3	B-2	F-1	C-3	
307	STAGE	F-5	P-1	B-1	F-5	C-5	
308	STAGE ACCESS	F1	P-1	B-1	F-2	C-1/C-2	
309	UNISEX RESTROOM	F2	P-3	B-2	F-1	C-3	
310	RISE	F4	P-1	B-1	F-4	C-3	
311	A/C	F4	P-1	B-1	F-4	C-3	

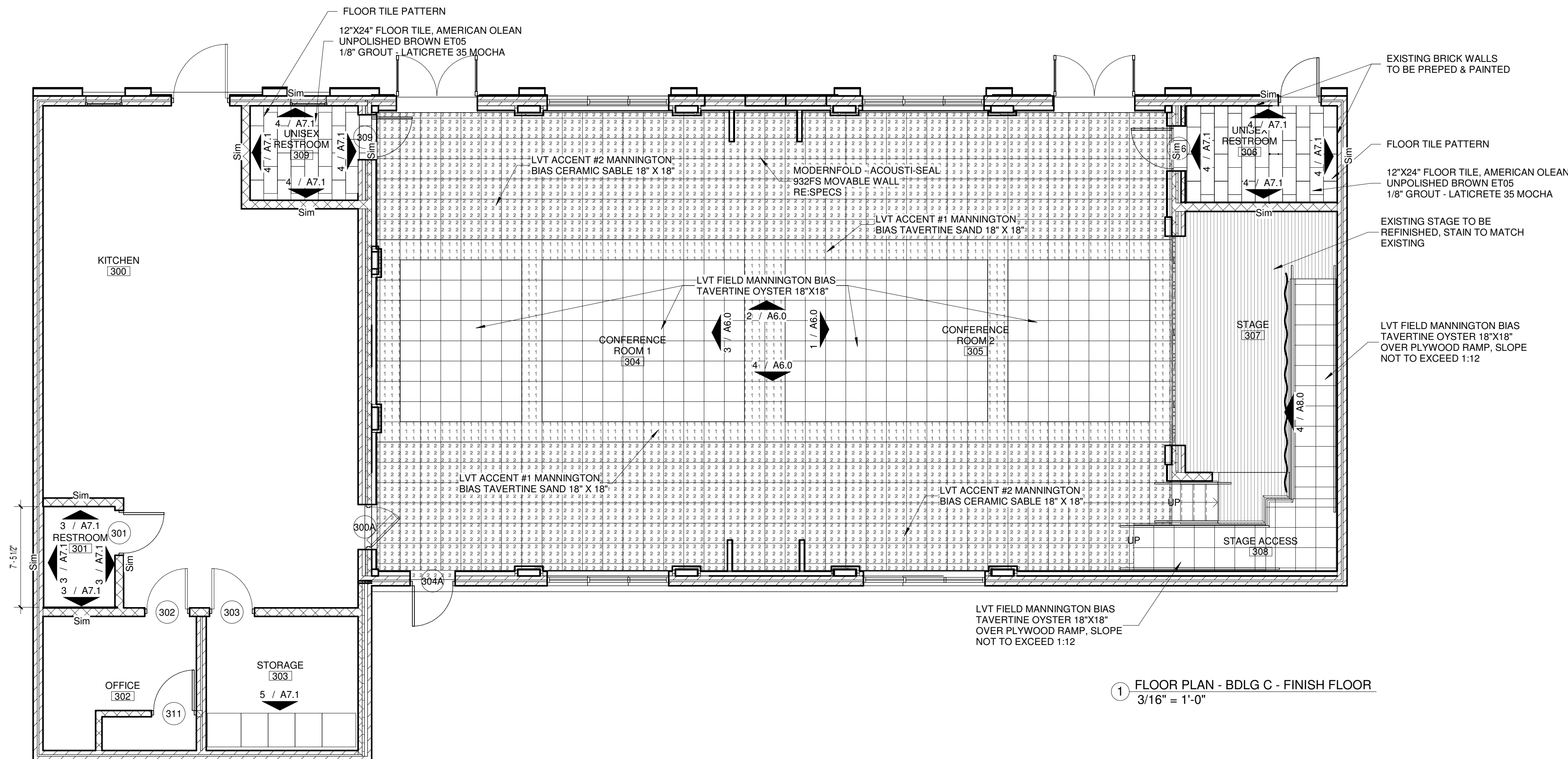
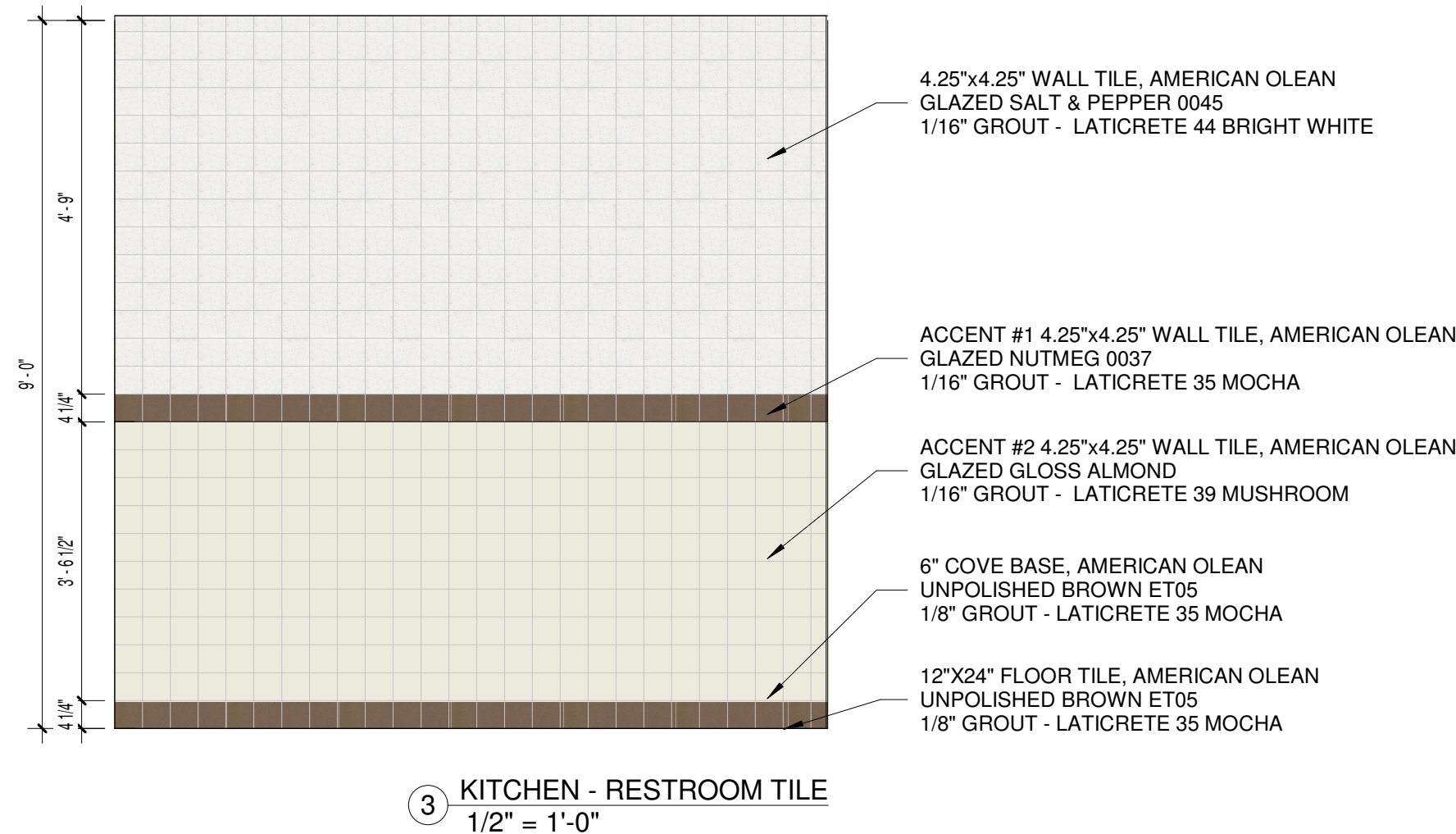
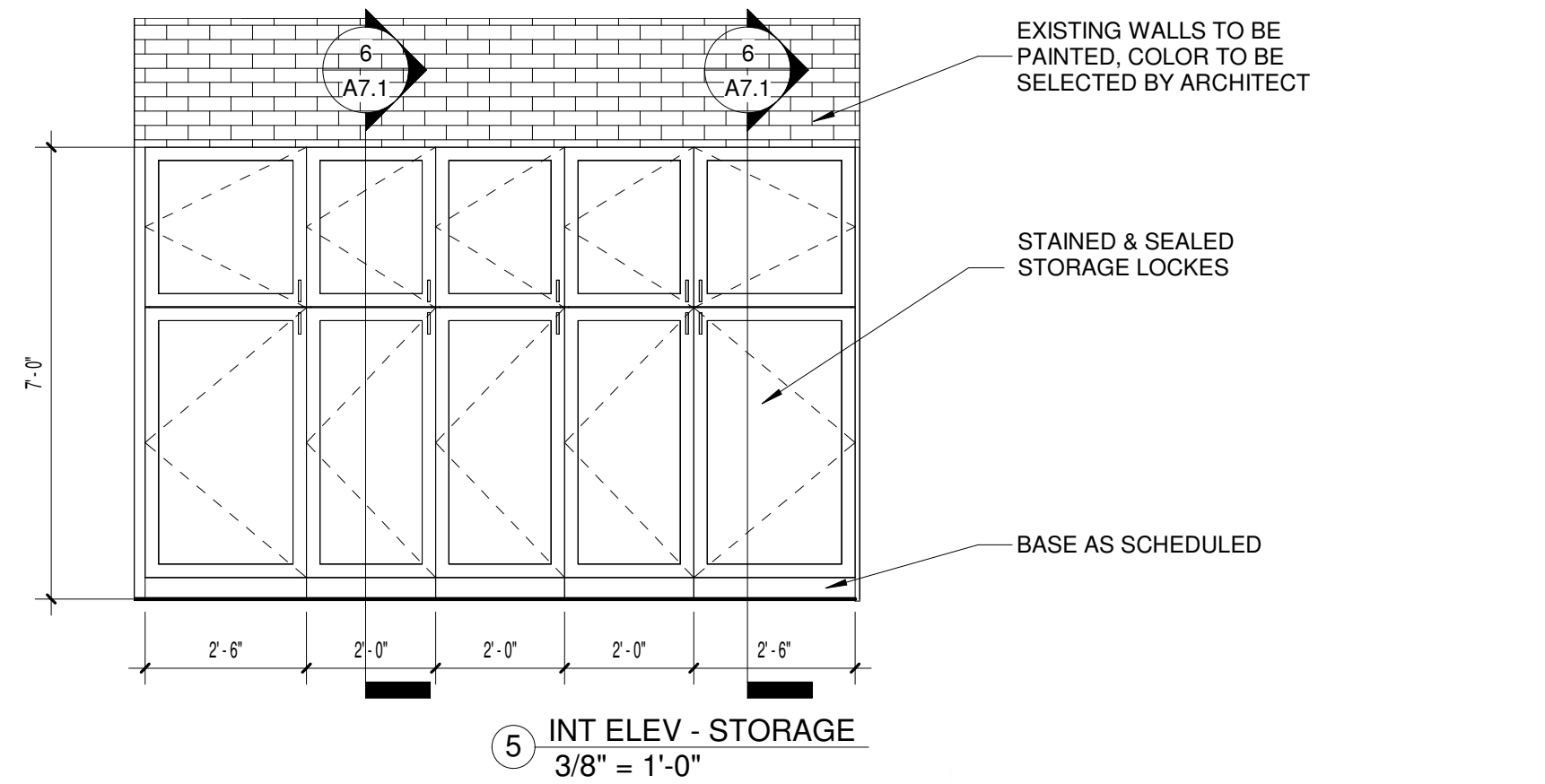
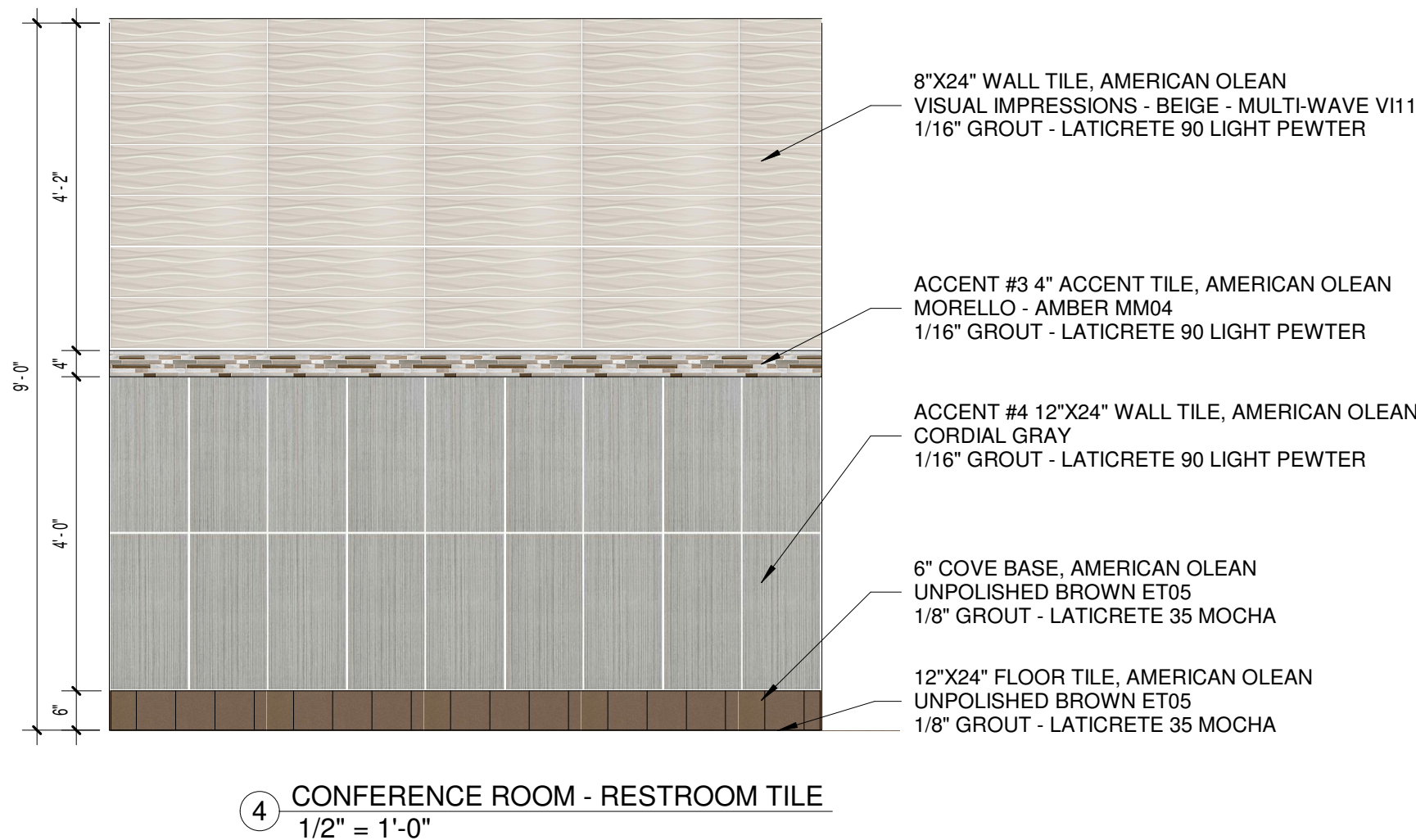
ROOM FINISH SCHEDULE							
KEY NOTE	WALLS	BASE	FLOOR	CEILING	MISC.	REMARKS	
F1	P-1	B-1	F-2	C-1/C-2		WALL PAINT LATEX	
F2	P-3	B-2	F-1	C-3		WALL PAINT EPOXY	
F3	P-2	B-3	F-3	C-4		WALL PAINT EPOXY	
F4	P-1	B-1	F-4	C-3		WALL PAINT EPOXY	
F-5	P-1	B-1	F-5	C-5		WALL PAINT LATEX	

ROOM FINISH STANDARDS	
WALLS	
P-1	WALL PAINTED
P-2	CMU SEALED & PAINTED (EPOXY PAINT)
P-3	CERAMIC TILE
FLOOR COVERINGS	
F-1	CERAMIC TILE
F-2	LUXURY VINYL TILE
F-3	ALTRO CLASSIC 25 - COLOR TRUFFLE
F-4	SEALED CONCRETE
F-5	EXISTING STAGE FLOOR TO BE SANDED, SEALED, AND STAINED.
BASE	
B-1	4" RUBBER BASE
B-2	CERAMIC TILE
B-3	4" ALTRO CLASSIC 25 - COLOR TRUFFLE WITH C7 CAP STRIP
CEILING	
C-1	SUSP. ACOUSTICAL CEILING (2X2)
C-2	SUSP. 5/8" GYPSUM BD. T.F.T.&P.
C-3	5/8" THICK, MOISTURE RESISTANT GYP. BD. ON SUSPENDED GRID SYSTEM (2-LAYERS OF 5/8" GYP. BD. AT FIRE RATED CONDITIONS)
C-4	2"X2" CERAMA GUARD (MOISTURE RESISTANT) LAY-IN CEILING TILE
C-5	EXISTING TO REMAIN, TO BE PAINTED



GENERAL FINISH NOTES

1. ALL FINISH MATERIALS MUST MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED DUCTWORK, CONDUIT, ELECTRICAL EQUIPMENT, ETC TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR ALL FLOORING MATERIALS.
6. FLOORING TRANSITIONS AT DOORS SHOULD BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, UNLESS NOTED OTHERWISE.
7. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE BULLNOSE TRIM AT TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL, UNLESS NOTED OTHERWISE.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE UNLESS NOTED OTHERWISE.
11. CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, UNLESS NOTED OTHERWISE.
12. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL COLOR.
13. ALL EXISTING WALLS NOTED TO BE PAINTED, SHALL RECEIVE THE NECESSARY PREPARATION IN ORDER TO ADEQUATELY RECEIVE NEW PAINT. REFER TO SPECS FOR ADDT. INFORMATION.





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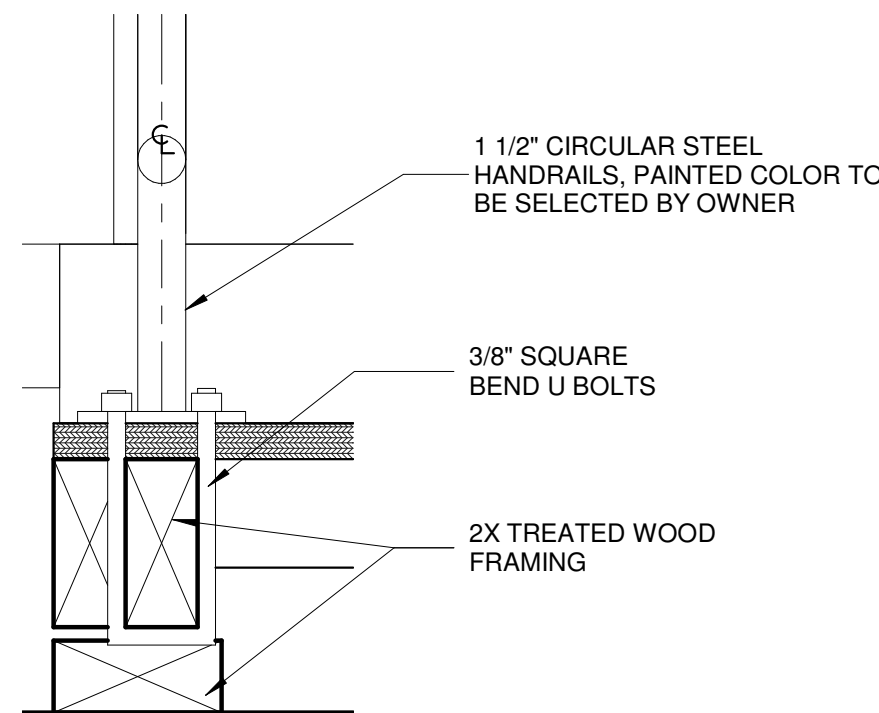
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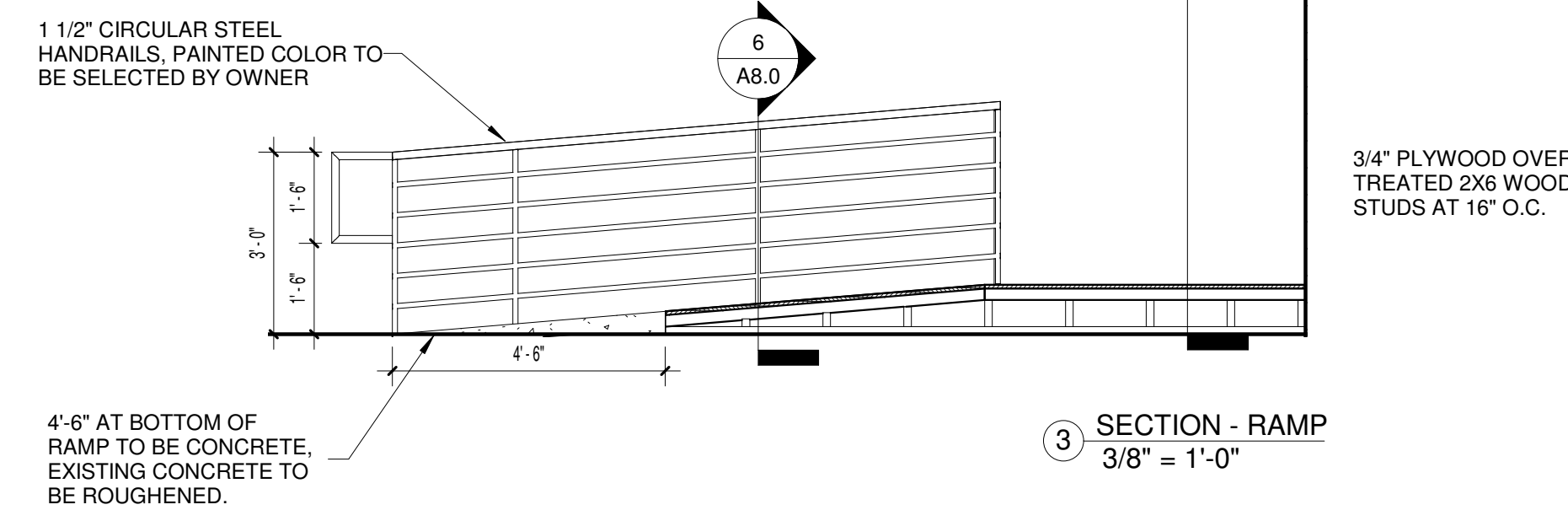
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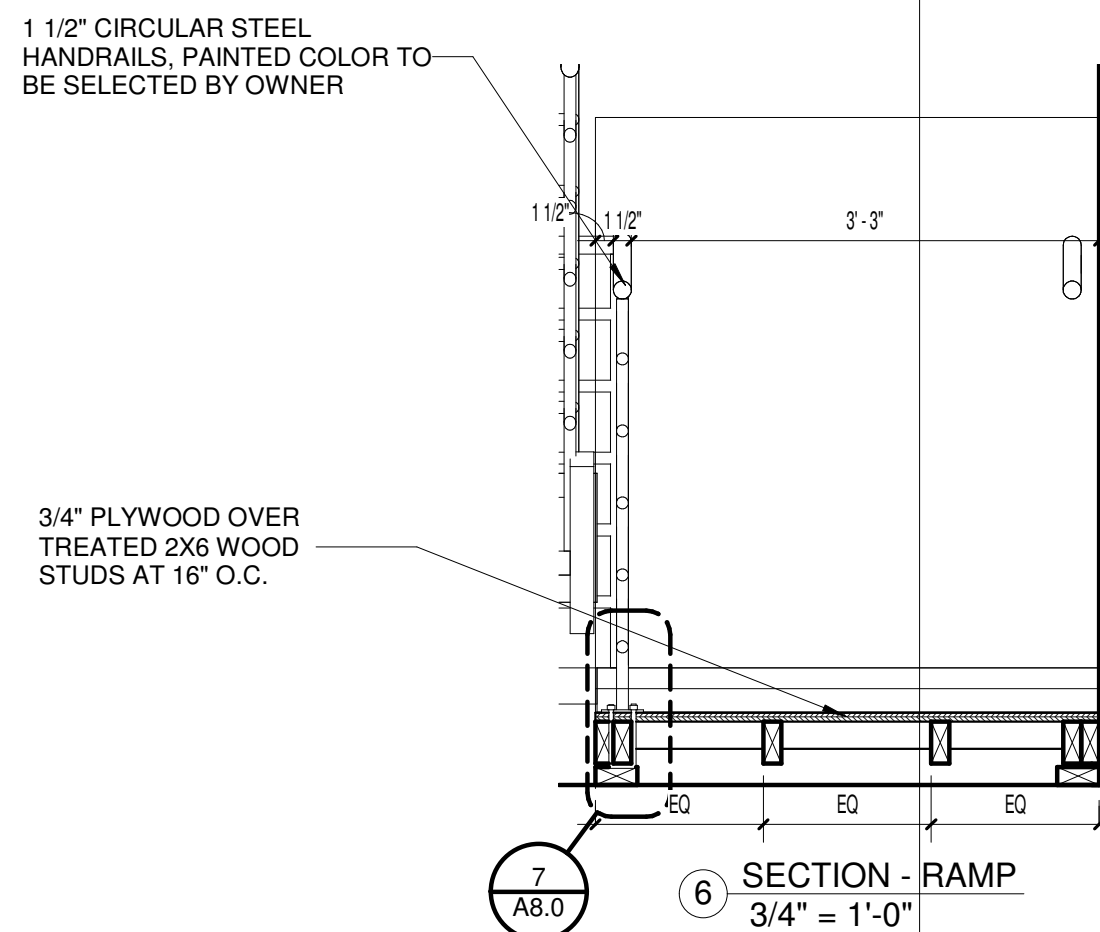
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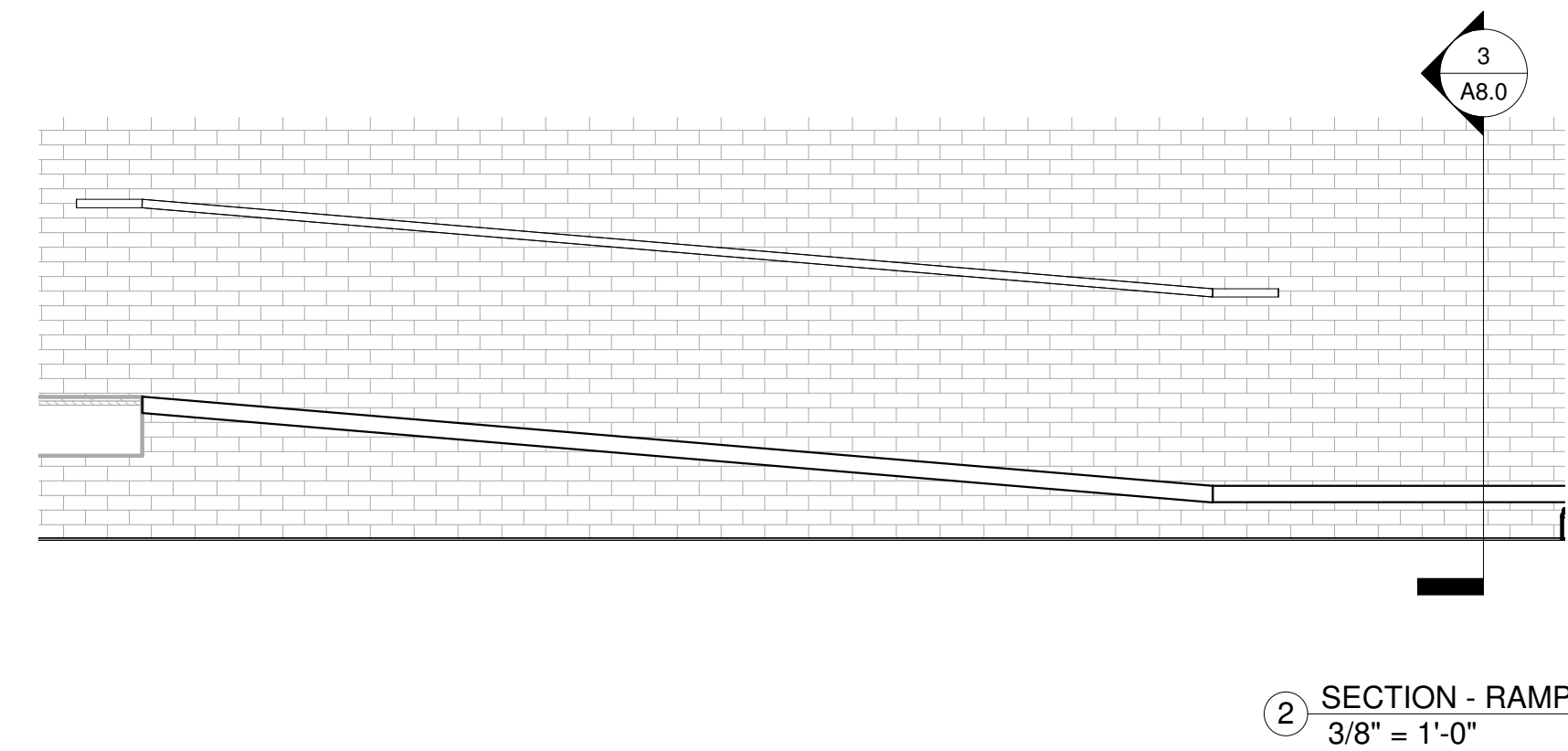
7 SECTION - RAMP
3" = 1'-0"



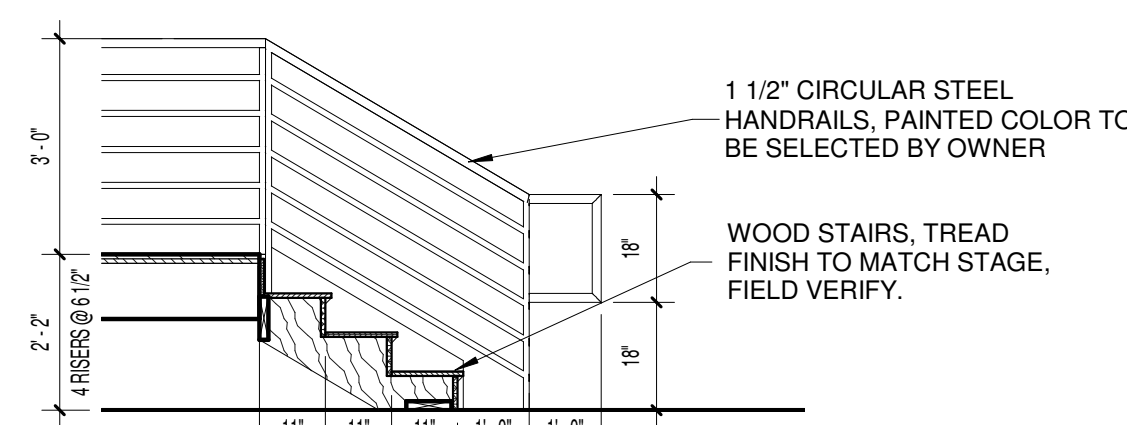
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3/8" = 1'-0"



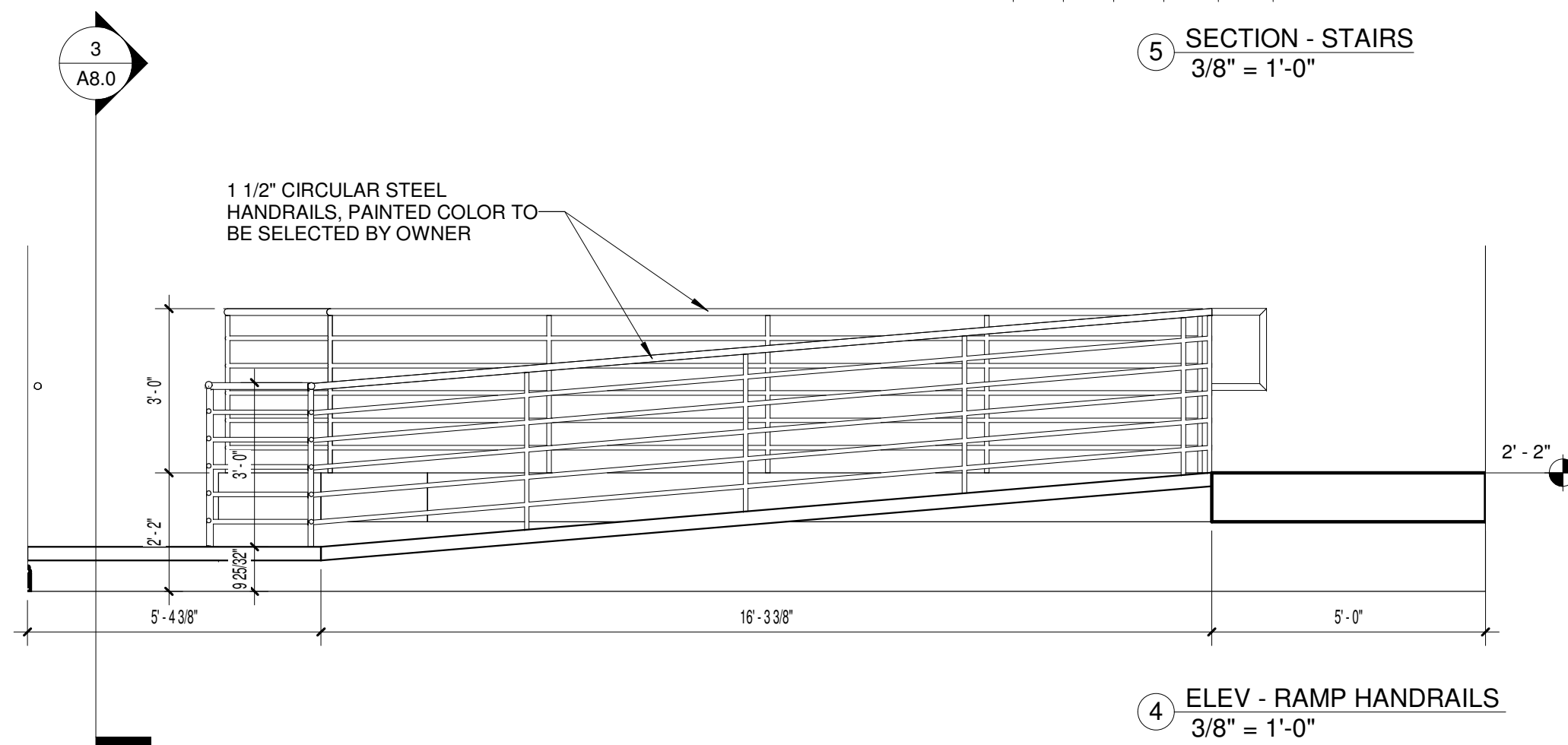
6 SECTION - RAMP
3/4" = 1'-0"



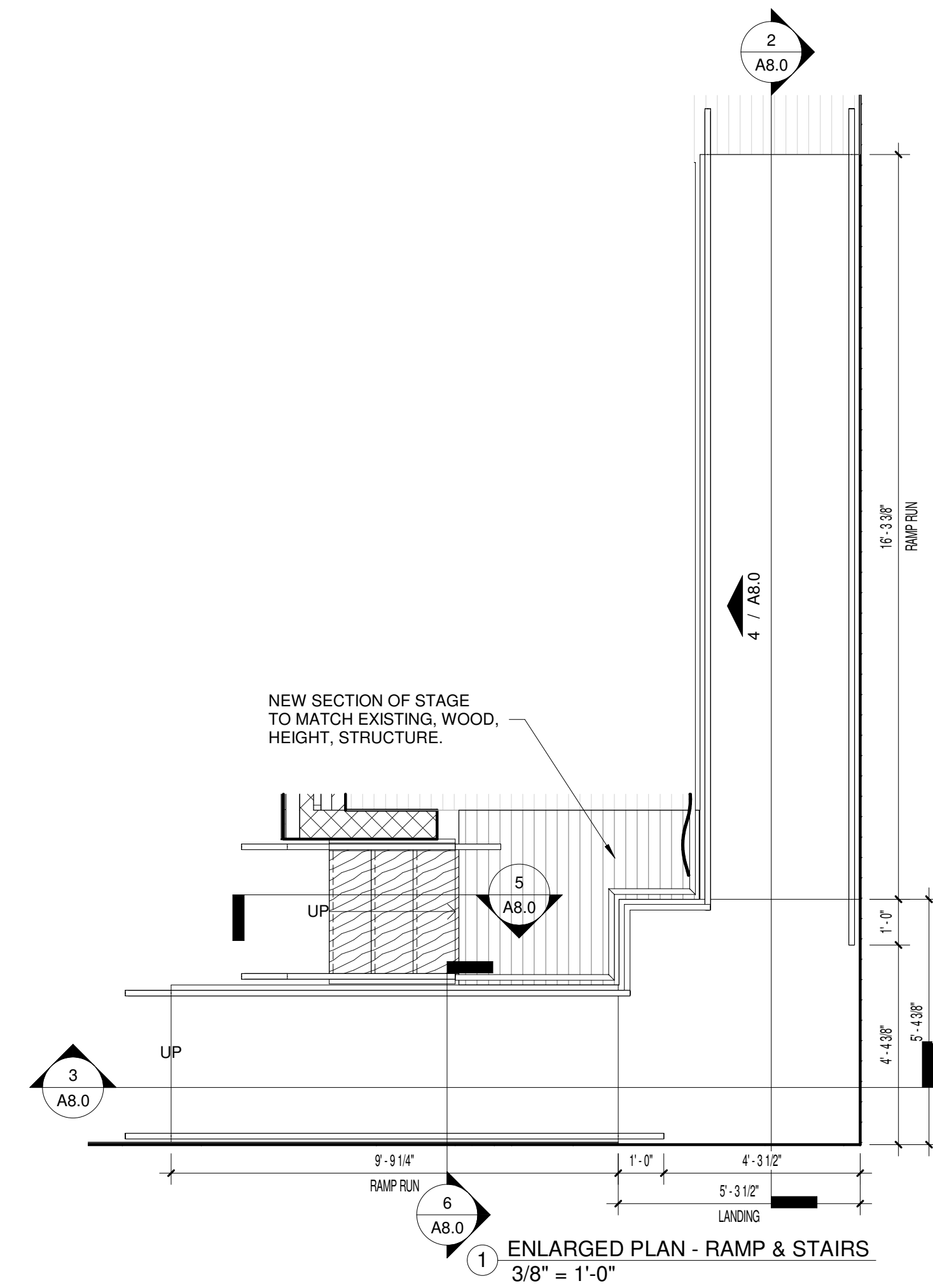
2 SECTION - RAMP
3/8" = 1'-0"



5 SECTION - STAIRS
3/8" = 1'-0"



4 ELEV - RAMP HANDRAILS
3/8" = 1'-0"



1 ENLARGED PLAN - RAMP & STAIRS
3/8" = 1'-0"



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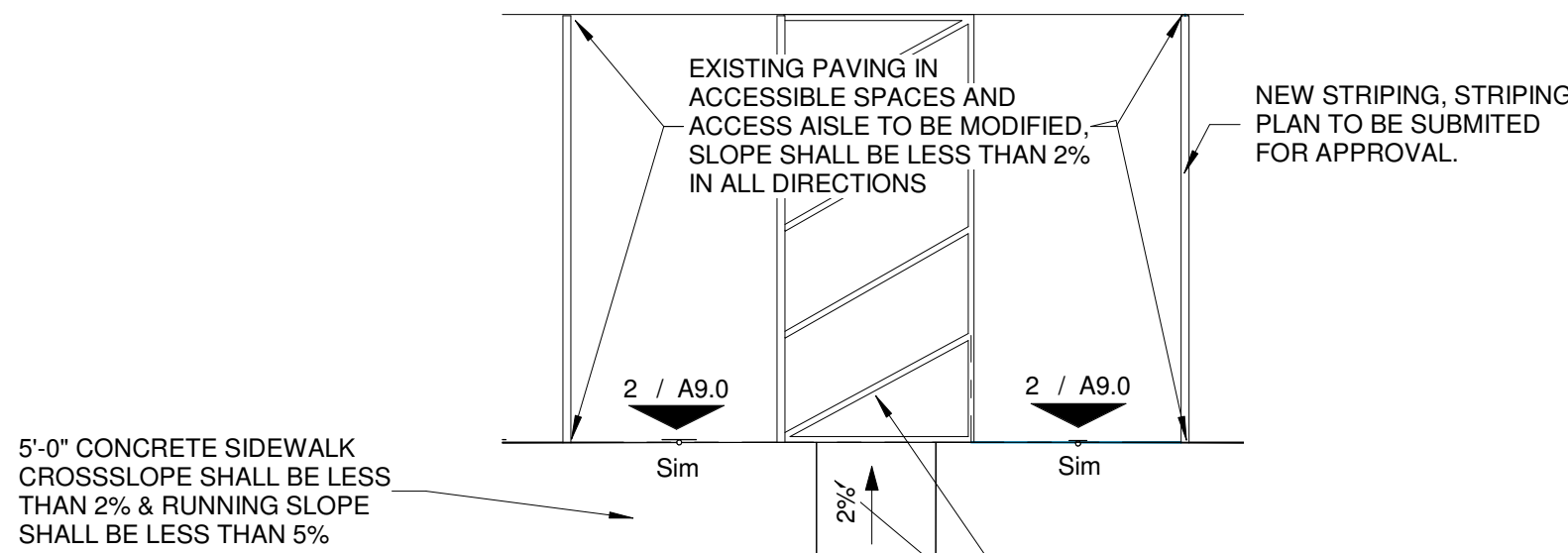
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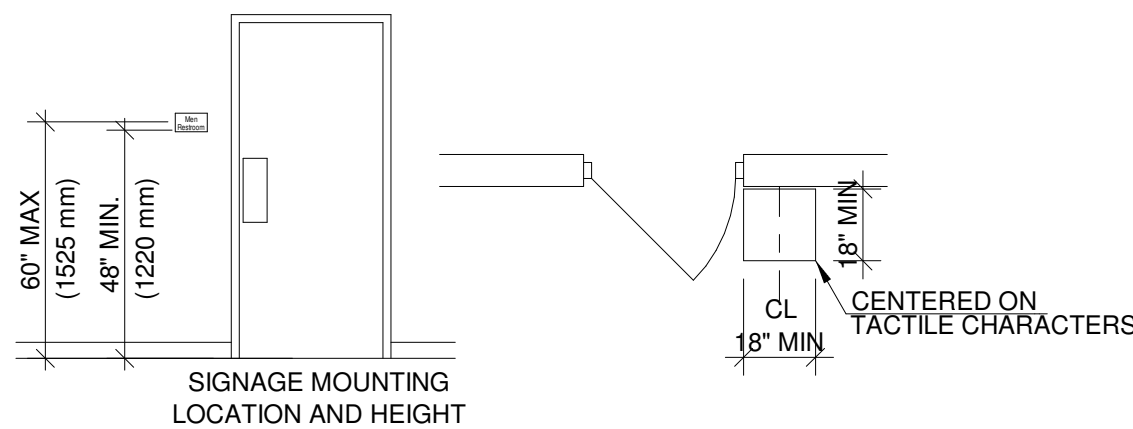
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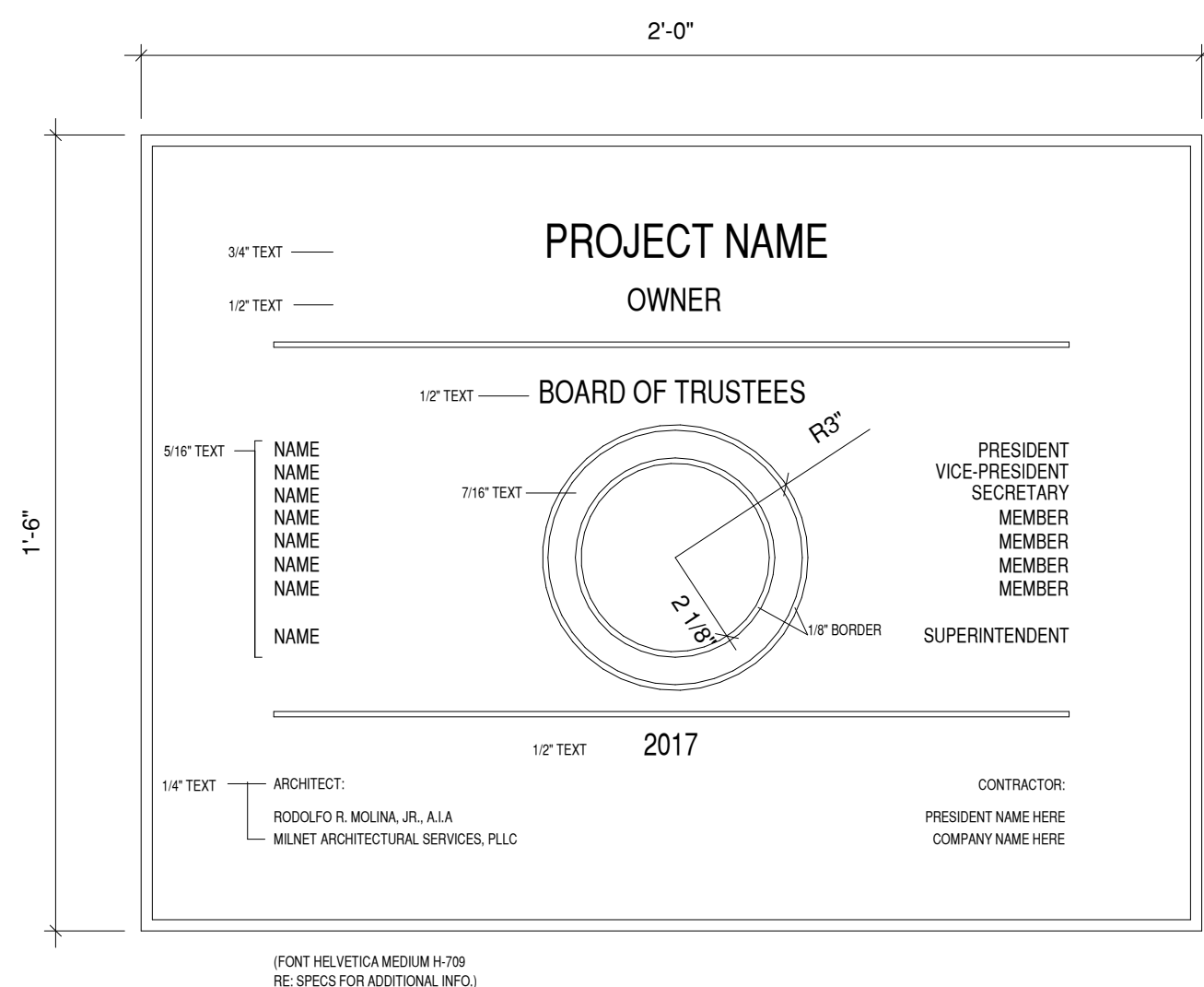


10 ACCESSIBLE
1/8" = 1'-0"

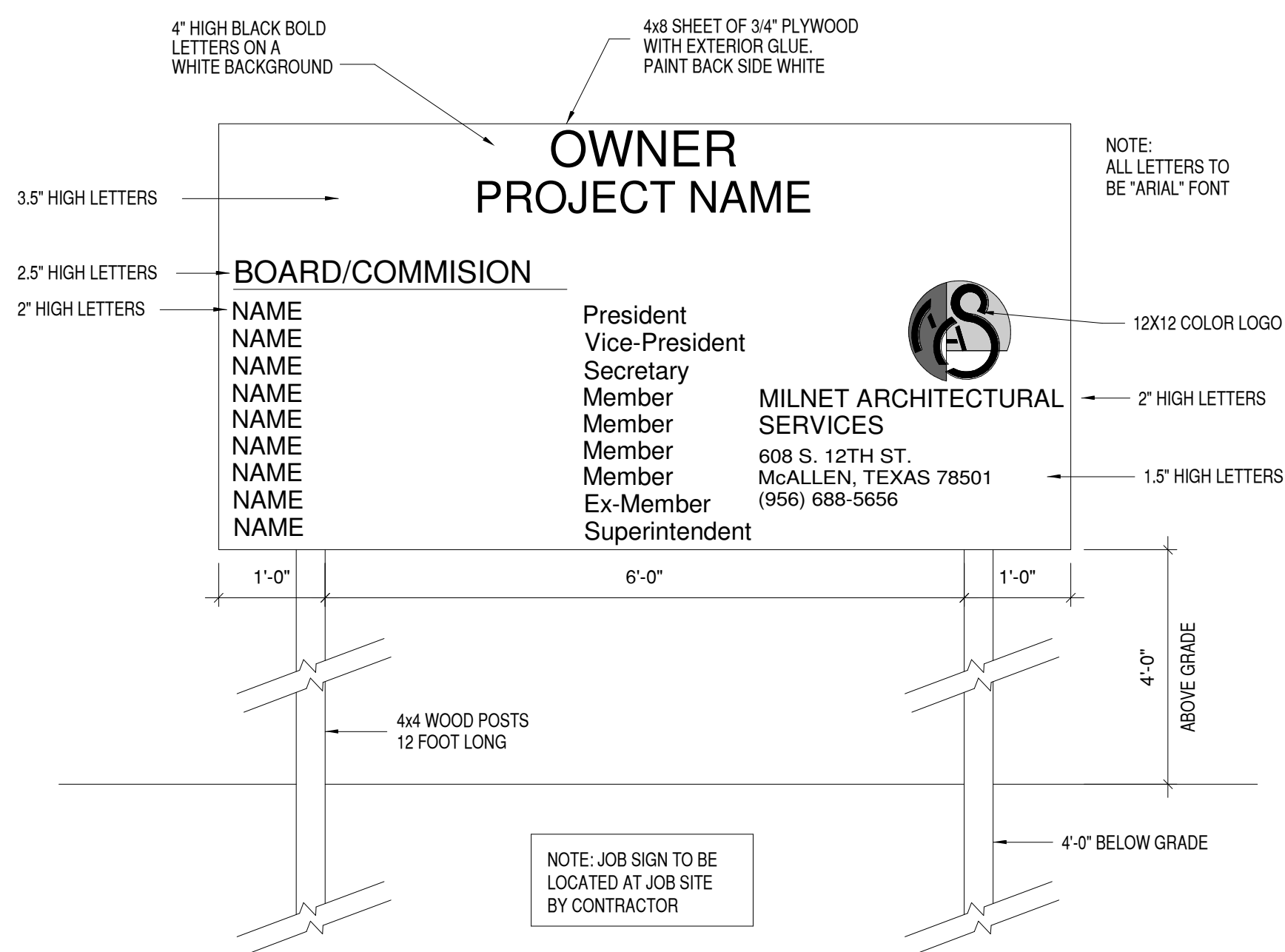
- COLOR AS CLOSE TO COUNTERTOP AS POSSIBLE BASED ON STANDARD COLORS.
- SIGNS THAT DESIGNATE PERMANENT ROOMS AND SPACES MUST COMPLY WITH REQUIREMENTS FOR CHARACTER PROPORTION, RAISED AND BRAILLED CHARACTERS AND PICTORIAL SYMBOLS SIGNS, FINISH AND CONTRAST, AND MOUNTING AND LOCATION HEIGHT.
- CHARACTER PROPORTION: CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".
- RAISED AND BRAILLED CHARACTERS AND PICTORIAL SYMBOL SIGNS (PICTORGRAMS): LETTERS AND NUMERALS SHALL BE RAISED 1/32 IN. UPPERCASE, SANS SERIF AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8 IN. (16mm) HIGH, BUT NO HIGHER THAN 2 IN. (50mm). PICTORGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTORGRAM. THE BORDER DIMENSION OF THE PICTORGRAM SHALL BE 6 IN. (152mm) MINIMUM IN HEIGHT.
- FINISH AND CONTRAST: CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
- MOUNTING LOCATION AND HEIGHT: WHERE PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ALONGSIDE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE INSTALLED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE INSTALLED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGN SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN. BY 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.



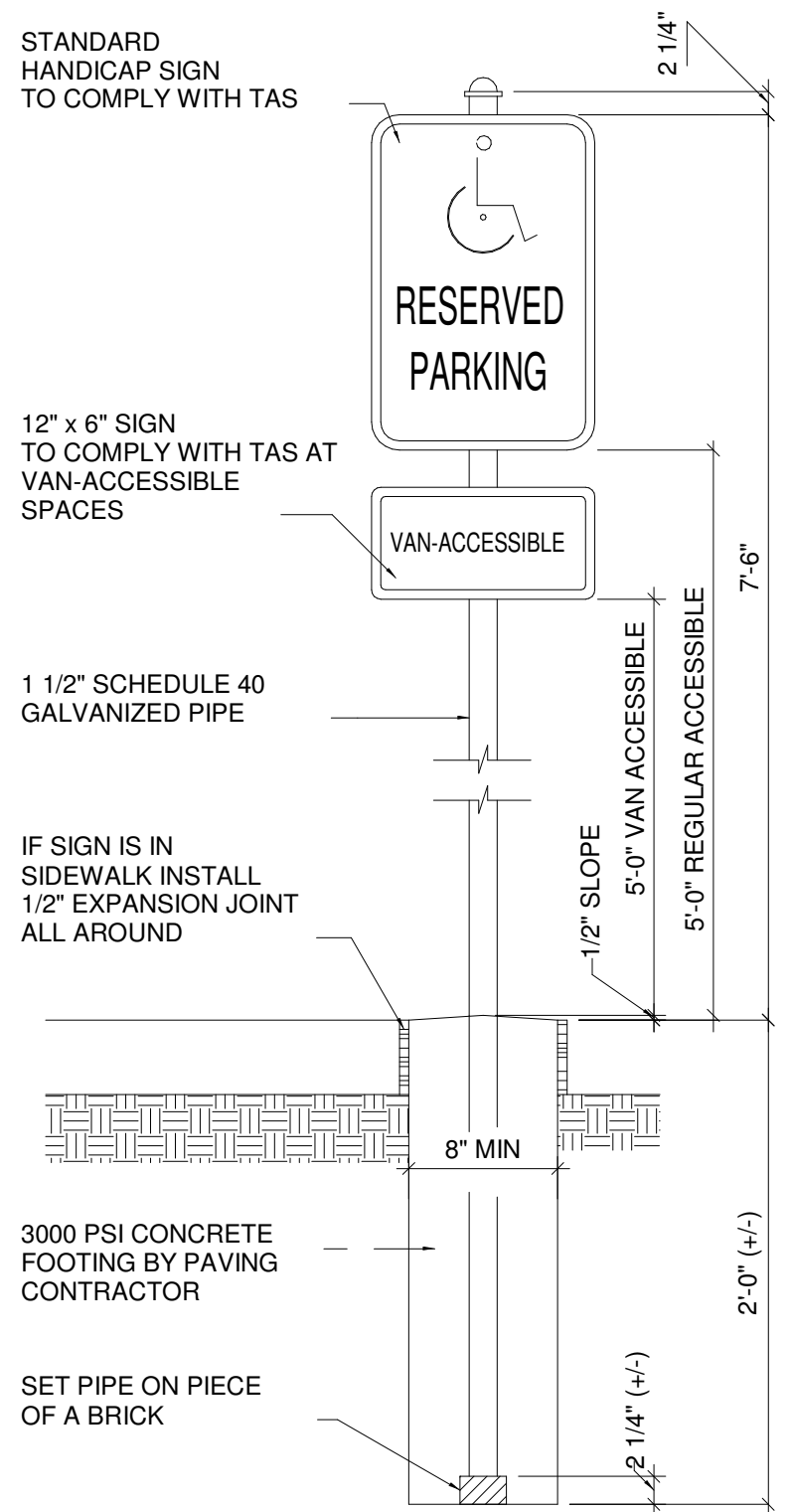
3 ADA - INTERIOR SIGNAGE SPECS
N.T.S.



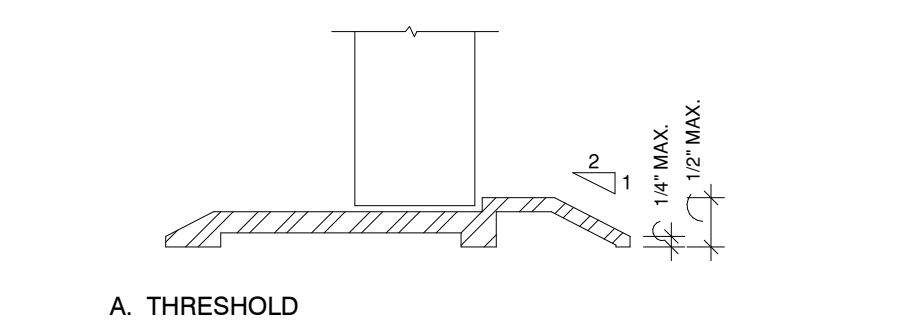
5 PLAQUE
N.T.S.



4 JOB SITE SIGN
N.T.S.



2 ADA - PARKING SIGNAGE
N.T.S.



GENERAL NOTES:

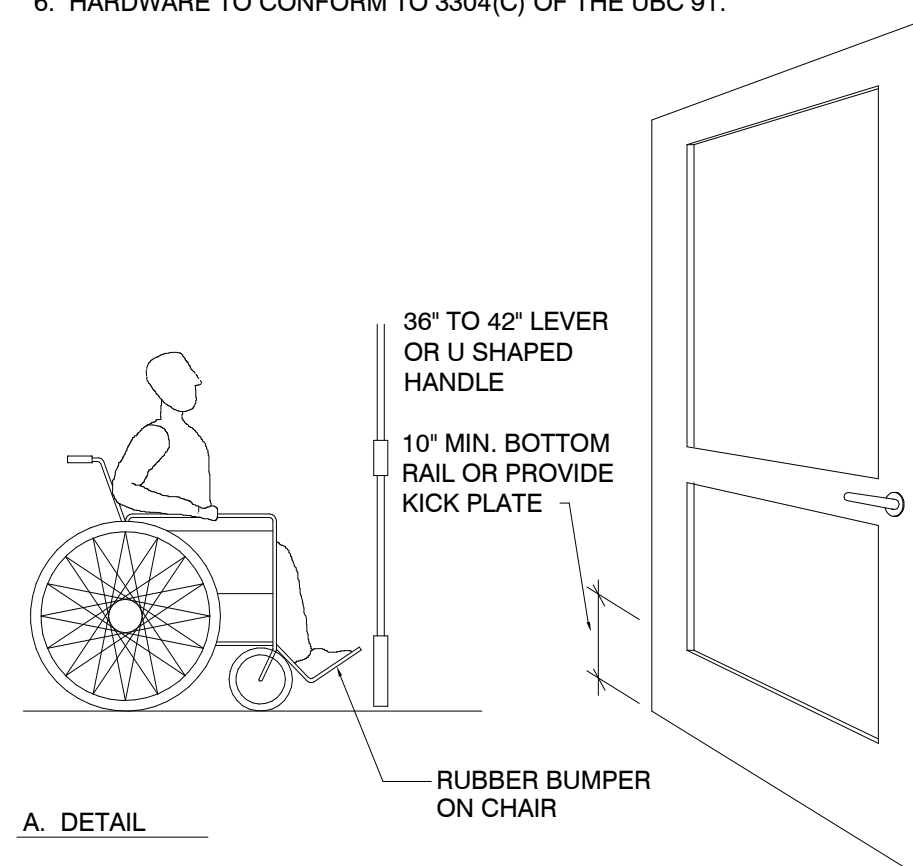
- FLOOR OR GROUND SURFACE. FLOOR OR GROUND SURFACE WITHIN REQUIRED MANEUVERING CLEARANCE SHALL BE STABLE FIRM, AND SLIP RESISTANT. CHANGES IN LEVEL ARE NOT PERMITTED.
- VISION LIGHTS, DOORS, GATES, AND SIDE LIGHTS ADJACENT TO DOOR OR GATES, SHALL HAVE THE BOTTOM OF AT LEAST ONE GLAZED PANEL LOCATED 43" MAX. ABOVE THE FINISH FLOOR

DOOR TYPE:

- MINIMUM 10" HIGH SMOOTH SURFACE AT DOOR BOTTOM, EITHER ATTACHED PANEL OR BOTTOM RAIL.

HARDWARE:

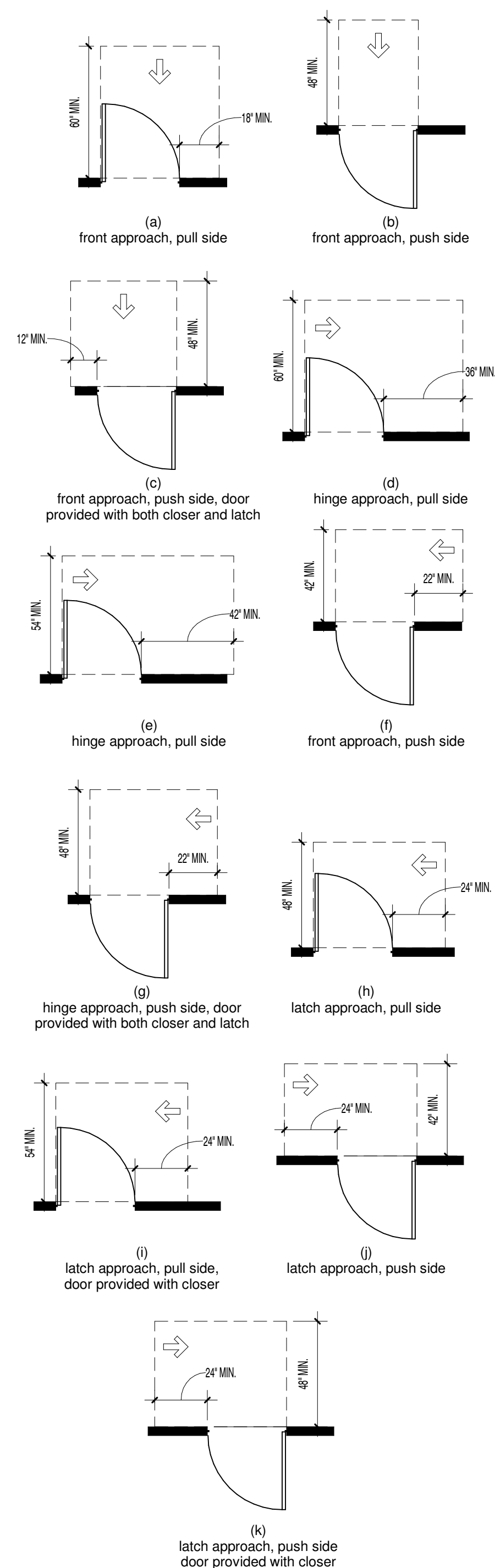
- OPERABLE FROM INSIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- OPENABLE BY SINGLE EFFORT LEVER-TYPE DEVICE (NOT REQUIRING GRASPING).
- MOUNTED 36" TO 42".
- MAXIMUM 8.5 POUNDS EFFORT TO OPERATE EXTERIOR DOOR, 5 POUNDS FOR INTERIOR.
- HARDWARE TO CONFORM TO 3304(C) OF THE UBC 91.



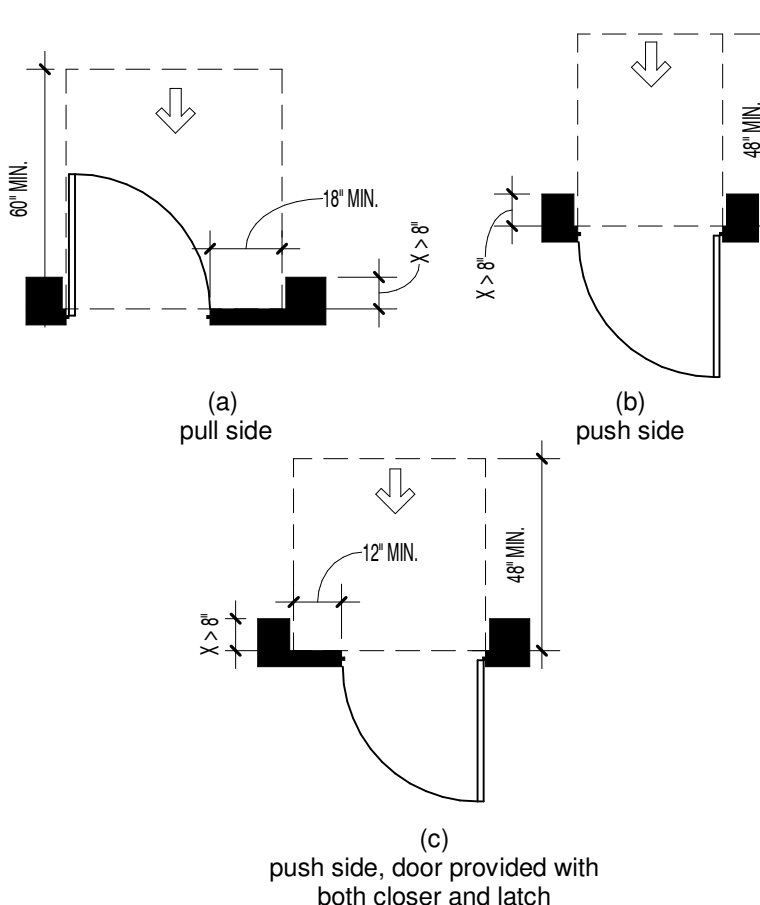
1 DOOR CRITERIA
N.T.S.

MANEUVERING CLEARANCE AT DOORWAYS WITHOUT DOORS,
SLIDING DOORS, GATES AND FOLDING DOORS

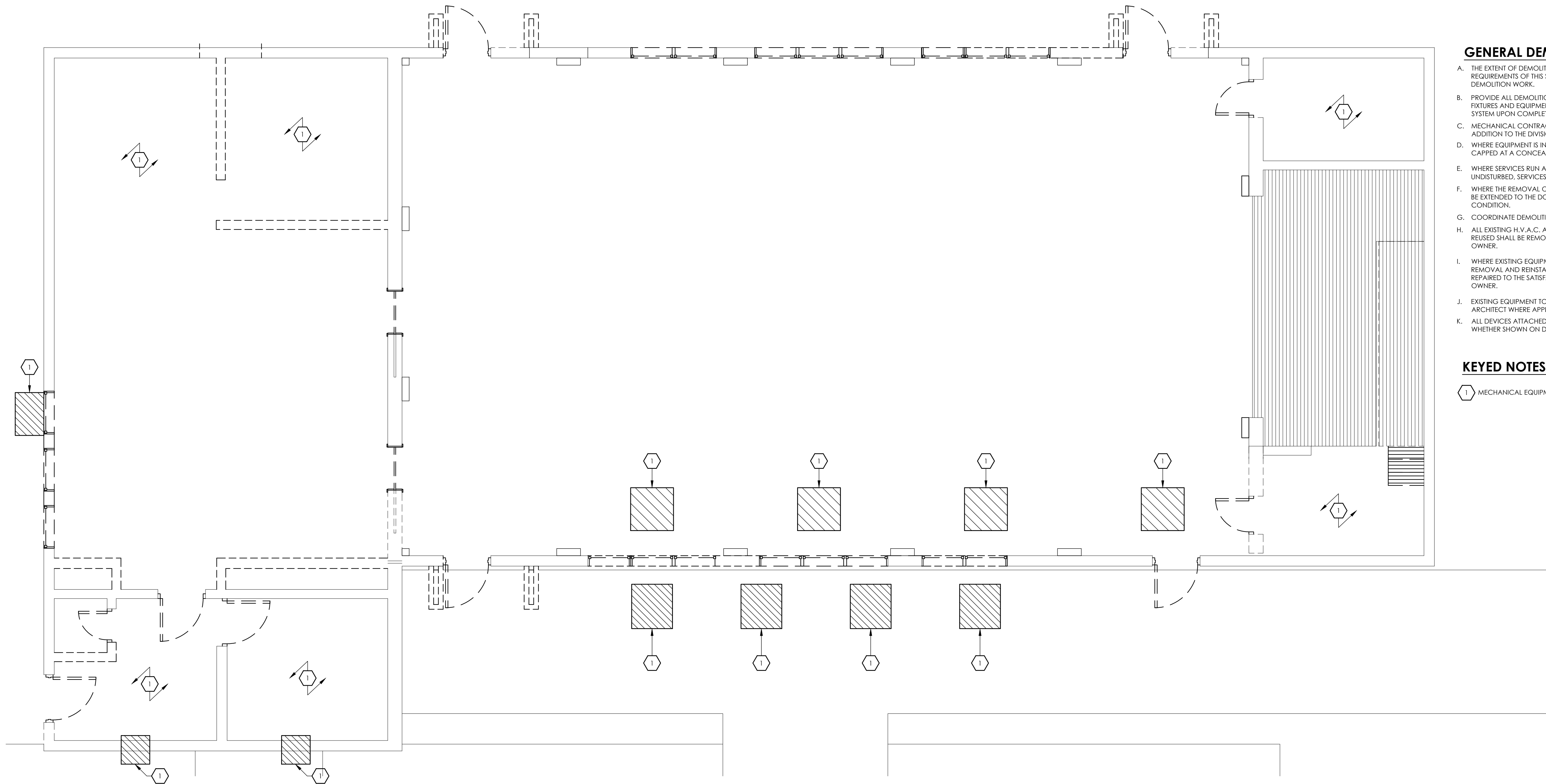
DOOR CRITERIA:



MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS AND GATES



MANEUVERING CLEARANCE AT RECESSED DOORS AND GATES



GENERAL DEMOLITION NOTES

- A. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- B. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF HVAC FIXTURES AND EQUIPMENTS AND ASSOCIATED SERVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- C. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. WHERE EQUIPMENT IS INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.
- E. WHERE SERVICES RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE TO REMAIN UNDISTURBED, SERVICES SHALL BE CAPPED AT CONCEALED LOCATION AND ABANDONED.
- F. WHERE THE REMOVAL OF EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO THE DOWNSTREAM EQUIPMENT SO THAT THE FIXTURES ARE LEFT IN OPERATING CONDITION.
- G. COORDINATE DEMOLITION OF DIVISION 15 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.
- H. ALL EXISTING H.V.A.C. AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- I. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- J. EXISTING EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- K. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

KEYED NOTES: MECHANICAL DEMOLITION

- 1 MECHANICAL EQUIPMENT TO BE RETURNED TO OWNER.

OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

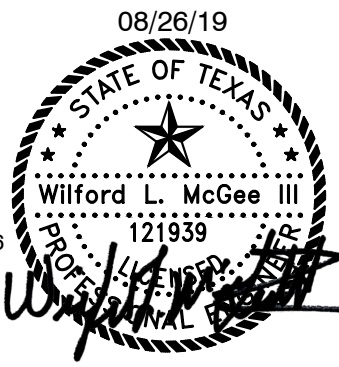
DATE
AUG 26, 2019

SHEET NUMBER

MD1.1

1 MECHANICAL DEMOLITION PLAN
1/4"=1'-0"

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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

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M1.1

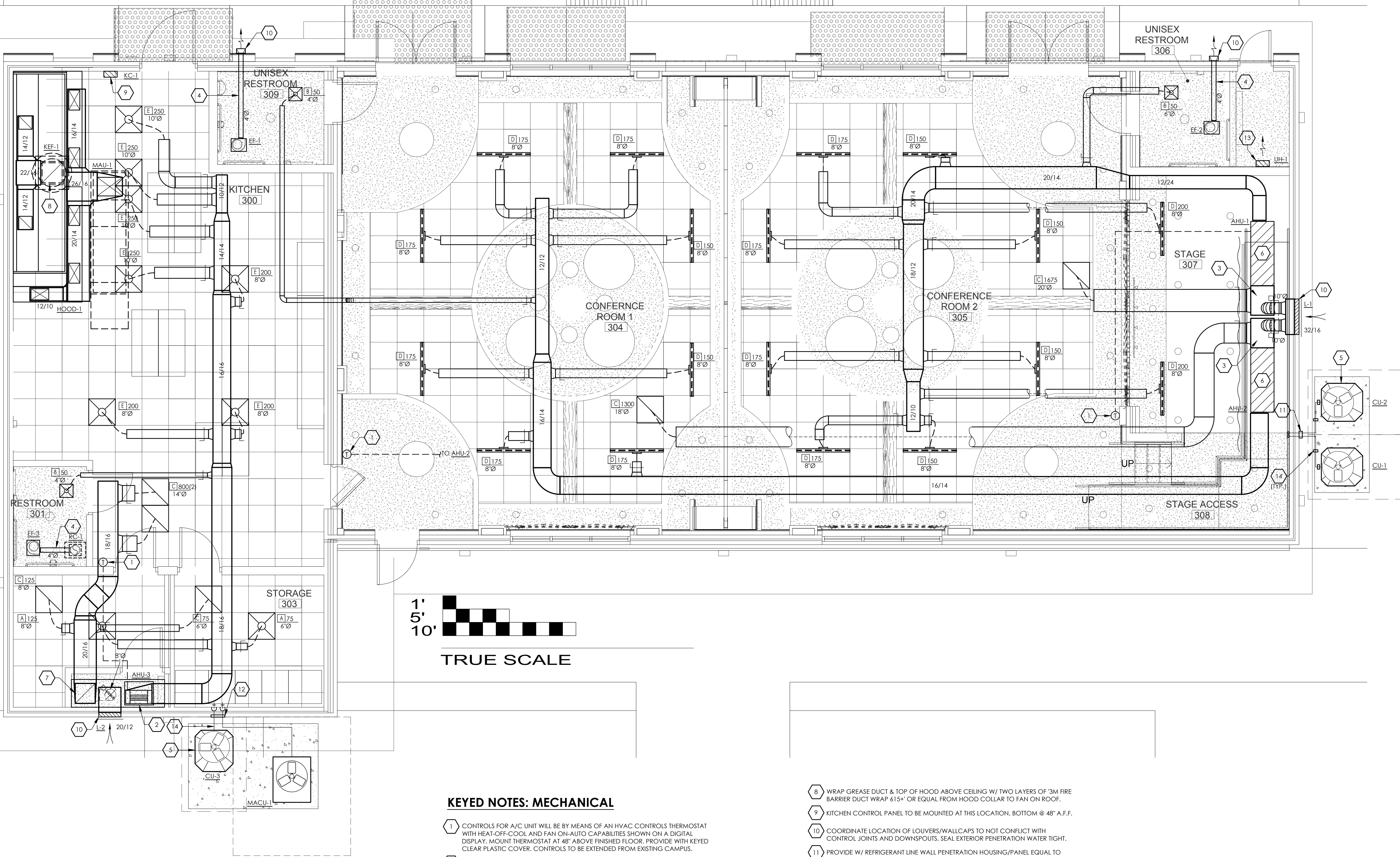
08/26/19



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OFFICE
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KEYED NOTES: MECHANICAL

- 1 CONTROLS FOR A/C UNIT WILL BE BY MEANS OF AN HVAC CONTROLS THERMOSTAT WITH HEAT-OFF-COOL AND FAN ON-AUTO CAPABILITIES SHOWN ON A DIGITAL DISPLAY. MOUNT THERMOSTAT AT 48" ABOVE FINISHED FLOOR. PROVIDE WITH KEYED CLEAR PLASTIC COVER. CONTROLS TO BE EXTENDED FROM EXISTING CAMPUS.
- 2 UNIT TO BE MOUNTED ON A 24" HIGH PLATFORM CONSTRUCTED OF 1-1/2" ANGLE IRON/1" SQUARE METAL TUBING. WRAP PLATFORM IN GALVANIZED SHEET METAL. LINE INTERIOR OF PLATFORM W/ 1" DUCT BOARD. W/ FOIL FACING AIRSTREAM. COAT INSIDE W/ MASTIC (TO FACILITATE CLEANING) & SEAL AIR TIGHT.
- 3 RETURN AIR DUCT TO BE SIZED ACCORDING TO RESPECTIVE AIR OPENING. INTERNALLY LINE RA PLENUM W/ 1" ACOUSTIC DUCT LINER.
- 4 ROUND EXHAUST DUCT OUT TO WALL CAP/ ROOF CAP.
- 5 PLACE CONDENSING UNIT ON 4" CONCRETE PAD. REFER TO DETAILS.
- 6 HANG AIR HANDLER FROM STRUCTURE AND PROVIDE W/ VIBRATION ISOLATION. PROVIDE TWO 4x4" TREATED WOOD TIMBERS INSIDE AN AUXILIARY DRAIN PAN ON WHICH TO MOUNT AIR HANDLING UNIT. REFER TO PLUMBING PAGES FOR CONDENSATE ROUTING. REFER TO IMC 307.2.3 FOR AUXILIARY DRAIN PAN SIZING (OR JURISDICTION HAVING AUTHORITY).
- 7 PROVIDE W/ MOTORIZED DAMPER W/ OPEN/CLOSE OPERATION. DAMPER TO BE ACTUATED TO MAX ONLY WHEN COMPRESSOR OR HEATER IS ENERGIZED & ACTUATED TO THE CLOSED POSITION @ ALL OTHER TIMES. PROVIDE W/ ADDITIONAL MANUAL BALANCING DAMPER TO BALANCE CFM AMOUNTS OF OUTSIDE AIR. MECHANICAL CONTRACTOR TO PROVIDE W/ ANY ELECTRICAL HARDWARE TO POWER DAMPER.

- 8 WRAP GREASE DUCT & TOP OF HOOD ABOVE CEILING W/ TWO LAYERS OF 3M FIRE BARRIER DUCT WRAP 615+ OR EQUAL FROM HOOD COLLAR TO FAN ON ROOF.
- 9 KITCHEN CONTROL PANEL TO BE MOUNTED AT THIS LOCATION, BOTTOM @ 48" A.F.F.
- 10 COORDINATE LOCATION OF LOUVERS/WALLCAPS TO NOT CONFLICT WITH CONTROL JOINTS AND DOWNSPOUTS. SEAL EXTERIOR PENETRATION WATER TIGHT.
- 11 PROVIDE W/ REFRIGERANT LINE WALL PENETRATION HOUSING/PANEL EQUAL TO "WALL VAULT" MADE BY "ROOF PENETRATION HOUSINGS, LLC". WALL PANEL TO BE SIZED TO ACCOMMODATE REFRIGERANT LINES & CONDUIT. COORDINATE W/ ELECTRICAL REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE SECURED WITH LOCK-TYPE TAMPER-RESISTANT CAPS OR SHALL BE OTHERWISE SCORED TO PREVENT UNAUTHORIZED ACCESS. PROVIDE ALUMINUM JACKETING ON ALL LINES EXTERIOR TO THE BUILDING.
- 12 PROVIDE W/ REFRIGERANT LINE WALL PENETRATION HOUSING/PANEL EQUAL TO "TGS SERIES PRO SYSTEM KIT" MADE BY "AIREX MANUFACTURING INC.". WALL PANEL TO BE SIZED TO ACCOMMODATE REFRIGERANT LINES. COORDINATE W/ ARCH FOR COLOR. SECURE WITH LOCK-TYPE TAMPER-RESISTANT FASTENERS TO PREVENT UNAUTHORIZED ACCESS. PROVIDE WITH UV/ WEATHER RESISTANT INSULATION PROTECTOR (E-FLEX GUARD).
- 13 MOUNT UNIT HEATER RECESSED IN WALL OR SURFACE MOUNTED ON WALL, BOTTOM OF UNIT HEATER TO BE AT MINIMUM OF 6'-0" A.F.F. PROVIDE W/ ACCESSORIES AS REQUIRED FOR WALL MOUNTING APPLICATION.
- 14 PROVIDE ALUMINUM PIPING SUPPORTS AT EVERY 4' FEET. PROVIDE ALUMINUM JACKETING ON ALL LINES EXTERIOR TO THE BUILDING.
- 15 CONDENSING UNIT FOR KITCHEN MAKE UP AIR UNIT (MAU-1).

1 MECHANICAL PLAN
1/4"=1'-0"

H.V.A.C. SYSTEM

THE WORK INCLUDES PROVIDING THE HVAC SYSTEMS, INCLUDING DUCTWORK, DIFFUSERS AND GRILLES, INSULATION, CONTROLS, AND ALL OTHER EQUIPMENT NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM. HVAC SYSTEM SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:

- HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) UNITS.
- SUPPLY AND RETURN DUCTWORK SYSTEMS WITH GRILLES, DIFFUSERS, FILTERS, AND DAMPERS.
- TEMPERATURE CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING AND CONDUIT.
- DUCT, PIPING, AND EQUIPMENT INSULATION, WHERE INDICATED HEREIN.
- CONTROLS AND WIRING FOR CONNECTION TO LANDLORD'S FIRE-SMOKE ALARM SYSTEM (WHERE APPLICABLE).

THE CONTRACTOR SHALL COORDINATE ALL NEW DUCTWORK INCLUDING DUCTWORK INSULATION AND REINFORCING WITH EXISTING DUCTWORK AND DUCTWORK ANGLE BRACING SUCH THAT THE NEW DUCTWORK WILL FIT WITHIN THE SPACE LIMITATIONS OF THE PROJECT.

CONDENSATE PIPING: CONDENSATE PIPING SHALL BE A MINIMUM OF 3/4" COPPER TYPE "L" PIPE. ALL CONDENSATE DRAINS SHALL BE INSULATED WITH 1/2" THICK CLOSED CELL INSULATION SIMILAR TO ARMAFLEX 2000.

THE DESIGN, SELECTION, SPACING AND APPLICATION OF HORIZONTAL PIPE HANGERS, SUPPORTS, RESTRAINTS, ANCHORS AND GUIDES SHALL BE IN ACCORDANCE WITH THE STANDARD CODE FOR PRESSURE PIPING ANSI B31.1 AND THE LATEST EDITION OF THE MANUFACTURERS' STANDARDIZATION SOCIETY STANDARDS MSS SP-69, "PIPE HANGERS AND SUPPORTS-SELECTION AND APPLICATION".

PROVIDE PIPE COVERING PROTECTION SHIELDS AND SADDLES FOR ALL INSULATED PIPING AT THE LOCATIONS OF ALL SUPPORTS. THE PROTECTION SHIELD LENGTH AND GAUGE THICKNESS FOR USE AT EACH CLEVIS HANGER SHALL BE AS SPECIFIED FOR TYPE 40 PROTECTION SHIELDS IN THE CURRENT EDITION OF MSS SP-69. PROTECTION SHIELDS SHALL BE GALVANIZED AND SHALL BE ARRANGED TO COVER ONE-HALF OF THE CIRCUMFERENCE OF THE INSULATION AND SHALL BE MOUNTED ON THE OUTSIDE OF THE INSULATION WITH INSULATION BLOCKING BETWEEN THE PIPE AND SADDLE TO PREVENT CRUSHING OF THE INSULATION. INSULATION BLOCKING SHALL BE UPJOHN 2 POUND HIGH DENSITY MOLDED URETHANE OR SEGMENTED MACHINERY CORK DIPPED IN HOT ASPHALT VAPOR SEAL OF NOT LESS THAN THE SAME LENGTH AND CIRCUMFERENCE AS THE PIPE PROTECTION SHIELD.

ALL HANGERS, HARDWARE, RODS, CLAMPS, CHANNELS, BASE PLATES, ANGLES, BOLTS, NUTS AND OTHER FACTORY-BUILT OR SHOP FABRICATED PIPE SUPPORT DEVICES SHALL BE GALVANIZED OR CADMIUM PLATED UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL SHOP FABRICATED AND WELDED STEEL SUPPORTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

ALL CONCRETE INSERTS FOR HANGER RODS SHALL BE NATIONAL PIPE HANGERS CORPORATION FIGURE 606 WITH FIGURE 607, OR GRINNELL FIGURE 282, FIGURE 152, OR APPROVED EQUAL. METAL DECK CONCRETE INSERT SHALL BE F & S MANUFACTURING CORPORATION FIGURE 282. GALVANIZED FABRICATED STEEL METAL DECK CEILING BOLT, PHILLIPS RED HEAD, OR APPROVED EQUAL. HANGER RODS, INSERTS, ETC., SHALL BE SIZED AND INSTALLED AS RECOMMENDED BY THE HANGER MANUFACTURER FOR THE SERVICE INTENDED.

FIELD VERIFY THE EXACT SIZES AND LOCATIONS OF ALL EXISTING DUCTWORK AND PIPING PRIOR TO DEMOLITION OF ANY EXISTING WORK. THE DEMOLITION WORK SHALL BE COORDINATED WITH THE NEW WORK TO ASSURE PROPER LIMITS OF DEMOLITION.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION.

DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS, AS REQUIRED. PROVIDE ALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. THE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES OR ORDINANCES AND SUBJECT TO INSPECTION.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE LANDLORD, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

EXTRA STOCK: PROVIDE TWO SETS OF REPLACEMENT FILTERS PER EACH INSTALLED FOR ALL THE ROOFTOP UNITS, AND OTHER EQUIPMENT AND DEVICES, AND PROVIDE AN ITEMIZED LIST OF THE NUMBER, TYPE REQUIRED, AND WHERE USED. OBTAIN RECEIPT FROM OWNER THAT THESE ITEMS HAVE BEEN DELIVERED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWING ARE SHEET METAL DIMENSIONS ON UNLINED DUCTS (INTERIOR DIMENSIONS).

SHEET METAL DUCTWORK: SHEET METAL DUCTWORK SHALL BE FABRICATED AND INSTALLED TO MEET ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS. SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, ASTM A-525. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 30°.

DUCT SHALL BE EXTERNALLY WRAPPED W/ 2" FIBERGLASS BLANKET INSULATION. RIGID ROUND GALVANIZED DUCT SHALL BE SPIRAL OR SNAP LOCK GALVANIZED SHEETMETAL COMPLYING WITH SMACNA.

FLEXIBLE DUCT CONNECTOR: WHERE INDICATED PROVIDE U.L. LABELED 300z. NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS.

GRILLES AND DIFFUSERS: PROVIDE GRILLES, DIFFUSERS, AND DAMPERS IN SIZES, CAPACITIES, MATERIALS, AND PATTERN INDICATED ON THE DRAWINGS.

ACCESS PANELS: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.

PROVIDE WHERE APPLICABLE, DUCT MOUNTED SUPPLY AND/OR RETURN AIR PHOTOELECTRIC TYPE UL LISTED SMOKE DETECTORS. DETECTORS SHALL BE LISTED FOR THE AIR VELOCITIES ENCOUNTERED. PROVIDE INTERLOCK WIRING AND RELAYS FOR UNIT SHUT DOWN. ON ACTIVATION OF ANY DETECTOR, ALL HVAC UNIT FANS SHALL STOP.

TEST AND ADJUST EACH PIECE OF EQUIPMENT AND EACH SYSTEM AS REQUIRED TO ASSURE PROPER BALANCE AND OPERATION. TEST AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT NEBB OR AABC REGISTERED CONTRACTOR. ELIMINATE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF ALL CONTROLS, MAINTENANCE OF TEMPERATURE, AND OPERATION. BALANCE MECHANICAL SYSTEM, AND SUBMIT COMPLETED TEST.

EXPOSED ROUND (SPIRAL) DUCT TO BE INTERNALLY LINED. SUPPLY DUCTWORK SHALL BE LINED W/1" INSULATION. RETURN/EXHAUST/VENTILATION DUCT TO BE LINED W/1/2" INSULATION. CONCEALED ROUND DUCT TO BE EXTERNALLY INSULATED, USING R-6 INSULATION MIN FOR CONDITIONED SPACES (WHERE PLENUM RETURN IS USED) OR R-8 INSULATION MIN FOR UNCONDITIONED SPACES.

GENERAL NOTES - MECHANICAL:

(1) THE MECHANICAL CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE WORK IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES UNDER THIS SECTION OF THE CONTRACT. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE LOCAL CODES, HE/SHE SHALL INFORM THE ARCHITECT PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET APPLICABLE LOCAL CODES, AND RE-WORK SHALL BE AT CONTRACTOR'S EXPENSE.

(2) CONTRACTOR SHALL HANG AND INSTALL ALL DUCTWORK FLUSH WITH THE BUILDING STRUCTURE TO ACCOMMODATE NEW CEILINGS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH ARCHITECTURAL AND ELECTRICAL DESIGN. ALL DUCTWORK SHALL BE MODIFIED AS NECESSARY AND REQUIRED TO FIT AROUND BUILDING STRUCTURES, ARCHITECTURAL BUILD-OUT AND ELECTRICAL CABLE TRAY INSTALLATIONS. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.

(3) CONNECT EACH DIFFUSER TO THE MAIN DISTRIBUTION DUCTS WITH A FLEX-DUCT SECTION: CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAIL. EACH FLEX-DUCT CONNECTION SHALL INCLUDE A BUTTERFLY DAMPER TO BE INSTALLED AT THE TRUNK DUCT.

(4) CONTRACTOR SHALL PROVIDE ALL DUCTWORK REQUIRED TO COMPLETE THE HVAC SYSTEM, TIE IN BRANCH DUCTS TO MAIN DUCTS WITH SHEET METAL FLANGES. FLANGE CONNECTION SHALL BE FASTENED WITH CRIMPED SHEET METAL STRIPS AND SEALED WITH SILICONE CAULK.

(5) CONTRACTOR SHALL SUPPLY AND INSTALL FIRE DAMPERS AND ACCESS DOORS IN THE HORIZONTAL DUCTS WHERE THEY PENETRATE FIRE WALLS & BARRIERS.

(6) ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE CORE DRILLED OR SAWED WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS. CONTRACTOR SHALL REINFORCE ALL OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 8000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES

(7) ON ANY WORK SHOWN ON MECHANICAL DRAWINGS REQUIRING DEMOLITION OF EXISTING OR NEW BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH ARCHITECT-APPROVED PATCHING MATERIALS. REPAIRS SHALL BE COMPLETED ACCORDING TO ARCHITECTURAL SPECIFICATIONS. ALL REFINISHING SHALL BE APPROVED BY THE ARCHITECT.

(8) CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF THE AIR DISTRIBUTION SYSTEM SHOWN. DUCTWORK, DUCT ACCESSORIES AND CONTROLS SHOWN AND REQUIRED SHALL BE SUPPLIED AND INSTALLED. ALL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CODES, INCLUDING NFPA 90A AND 90B, (NFPA 90A: STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS) (NFPA 90B: STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR-CONDITIONING SYSTEMS)

(9) CONTRACTOR SHALL BALANCE ALL AIR DISTRIBUTION SYSTEMS TO ACHIEVE THE AIR VOLUME REQUIREMENTS INDICATED. BALANCING SHALL INCLUDE ADJUSTMENT OF ALL MANUAL VOLUME DAMPERS, SHUTTER DAMPERS, ZONE DAMPERS (IF REQUIRED), BUTTERFLY DAMPERS AND INDIVIDUAL DIFFUSER VOLUME DAMPERS (FINAL BALANCING ONLY). CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A COMPLETE BALANCING REPORT WHICH INCLUDES, VOLUME, ROOM REFERENCE AND ZONE VOLUME TOTALS.

(10) MOUNT ALL THERMOSTATS (SENSORS) 48" ABOVE THE FINISHED FLOOR LEVEL. THERMOSTATS SHOWN SHALL BE IN CONTROL OF THE ZONE SYSTEM WHICH IS SUPPLYING AIR TO THE AREA WHERE THE THERMOSTAT IS LOCATED. CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONTROL VOLTAGE WIRING AND CONDUIT FOR THERMOSTAT (DDC CONTROL) INSTALLATION.

(11) CONTRACTOR SHALL INSTALL NEW REFRIGERANT PIPING FLUSH WITH THE BUILDING STRUCTURE AND MECHANICAL ROOM BOUNDARIES AS SHOWN. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH DUCTS AND ELECTRICAL CONDUIT. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.

(12) ALL PIPING SHALL BE INSULATED AND JACKETED. REFER TO THE SPECIFICATIONS. THE CONDENSING AND ROOF TOP CONDENSER COILS ARE TO BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

(13) PROVIDE SMOKE DETECTOR AND SHUTDOWN CONTROLS ON AIR HANDLERS AND SUPPLY FANS. SMOKE DETECTORS SHALL BE PROVIDED BY ELECTRICAL AND INSTALLED BY MECHANICAL. COORDINATE TO PROVIDE A COMPLETE SYSTEM. PROVIDE BOTH SUPPLY AND RETURN SIDE DEVICES.

(14) PROVIDE SEVEN DAY PROGRAMMABLE THERMOSTAT, 24 HOUR SINGLE/MULTI STAGE COMMERCIAL THERMOSTAT, DUAL SET POINTS, OCCUPIED AND UNOCCUPIED PERIODS, UNIT OPTIMIZATION, AUTO HEATING/COOLING AND AUTO CHANGE OVER. SUB-BASE BACK-UP BATTERY AND TEMPORARY OVER-RIDE. 24 VAC CONTROL VOLTAGE. PROVIDE PLASTIC SEE THRU PROTECTIVE COVER WITH KEY LOCK.

- (15) **FILTER INSTALLATION AND REPLACEMENT**
- A. INSTALL CONSTRUCTION RETURN FILTER AT EACH RETURN GRILLE BEFORE OPERATING PERMANENT AIR HANDLERS DURING CONSTRUCTION.
- B. REPLACE FILTERS AFTER COMPLETING CONSTRUCTION AND BEFORE CONDUCTING BUILDING FLUSH-OUT.
1. REPLACE CONSTRUCTION RETURN FILTERS WITH FLUSH-OUT RETURN FILTERS.
2. REPLACE SUPPLY FILTERS.

MECHANICAL SYMBOL LEGEND		MECHANICAL ABBREVIATIONS			
		A/C	AIR CONDITIONED	MAX	MAXIMUM
		AD	ACCESS DOOR	MBD	MANUAL BALANCING DAMPER
		AFF	ABOVE FINISHED FLOOR	MD	MOTORIZED DAMPER
		AHU	AIR HANDLING UNIT	MECH	MECHANICAL
		APPROX	APPROXIMATE	MIN	MINIMUM
		ARCH	ARCHITECTURAL	MS	MOTOR STARTER
		BDD	BACK DRAFT DAMPER	NA	NOT APPLICABLE
		BHP	BRAKE HORSEPOWER	NC	NORMALLY CLOSED
		BTU	BRITISH THERMAL UNIT	NIC	NOT IN CONTRACT
		CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
		CH	CHILLER	NTS	NOT TO SCALE
		CHP	CHILLED WATER PUMP	OA	OUTSIDE AIR
		CLG	CEILING	OAH	OUTSIDE AIR INTAKE HOOD
		CWP	CONDENSER WATER PUMP	OBD	OPPOSED BLADE DAMPER
		CO	CLEANOUT	OC	ON CENTER
		CT	COOLING TOWER		
		CU	CONDENSING UNIT	P	PUMP
		CW	COLD WATER	PBD	PARALLEL BLADE DAMPER
		CL	CENTER LINE	PP	PRIMARY CHILLED WATER PUMP
		DB	DRY BULB	PRESS	PRESSURE
		DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE
		DN	DOWN	PSIG	POUNDS PER SQUARE INCH (GAUGE)
		DWG	DRAWING		
		DX	DIRECT EXPANSION	R	RETURN (AIR DEVICE)
		EAT	ENTERING AIR TEMPERATURE	RA	RETURN AIR
		EDH	ELECTRIC DUCT HEATER	RE: 4M7.01	REFER TO DETAIL 4, SHEET M7.01
		EF	EXHAUST FAN	RET	RETURN
		ELEC	ELECTRICAL	RH	RELATIVE HUMIDITY
		ELEV	ELEVATION	RHD	RELIEF HOOD
		F	DEGREES FAHRENHEIT	RPM	REVOLUTIONS PER MINUTE
		FC	FAN COIL	RTU	ROOF TOP UNIT
		FD	FIRE DAMPER W/ DUCT ACCESS DOOR		
		FLEX	FLEXIBLE	S	SUPPLY (AIR DEVICE)
		FLG	FLANGE	SA	SUPPLY AIR
		FLR	FLOOR	SCH	SCHEDULE
		FPM	FEET PER MINUTE	SCHP	SECONDARY CHILLED WATER PUMP
		FT	FEET, FOOT	SD	SMOKE DAMPER
		FS	FLOW SWITCH	SEC	SECOND
		GAL	GALLON	SF	SUPPLY FAN
		GALV	GALVANIZED	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
		GPM	GALLONS PER MINUTE	SP	STATIC PRESSURE
		HB	HOSE BIBB	SPEC	SPECIFICATION
		HP	HORSEPOWER	SF	SQUARE FOOT
		HR	HEAT PUMP (WATER SOURCE)	STD	STANDARD
		HR	HOSE BIBB	TEMP	TEMPERATURE
		HVAC	HEATING/VENTILATING/ AIR CONDITIONING	TSTAT	THERMOSTAT
		HWP	HOT WATER PUMP	TYP	TYPICAL
		HZ	HERTZ	UF	UNDER FLOOR
		ID	INSIDE DIAMETER	UH	UNIT HEATER
		IE	INVERT ELEVATION (FLOW LINE)	UL	UNDERWRITERS LABORATORIES
		IN	INCHES	VEL	VELOCITY
		INSUL	INSULATION	VENT	VENTILATE
		IN WG	INCHES OF WATER	VF	VENTILATION FAN
		KW	KILOWATT(S)	VOL	VOLUME
		LAT	LEAVING AIR TEMPERATURE	VOLT	VOLTAGE
		LB	POUND	W	WIDE, WIDTH
		L	LOUVER	W/	WITH
				WB	WET BULB
				W/O	WITHOUT

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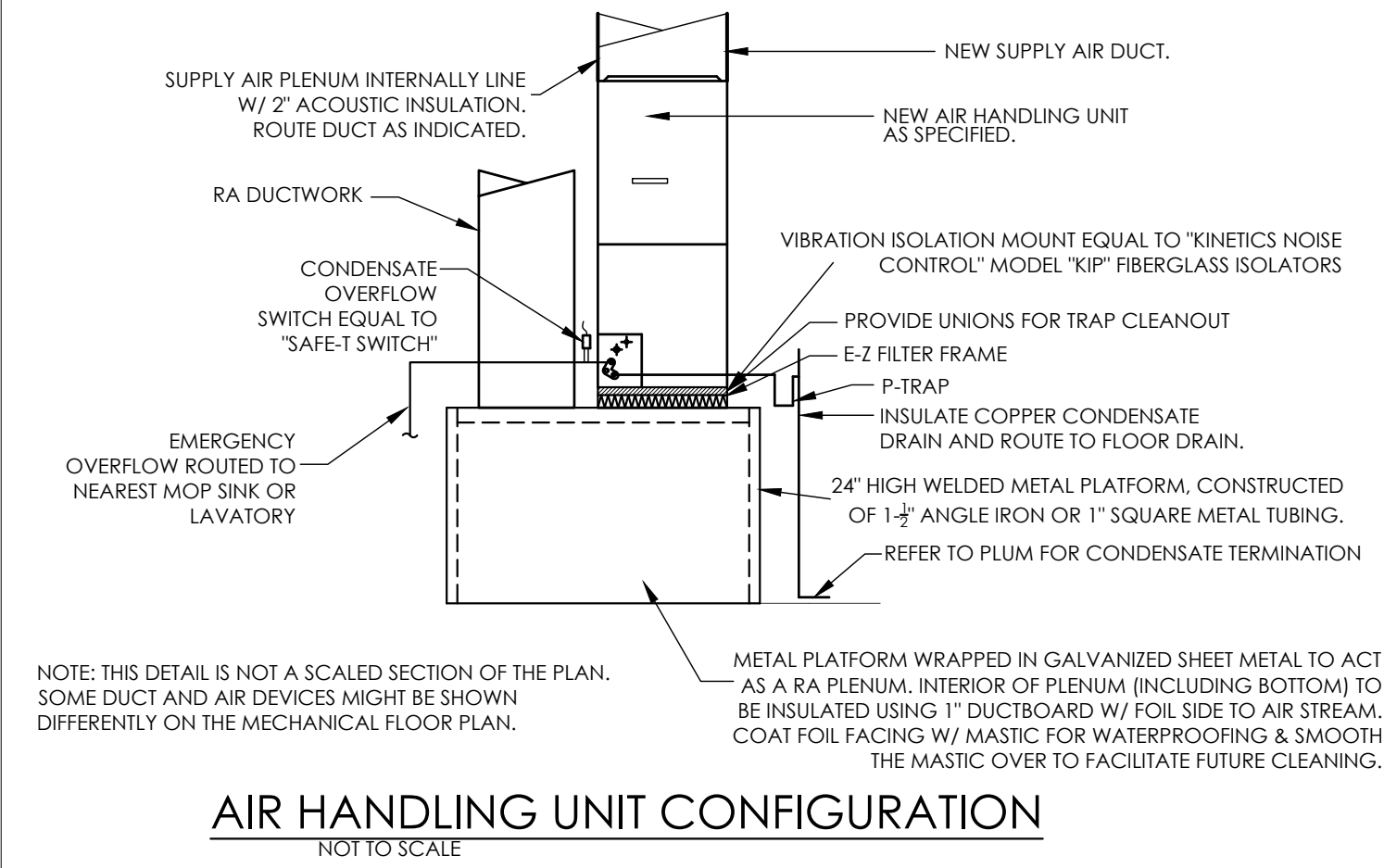
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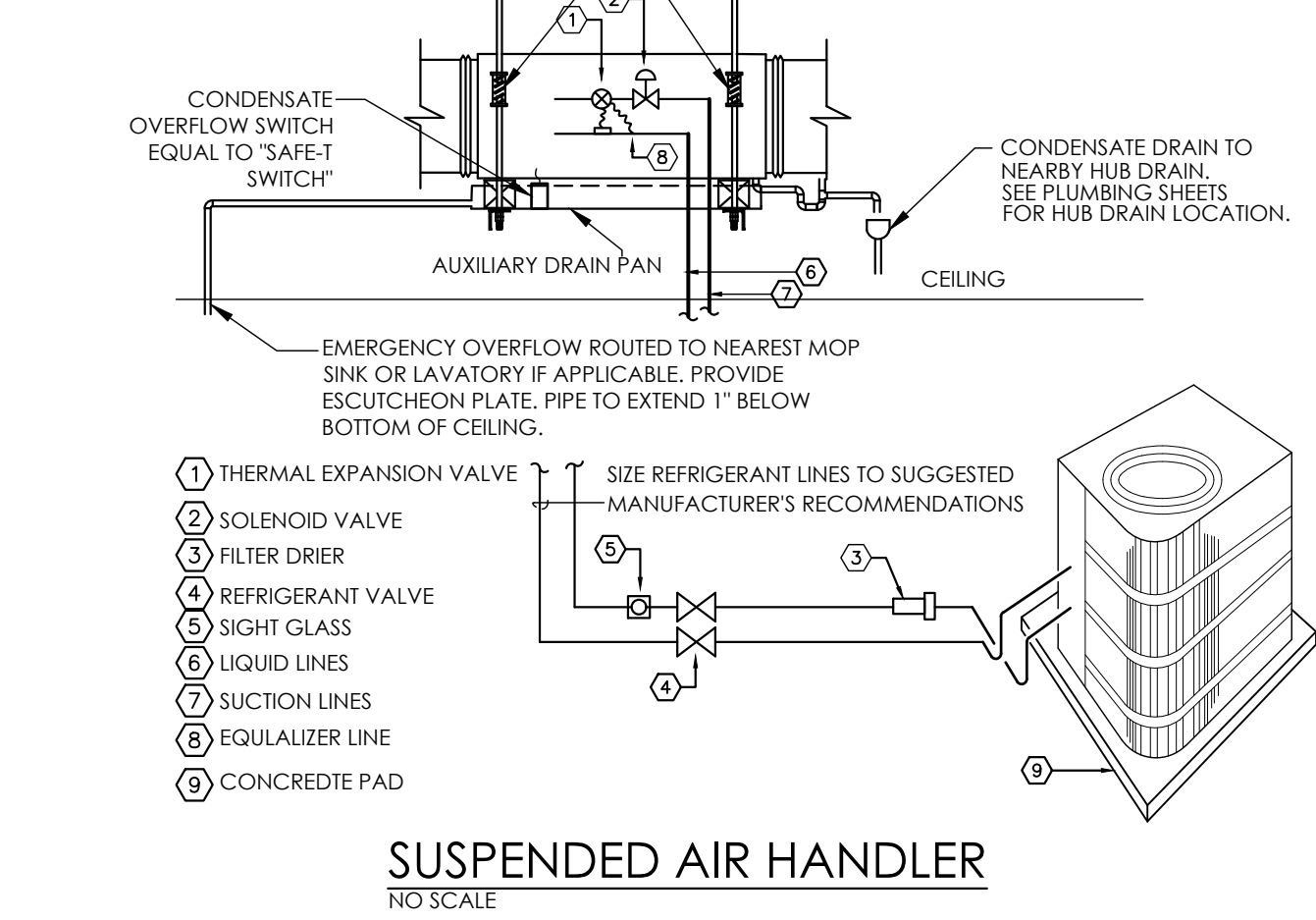
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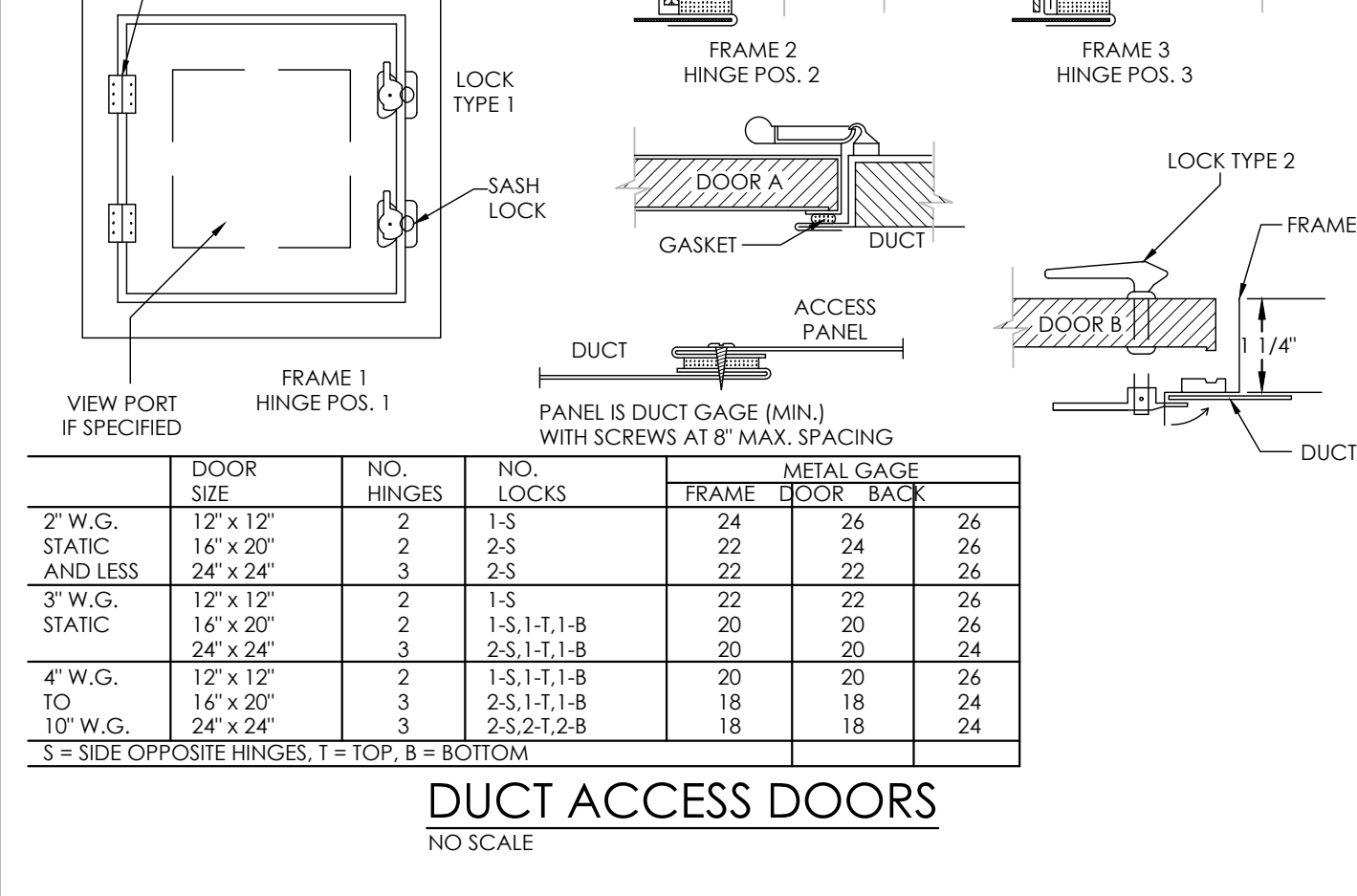
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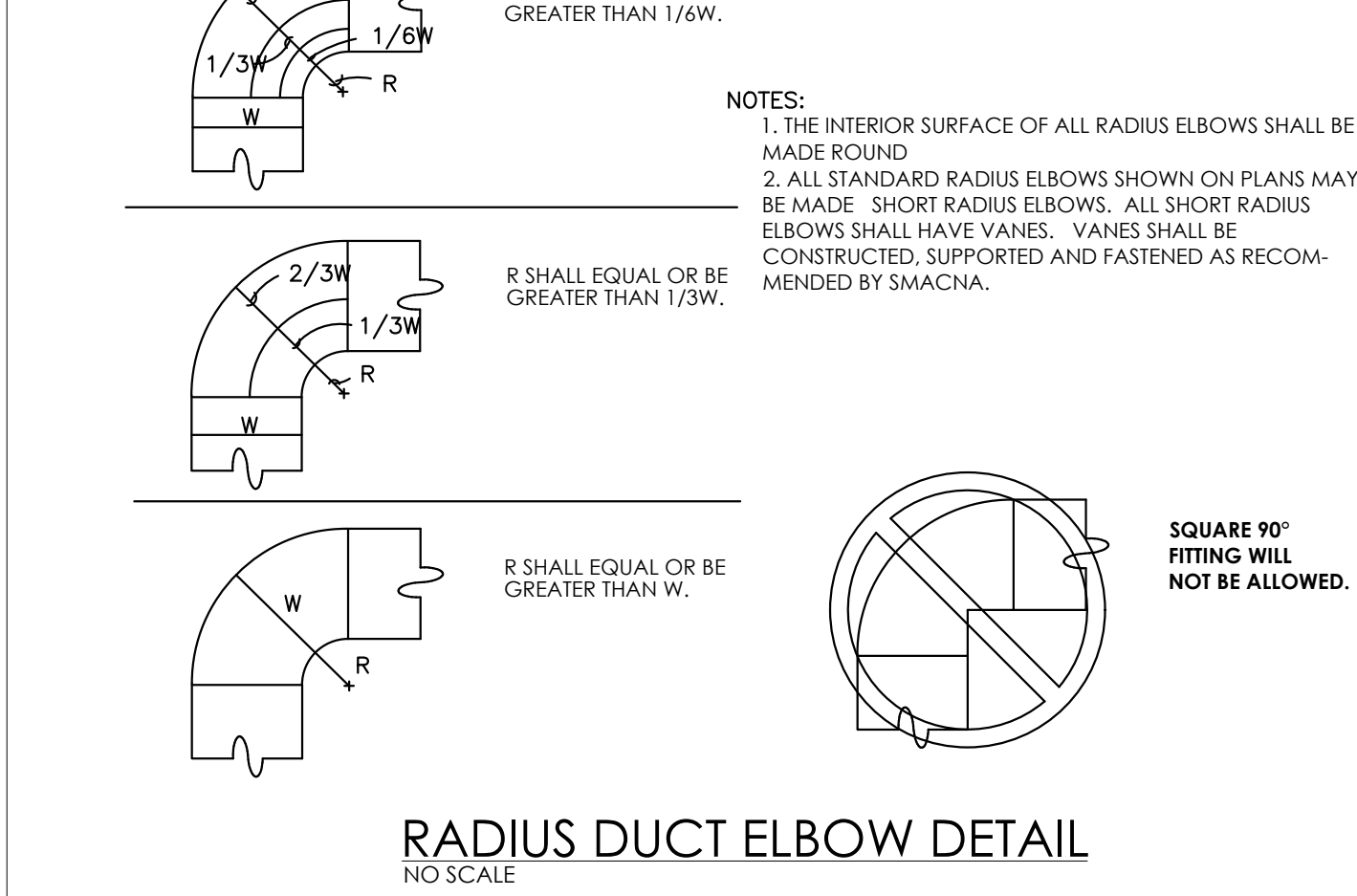
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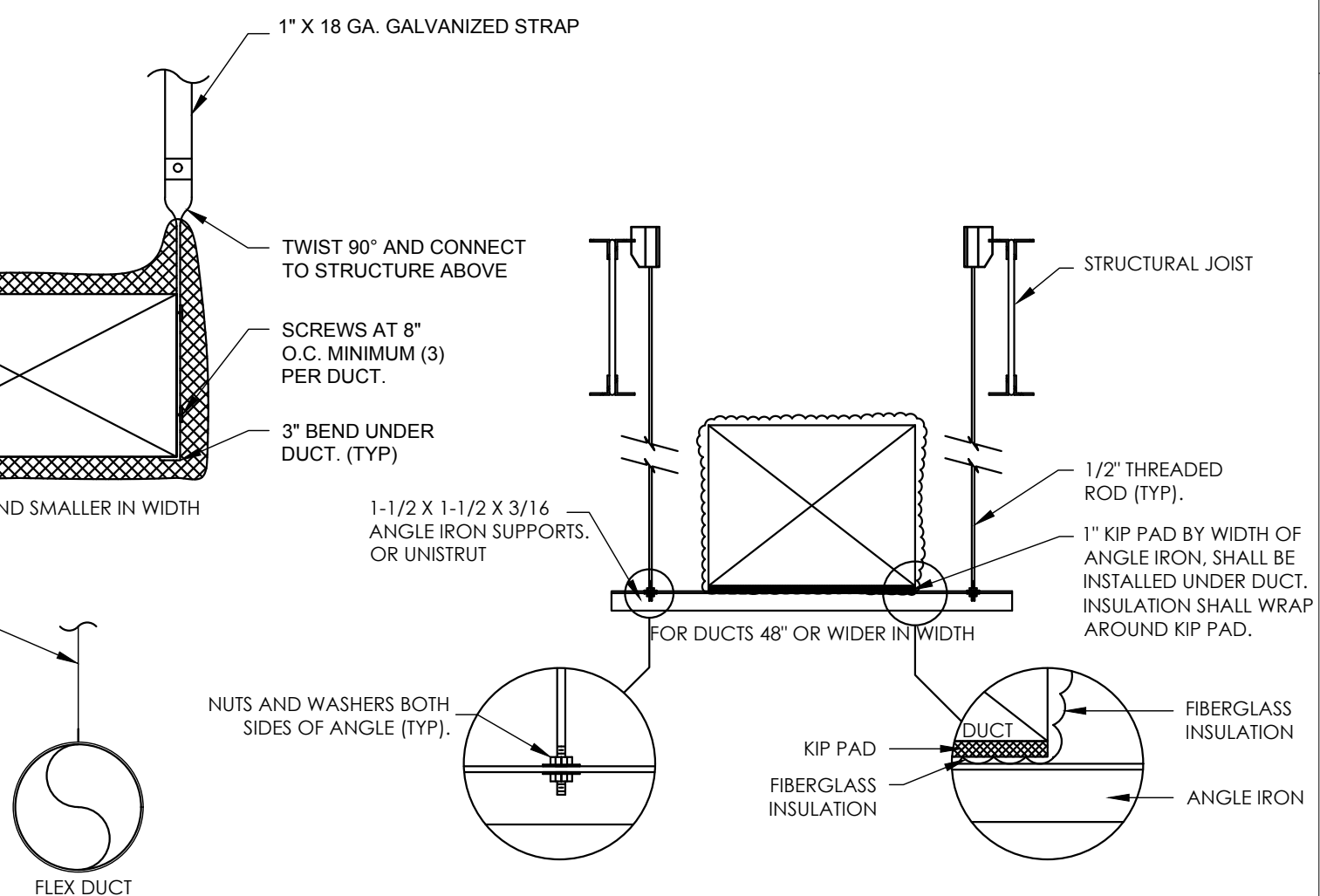
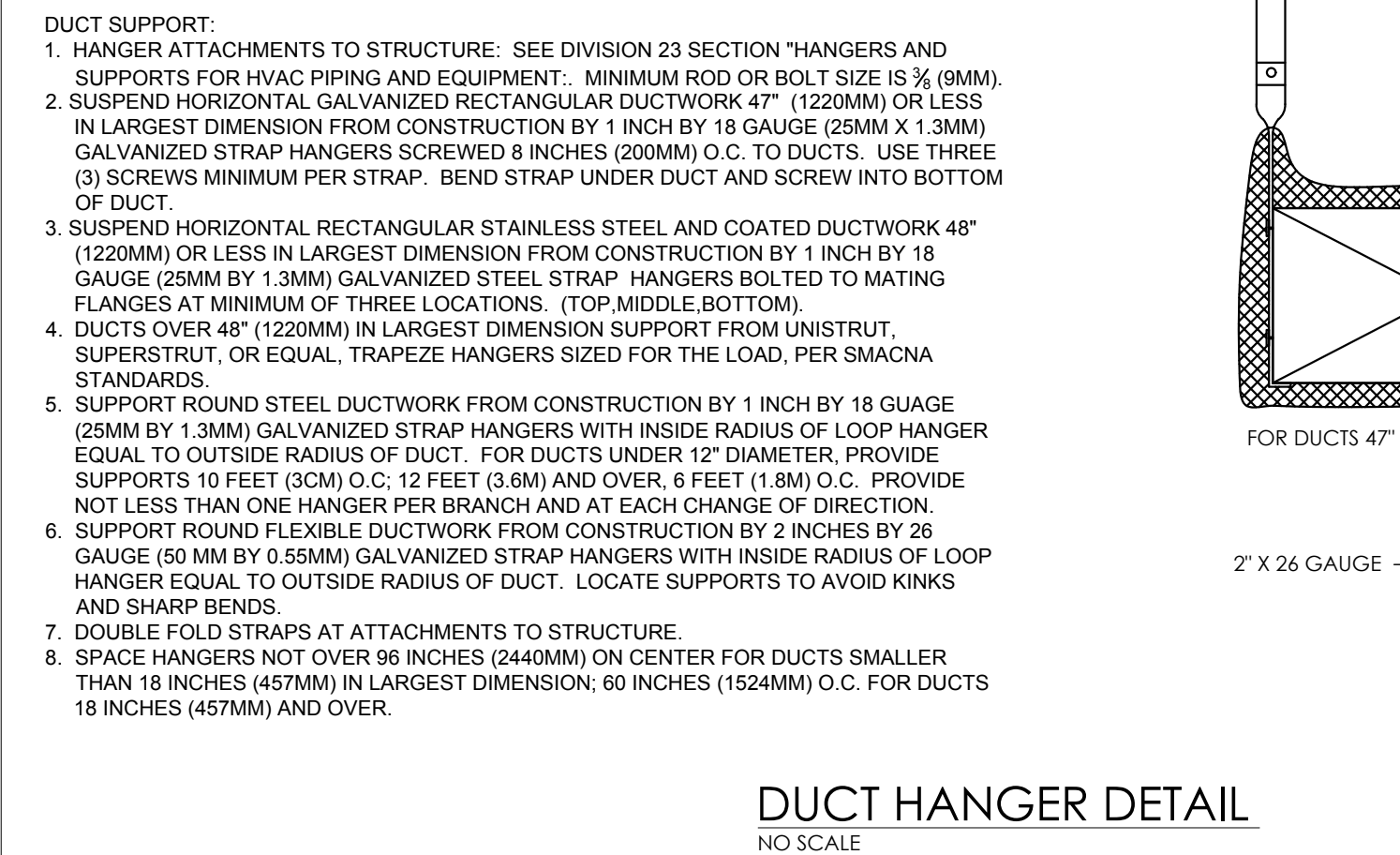
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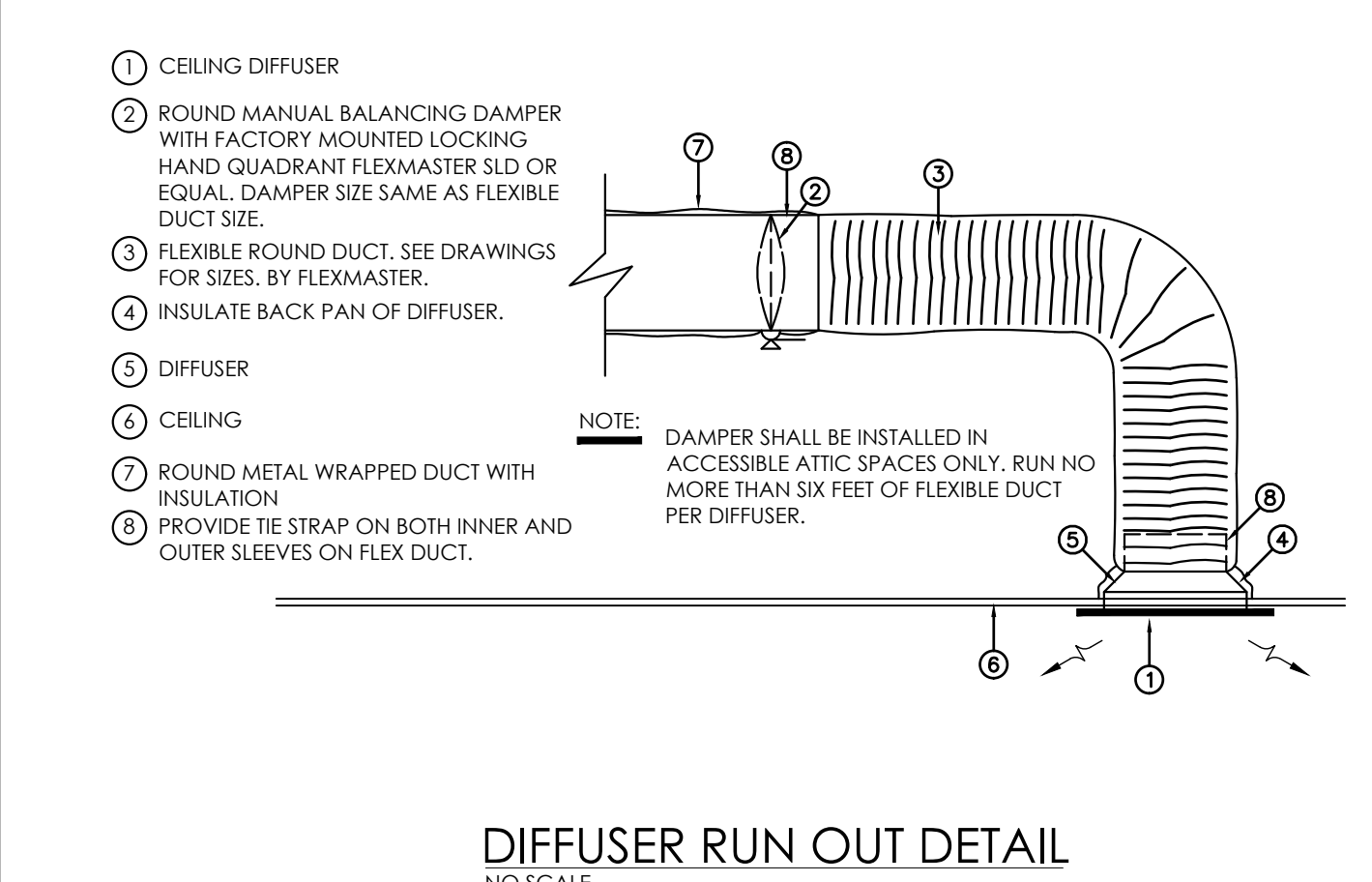
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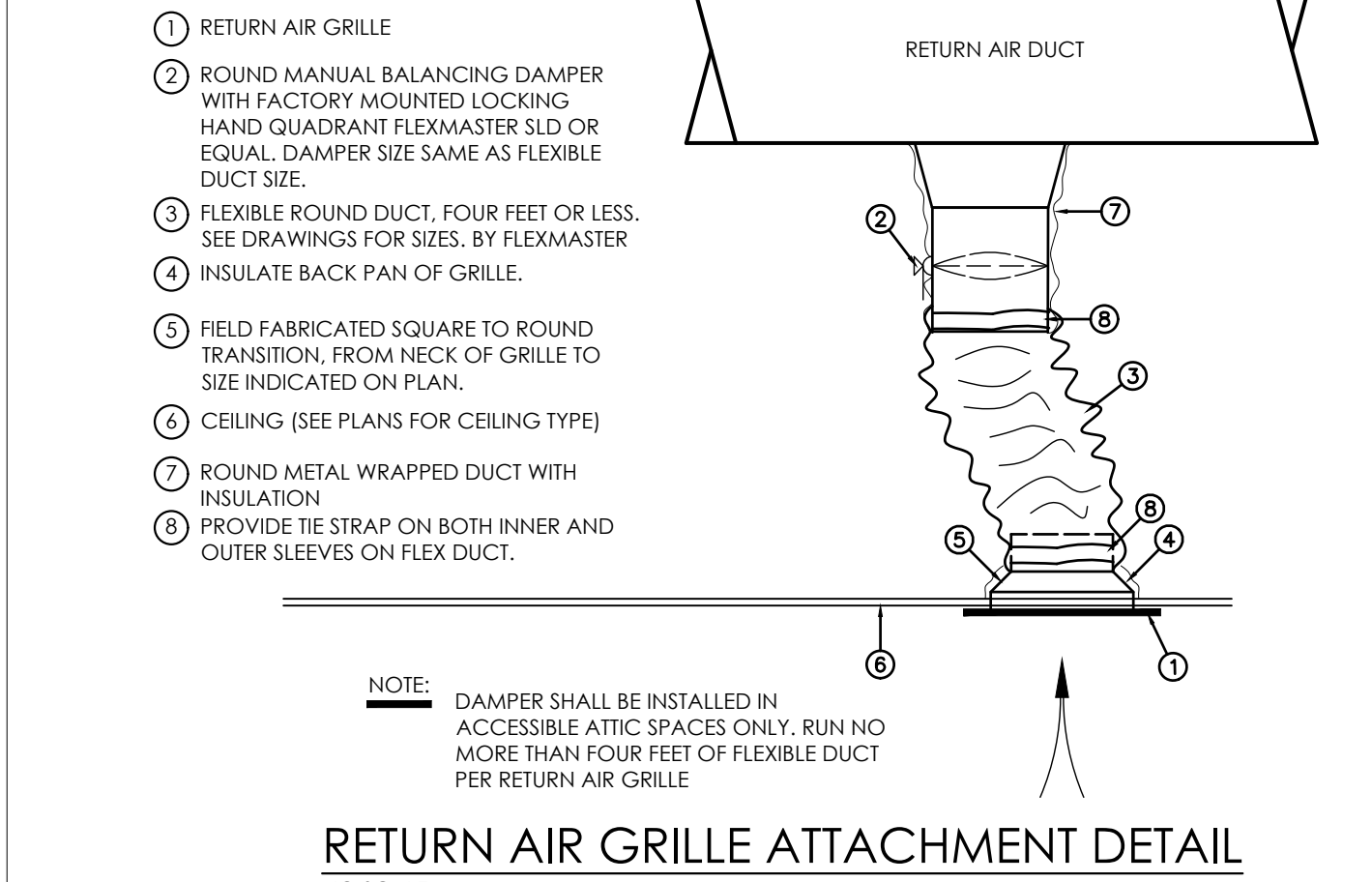
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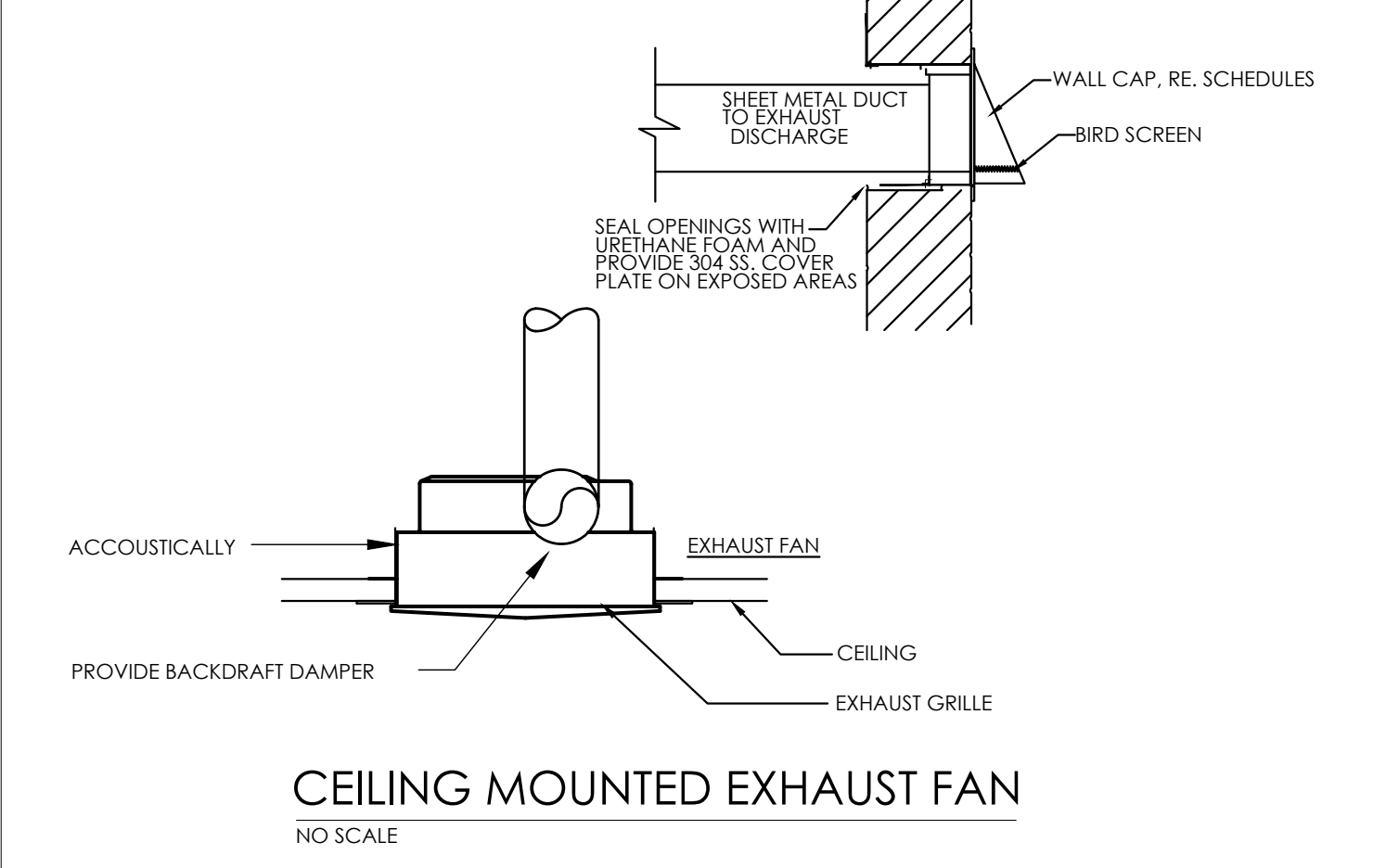
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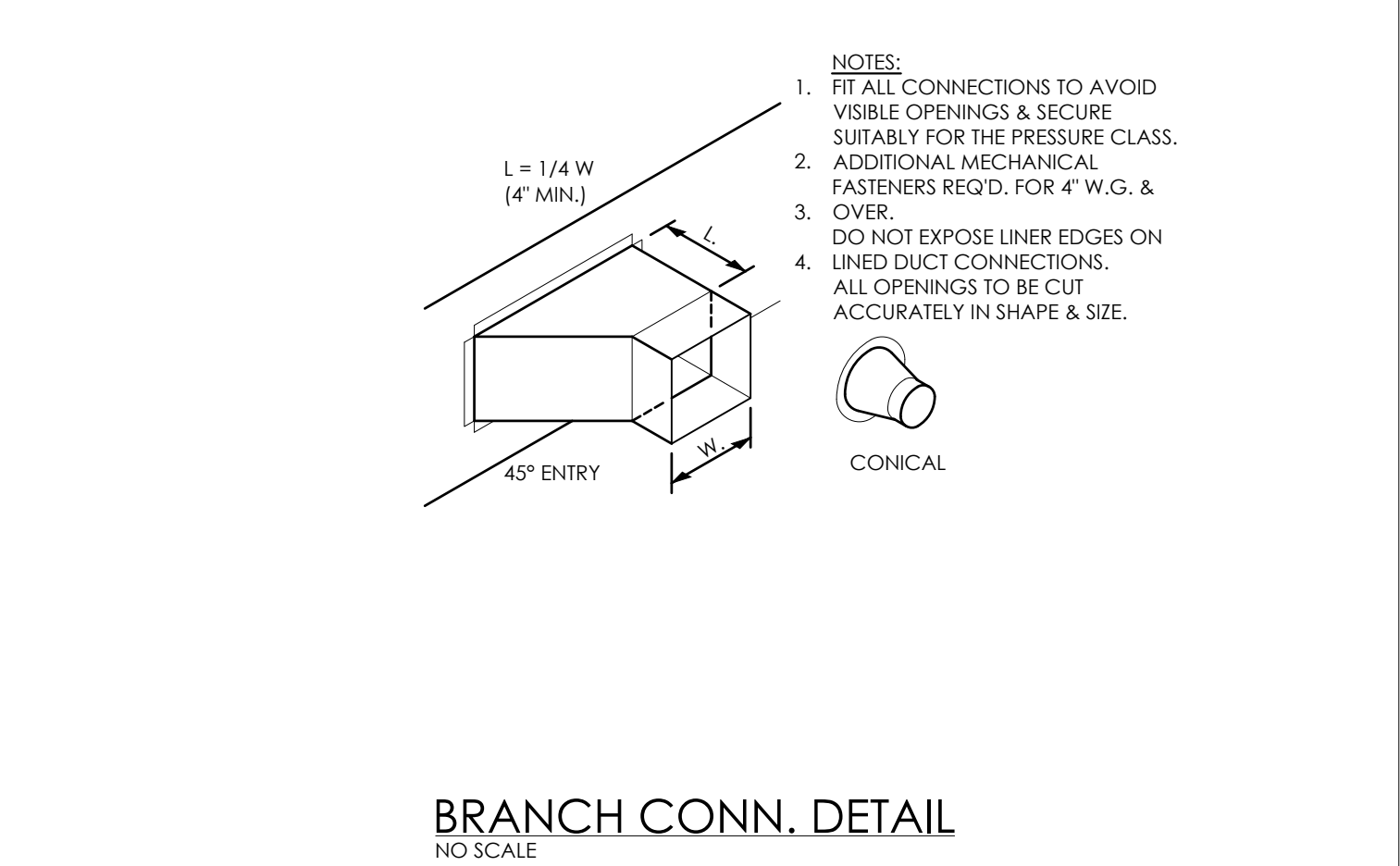
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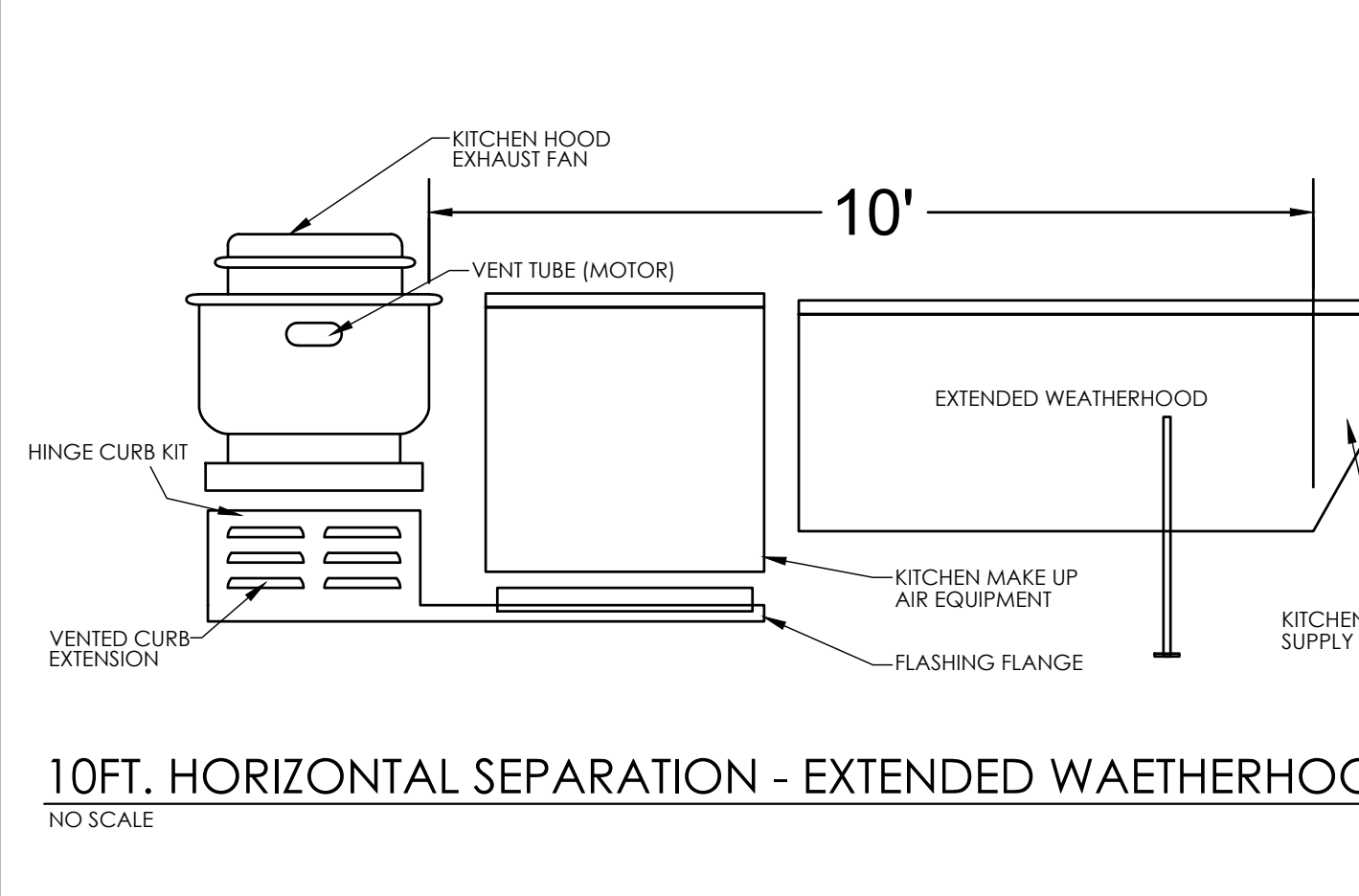
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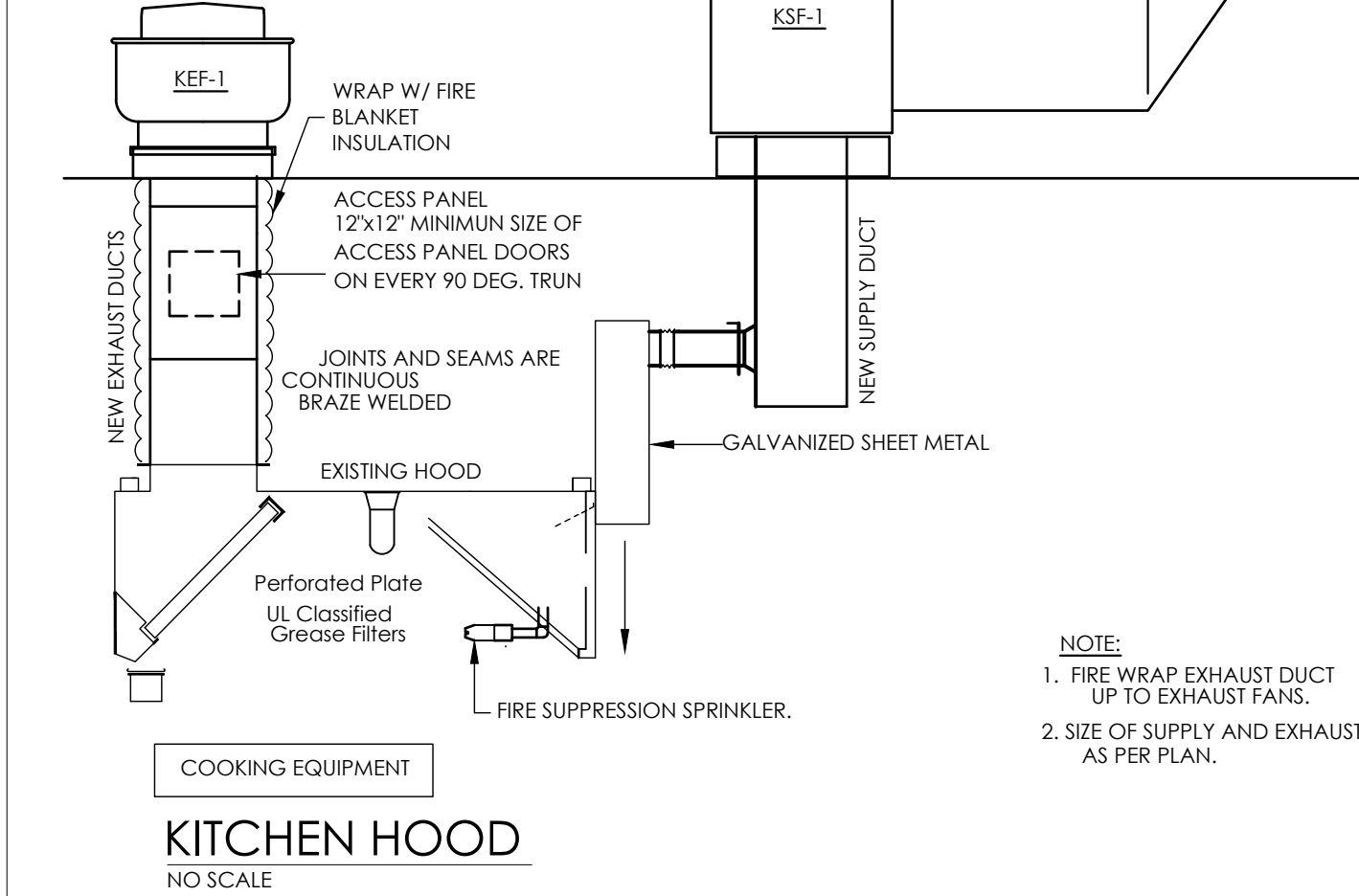
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10



11



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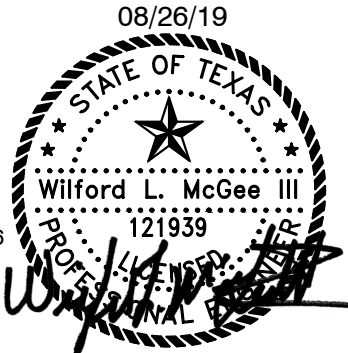
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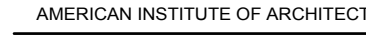
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M3.2

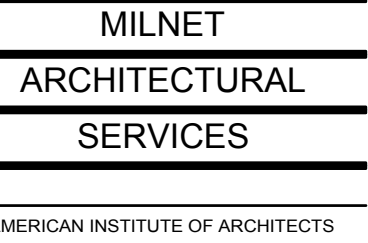


LOUVER SCHEDULE

TAG		L-1	L-2
	TYPE	INTAKE	INTAKE
	SERVICE	AHU-1,2	AHU-3
DETAILS AND ACCESSORIES			
	MAX CFM	550	200
	LENGTH/HEIGHT (IN)	32/16	20/12
	FREE AREA (SQ FT)	1.04	0.37
	MAX VELOCITY (FPM)	530	550
	MAX PRESSURE DROP (IN. H2O)	0.05	0.05
	FINISH	1.2 mils 70% PVDF	1.2 mils 70% PVDF
	INCLUDED SCREENS	BIRD	BIRD
	ACTUATION TYPE	NONE	NONE
	BORDER STYLE	2" FLANGE	2" FLANGE
	MANUFACTURER	GREENHECK	GREENHECK
	MODEL	EHH-501X	EHH-501X
	NOTES	1,2,3	1,2,3

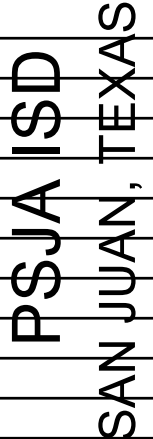
NOTES:

- LOUVER OPENINGS TO BE SAW CUT.
- SEAL OPENING WEATHER TIGHT.
- TO BE AMCA 540 & 550 LISTED



SUPPLY PLENUM INFORMATION																				
HOOD NO.	MARK	POS.	TYPE	SIZE (IN.)			INSULATED	DAMPER(S)	LED LIGHT(S)		TOTAL CFM	COLLARS								
				L	W	H			SUPPLIED	QTY		TYPE	MOUNTING	QTY	W	L	DIA.	CFM	S.P.	VEL.
1	HOOD-1	LEFT	ASP	48	14	10	NO	NO	NO		550	MUA	FACTORY	1	10	18		550	0.09	495
1	HOOD-1	FRONT	ASP	104	14	10	NO	NO	NO		1200	MUA	FACTORY	2	10	18		600	0.09	480
1	HOOD-1	FRONT	ASP	104	14	10	NO	NO	NO		1200	MUA	FACTORY	2	10	18		600	0.09	480

MARK: HOOD-1
SECTION VIEW



M4.1



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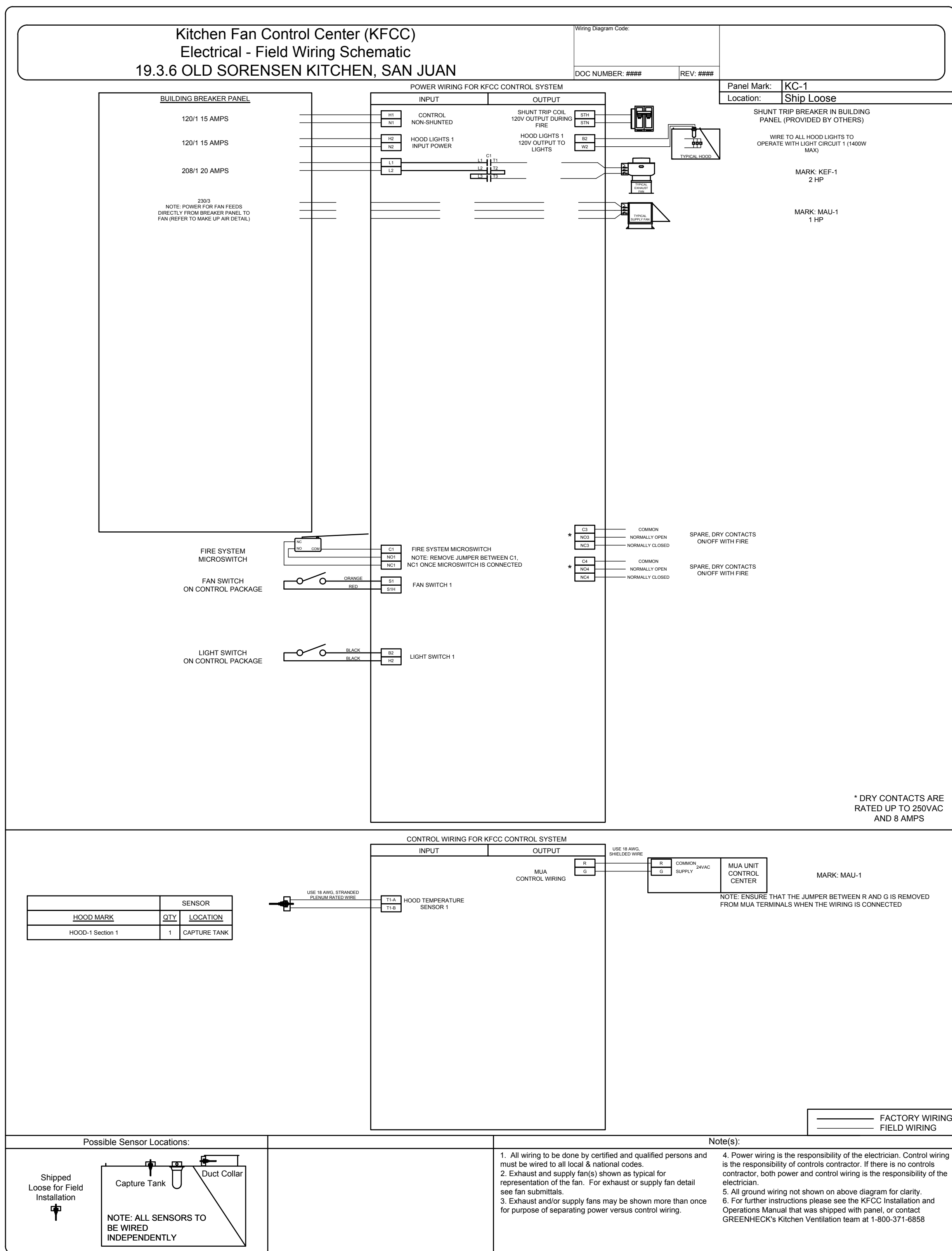
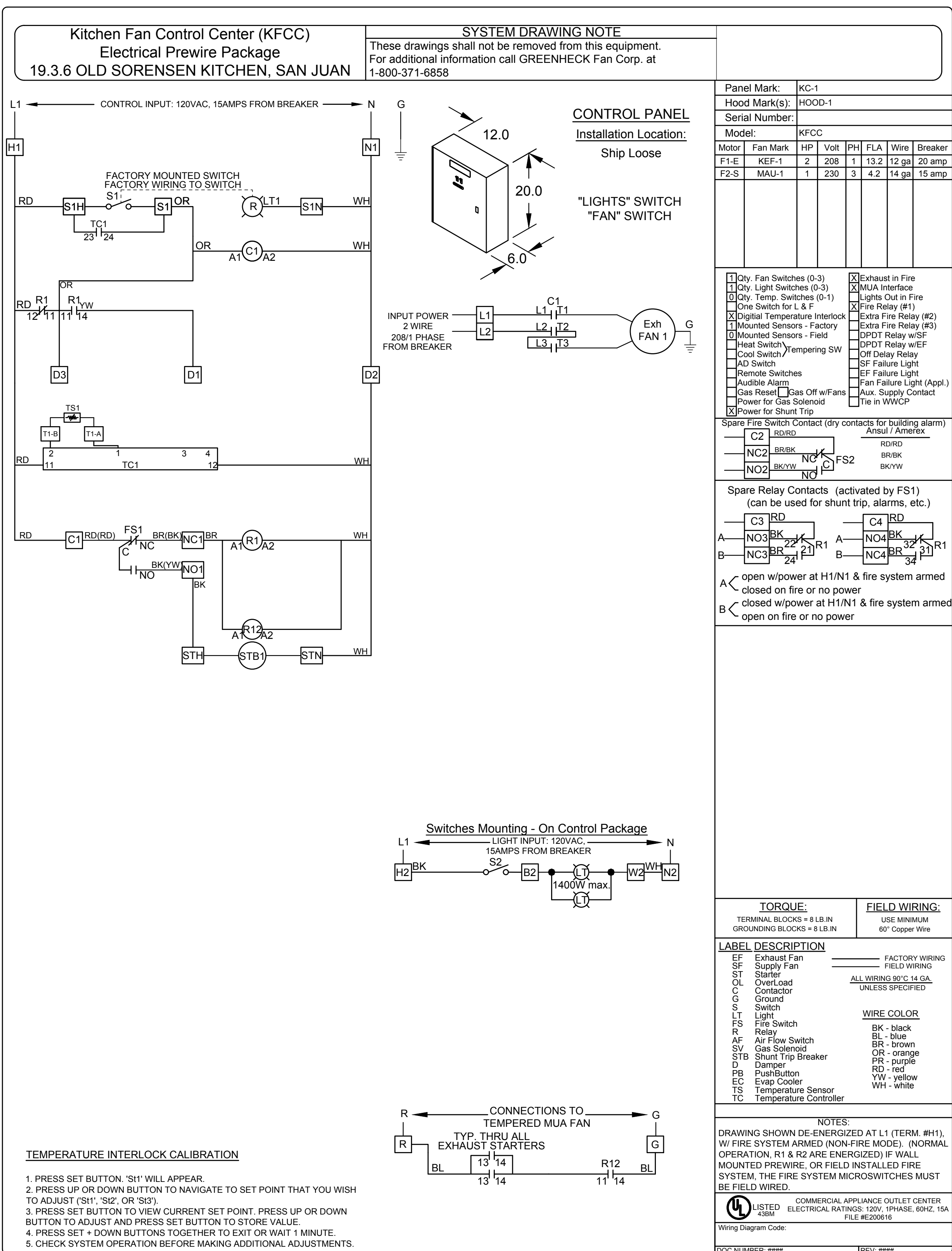
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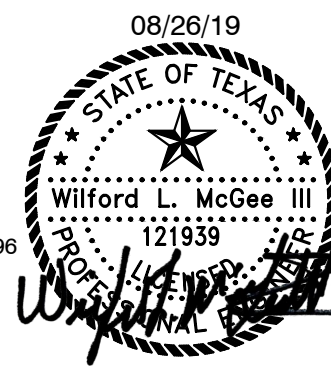
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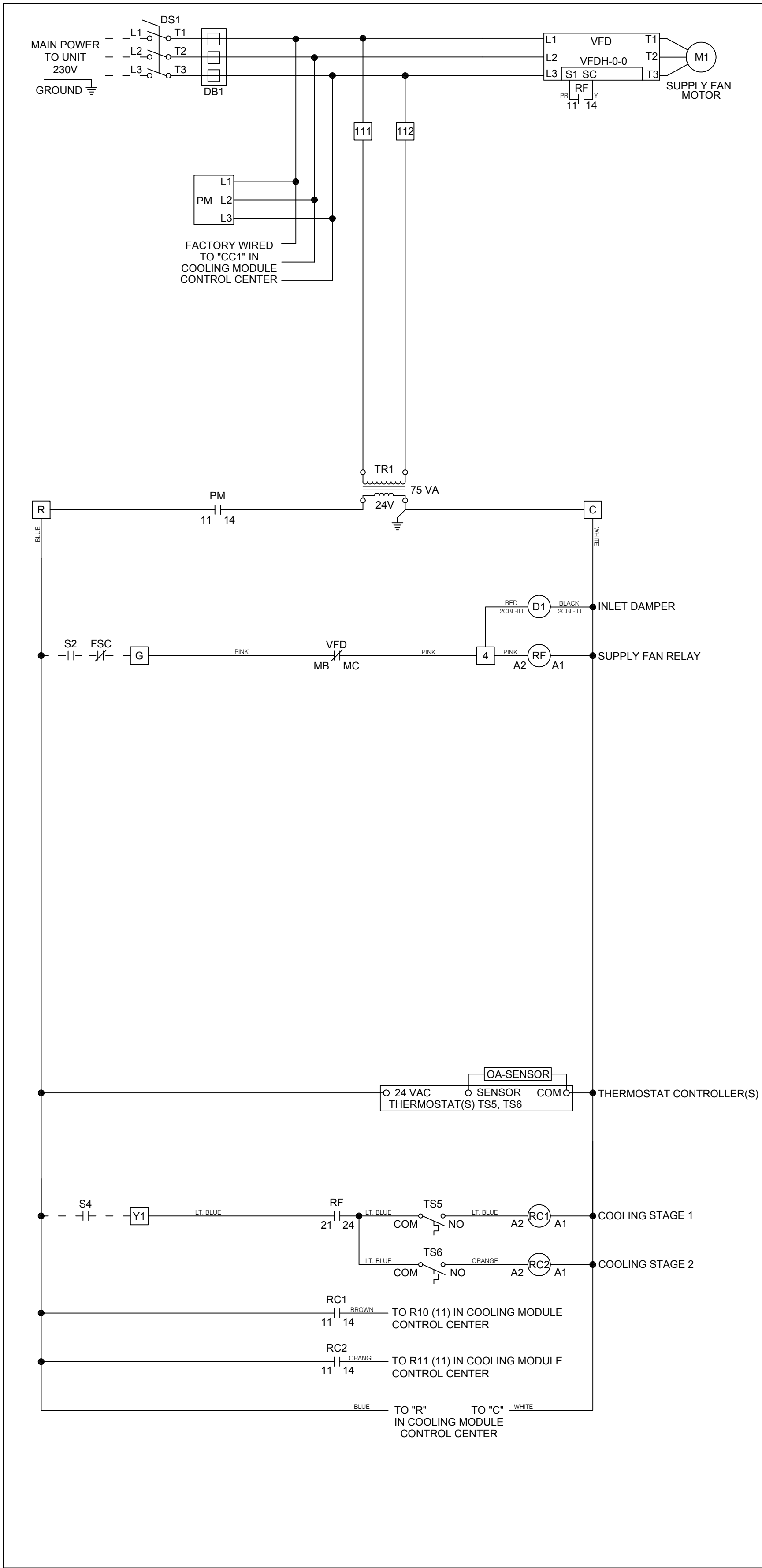
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Wiring Diagram Code:
GN00N502B013F20DU09

CAUTION
UNIT SHALL BE GROUNDED IN ACCORDANCE WITH N.E.C.
POWER MUST BE OFF WHILE SERVICING.

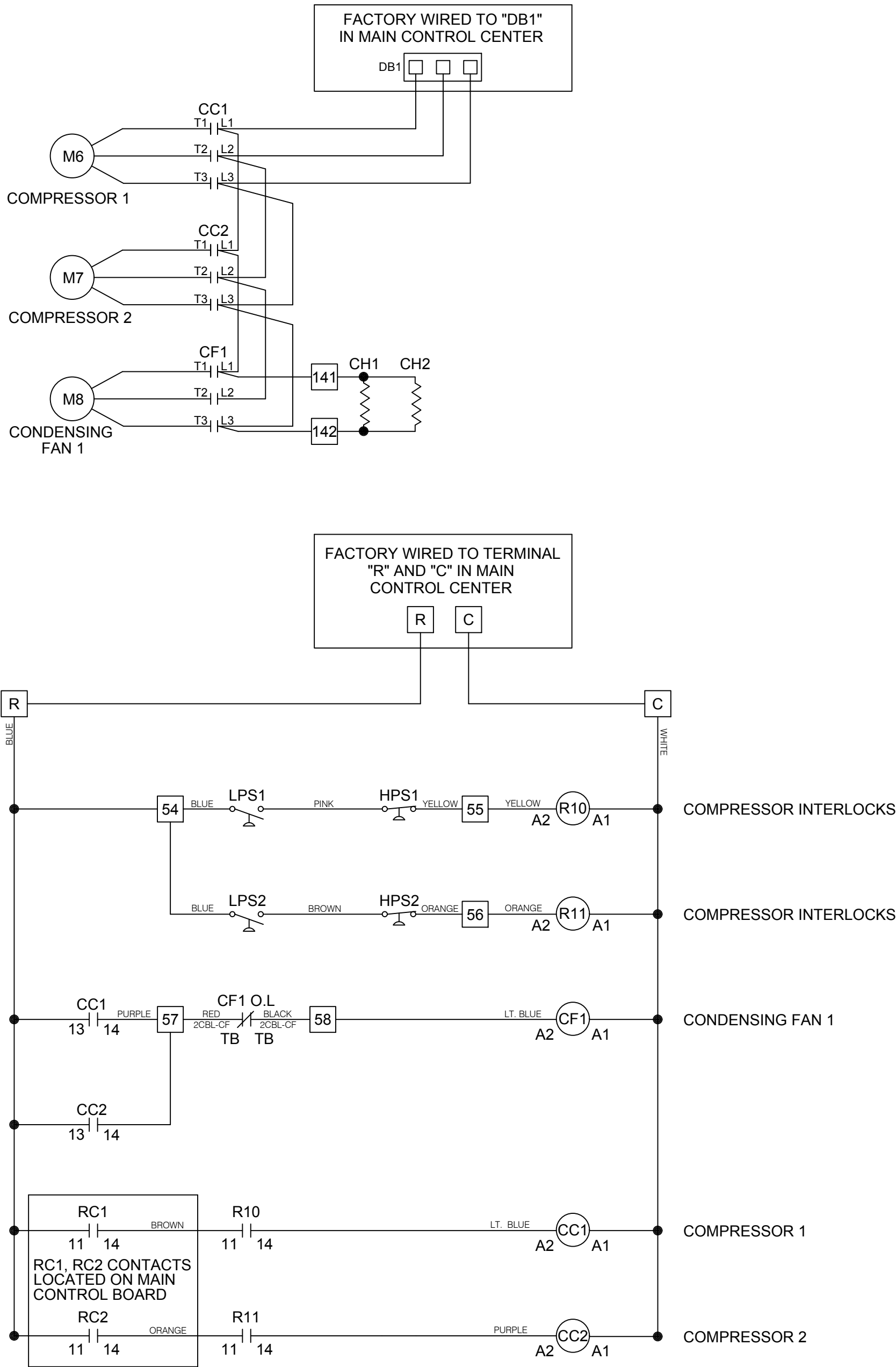
NOTES
USE COPPER CONDUCTORS ONLY
60° C FOR TERMINALS RATED LESS THAN 100 AMPS.
75° C FOR TERMINALS RATED 100 AMPS OR MORE.
FIELD CONTROL WIRING RESISTANCE SHOULD NOT EXCEED 0.75 OHM.
FIELD WIRED - - - - -
FACTORY SUPPLIED AND WIRED - - - - -

WIRE COLOR CODE					
BK	BLACK	BL	BLUE	BR	BROWN
GY	GRAY	LT BL	LIGHT BLUE	O	ORANGE
PK	PINK	PR	PURPLE	R	RED
W	WHITE	Y	YELLOW		

LEGEND
CC# COMPRESSOR CONTACTOR
CF# CONDENSER FAN CONTACTOR
CH# CRANK CASE HEATER
D1 INLET DAMPER
DS1 MAIN DISCONNECT SWITCH
FSC FIRE SYSTEM CONTACT
F# FUSE
HLC HIGH LIMIT CONTROL
HPS HIGH PRESSURE SWITCH
LPS LOW PRESSURE SWITCH
M# MOTOR
OL# MOTOR OVERLOAD
PM PHASE MONITOR
R10 COMP#1 INTERLOCK RELAY
R11 COMP#2 INTERLOCK RELAY
RC1 COOLING STAGE 1 RELAY
RC2 COOLING STAGE 2 RELAY
RF FAN ENABLE RELAY
S2 FAN SWITCH
S4 HEAT AND COOL SWITCH
ST# MOTOR STARTER
TR# TRANSFORMER
TS5 INLET AIR SENSOR - COOL
JUMPER = COOL : DIFFERENTIAL = 5
TS6 INLET AIR SENSOR - COOL
JUMPER = COOL : DIFFERENTIAL = 5 : OFFSET = 10
TS9 LOW DISCHARGE TEMP SENSOR
JUMPER = COOL : DIFFERENTIAL = 20
VFD VARIABLE FREQUENCY DRIVE

Template Drawing: U09 DOC NUMBER: #### REV: ####

PDX WIRING DIAGRAM



Wiring Diagram Code:
G521100XX0000PS11

CAUTION
UNIT SHALL BE GROUNDED IN ACCORDANCE WITH N.E.C.
POWER MUST BE OFF WHILE SERVICING.

NOTES
USE COPPER CONDUCTORS ONLY
60° C FOR TERMINALS RATED LESS THAN 100 AMPS.
75° C FOR TERMINALS RATED 100 AMPS OR MORE.
FIELD CONTROL WIRING RESISTANCE SHOULD NOT EXCEED 0.75 OHM.
FIELD WIRED - - - - -
FACTORY SUPPLIED AND WIRED - - - - -

WIRE COLOR CODE					
BK	BLACK	BL	BLUE	BR	BROWN
GY	GRAY	LT BL	LIGHT BLUE	O	ORANGE
PK	PINK	PR	PURPLE	R	RED
W	WHITE	Y	YELLOW		

LEGEND
CC# COMPRESSOR CONTACTOR
CF# CONDENSER FAN CONTACTOR
CH# CRANK CASE HEATER
DB1 DISTRIBUTION BLOCK
HPS# HIGH PRESSURE SWITCH
LPS# LOW PRESSURE SWITCH
M# MOTOR
R# CONTROL RELAY

Wiring Template: S11 DOC NUMBER: #### REV: ####



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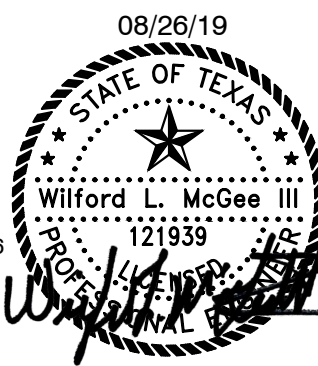
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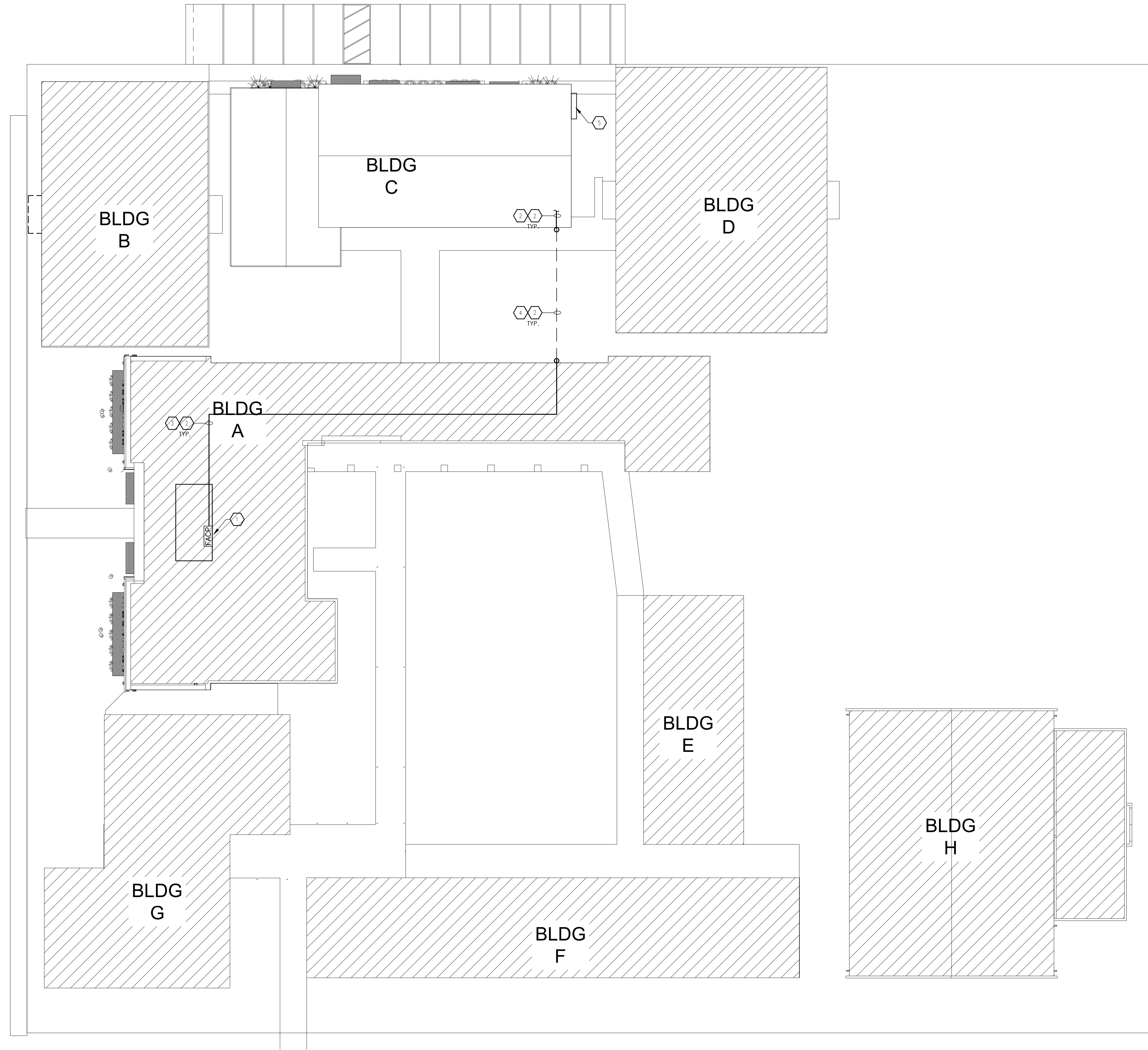
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GENERAL ELECTRICAL NOTES (TO ALL SHEETS)

- A. CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND FIELD COORDINATE WITH EXISTING CONDITIONS.
- B. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- C. CONTRACTOR TO VERIFY ALL EXISTING MAIN COMMUNICATION SERVICES AND COORDINATE WITH EXISTING CONDITIONS.
- D. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- E. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER, ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.
- F. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST, TO OWNER, ARCHITECT, OR ENGINEER.
- G. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- H. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- I. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- J. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- K. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- L. ALL WIRING SHALL BE COPPER.
- M. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- N. ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.

KEYED NOTES: ELECTRICAL

- 1 EXISTING FIRE ALARM CONTROL PANEL MFR. SILENT KNIGHT #5280, LOCATED IN MAIN OFFICE. FIELD VERIFY EXACT LOCATION. INCLUDE ALL COST IN BID TO INCLUDE ALL NEW FIRE ALARM DEVICES FROM REMODEL BUILDING-C.
- 2 PROVIDE 3-2" C WITH PULLSTRING FOR FIRE ALARM AND 2 SPARE CONDUITS FOR COMMUNICATIONS.
- 3 CONDUITS ABOVE THE CEILING LEVEL. SUPPORT CONDUIT FROM STRUCTURAL.
- 4 UNDERGROUND CONDUITS MINIMUM 36", FIELD VERIFY ALL EXISTING UNDERGROUND PRIOR TO ANY WORK.
- 5 ELECTRICAL SERVICE LOCATION.



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SHEET NUMBER

ES1.1



1 ELECTRICAL SITE PLAN
1/16"=1'-0"

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- A. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- B. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL EQUIPMENT AND ASSOCIATED CONDUCTORS, CONDUIT, BOXES, ETC. TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- C. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO THEIR SOURCE.
- E. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO A CONCEALED JUNCTION BOX AND NEW PRODUCTS SHALL BE USED TO EXTEND THE SERVICE TO THE NEW LOCATION.
- F. WHERE CONDUITS RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE NOT PART OF DEMOLITION ARE TO REMAIN UNDISTURBED, CONDUCTORS SHALL BE REMOVED AND THE CONDUITS CAPPED AND ABANDONED.
- G. WHERE THE REMOVAL OF DEVICES OR EQUIPMENT REQUIRES EQUIPMENT DOWNSTREAM, THE REMOVED DEVICE SHALL BE EXTENDED TO THE DOWNSTREAM DEVICE OR EQUIPMENT SO THAT THE DEVICE OR EQUIPMENT IS LEFT IN OPERATING CONDITION.

H. COORDINATE DEMOLITION OF DIVISION 16 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.

I. ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT AND WIRING REMOVED DURING CONSTRUCTION NO LONGER REQUIRED AS PART OF AN ACTIVE SYSTEM AND NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.

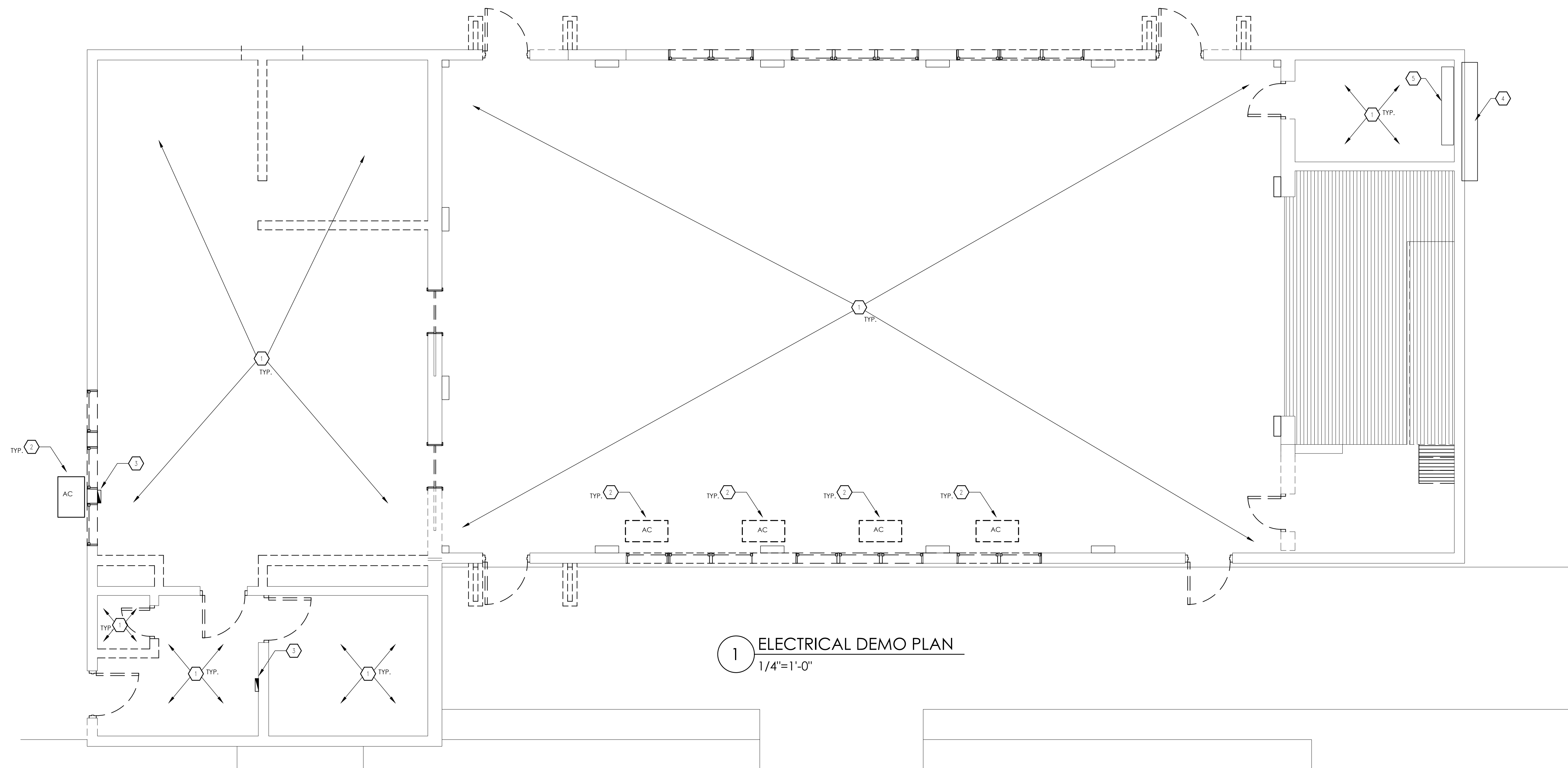
J. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

K. EXISTING DEVICES AND/OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.

L. ALL DEVICES WITH AN "EX" SYMBOL ARE EXISTING TO REMAIN.

M. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

- 1 ALL CONDUITS, WIRING, LIGHTS, CEILING FANS, WIRING DEVICES, FIRE ALARM, INTRUSION, CAMERAS, INTERCOM, AC ELECTRICAL HEATER ELECTRICAL TO BE REMOVED.
- 2 A/C ELECTRICAL TO BE REMOVED.
- 3 ELECTRICAL PANEL TO BE REMOVED.
- 4 ELECTRICAL EQUIPMENT TO REMAIN.
- 5 ELECTRICAL EQUIPMENT TO BE REMOVED.



1 ELECTRICAL DEMO PLAN
1/4"=1'-0"



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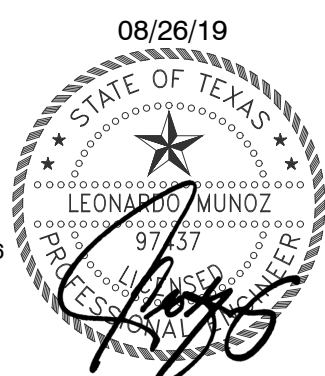
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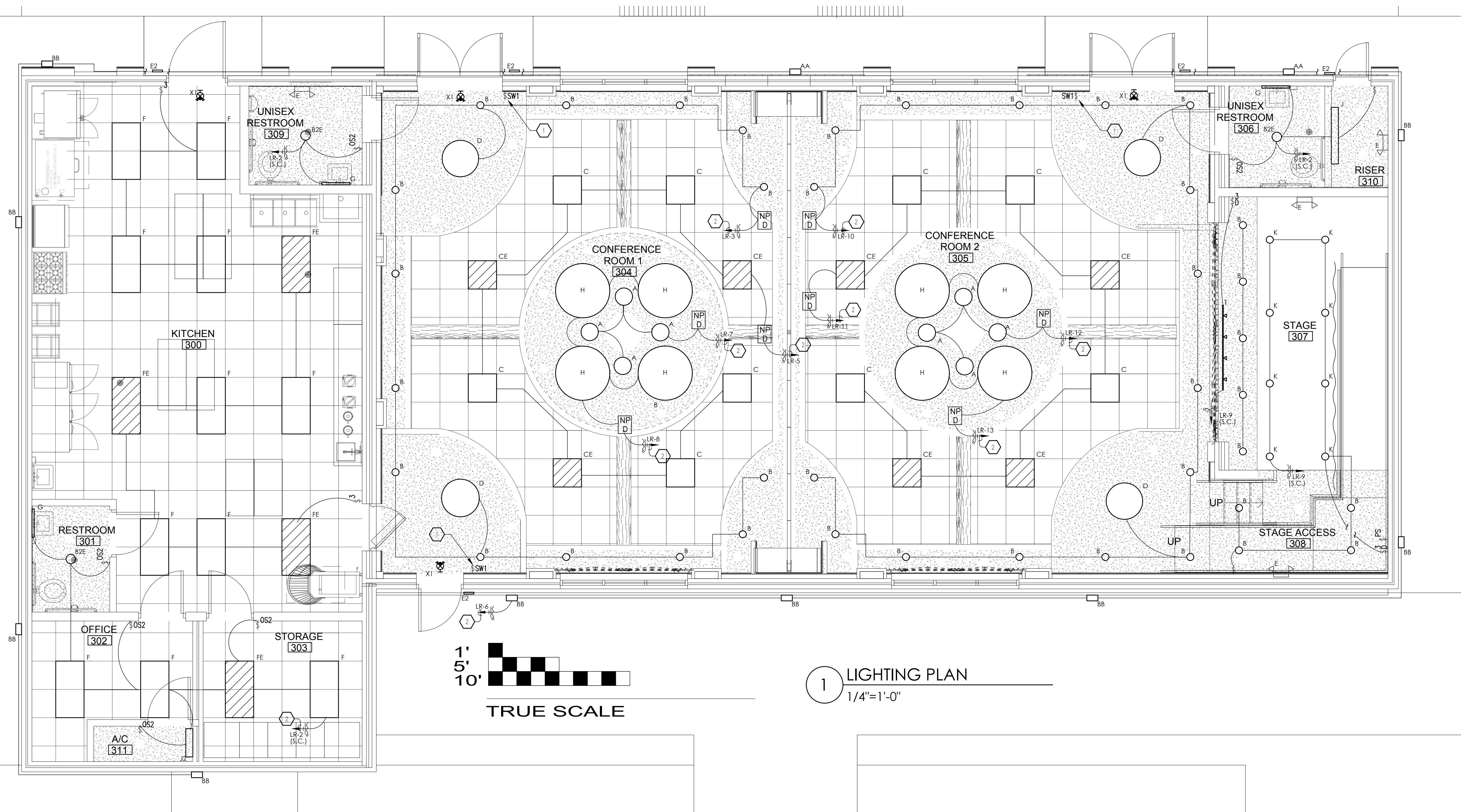


GENERAL NOTES: LIGHTING

- A. ALL EXIT FIXTURES/EMERGENCY BATTERY PACK LIGHT FIXTURE SHALL BE CONNECTED TO UNSWITCHED OR NON-DIMMING HOT LEG OF SAME VOLTAGE/PHASE OF LOCAL LIGHTING CIRCUIT IN SPACE.
- B. VERIFY CEILING TYPES AND COORDINATE WITH FIXTURE TYPE LIGHT FIXTURE SHALL BE COMPATIBLE WITH CEILING TYPE AS INDICATED ON THE ARCHITECTURAL DOCUMENTS. NOTIFY ENGINEER IF DISCREPANCIES EXIST PRIOR TO ORDERING FIXTURES.
- C. COORDINATE EXACT ROUTING OF ALL CONDUIT ABOVE CEILING IN BUILDING. TYPICAL FOR ALL BUILDING EXTERIOR LIGHTING.
- D. COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLES.
- E. SWITCH LEGS ARE NOT SHOWN WHERE SWITCHING SCHEME IS OBVIOUS.
- F. ALL EXIT FIXTURES TYPE-"X1 & X2"; EMERGENCY LIGHT FIXTURE TYPE-"E" AND ALL EMERGENCY BALLAST SHALL BE ON CIRCUIT "LR-1". FIXTURE TYPE LABEL WITH AN "E" ARE LIGHT FIXTURES WITH EMERGENCY BALLAST. REFER TO LIGHT FIXTURE SCHEDULE.
- G. CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.

KEYED NOTES: LIGHTING

- 1 LOW VOLTAGE SWITCH. ROUTE TO LIGHTING RELAY PANEL.
- 2 PROVIDE A 4 BUTTON DIFFERENT ZONES AND SCENE.



OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

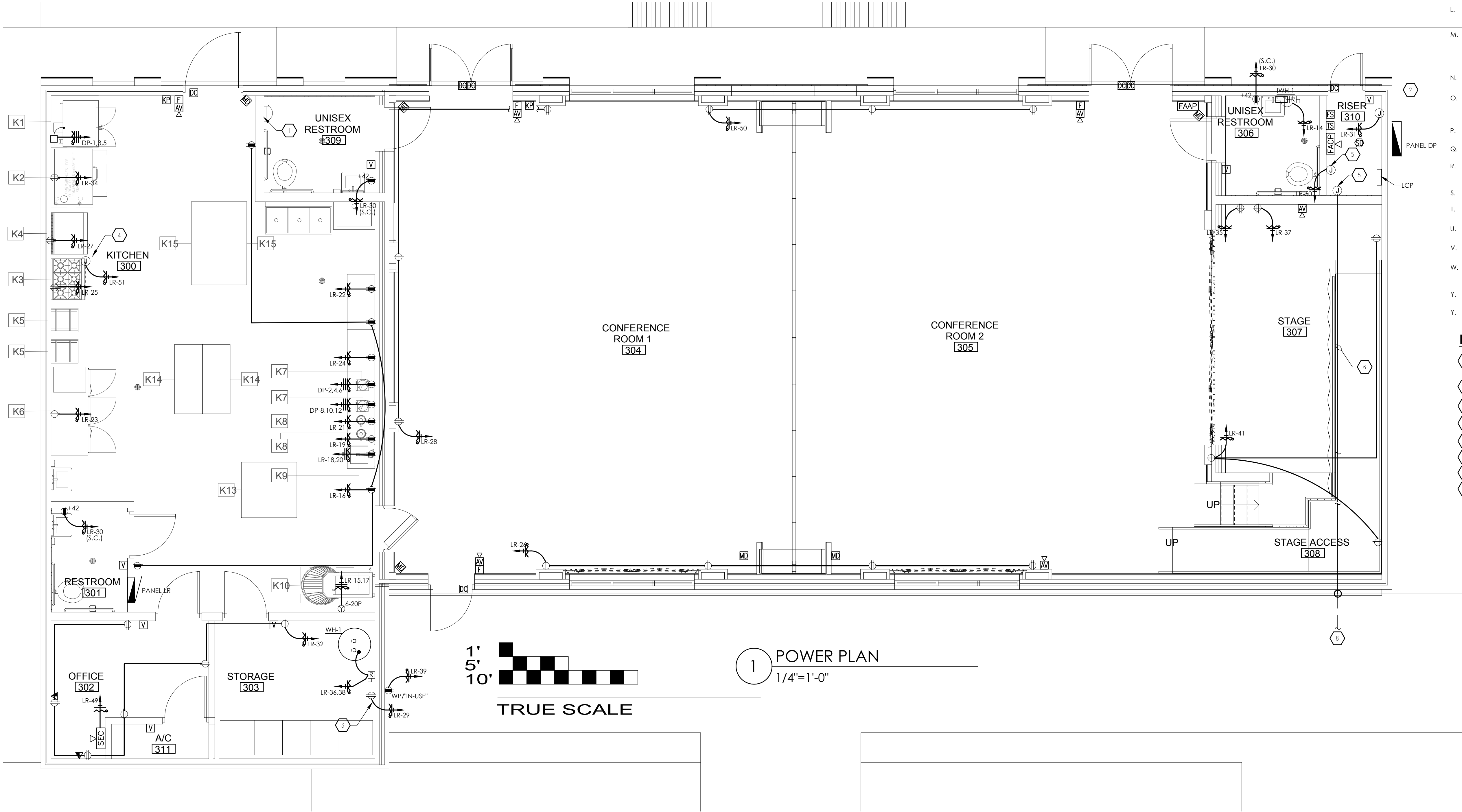
DATE
AUG 26, 2019

SHEET NUMBER

E1.1

EQUIPMENT SCHEDULE						
Item No	Qty	Equipment	Amps	KW	HP	Volts
(K1)	1	DOUBLE INDUSTRIAL OVEN VULCAN VC44ED	70	25		240
(K2)	1	BAKING OVEN LOGIDUCE MINISTAR-MSR-41016				
(K3)	1	6 BURNER GAS RANGE AMERICAN GAS RANGE AR6				
(K4)	1	FLAT GRILL VULCAN MSA36-36" GAS				
(K6)	2	3 DOOR REFRIGERATOR TRUE T-72G-HC	7			120
(K7)	2	FOOD PROCESSOR HOBART HCM62	6			240
(K8)	1	COMMERCIAL BLENDER XTREME MX1000TXP	13			120
(K9)	2	TORTILLA PRESS DUTCHESS DUT/TXM-15	15			240
(K10)	1	COMMERCIAL MIXER DOYON BTFO60 60QT	16			240

NOTE:
1.) KITCHEN EQUIPMENT SHALL BE VERIFY PRIOR TO ORDER FOR ELECTRICAL REQUIREMENTS



1 POWER PLAN
1/4"=1'-0"

TRUE SCALE

FIRE ALARM SYSTEM GENERAL NOTES:

1. PROVIDE A FIRE ALARM SYSTEM & DEVICES AS REQUIRED TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA), TEXAS ACCESSIBILITY STANDARDS (TAS), TEXAS DEPARTMENT OF LICENSING AND REGULATIONS, ARCHITECTURAL BARRIERS, LOCAL CODES & ORDINANCES, AND FIRE MARSHALL POLICIES AND REQUIREMENTS.
2. THE FIRE ALARM CONTRACTOR SHALL DEVELOP DIMENSIONED SHOP DRAWINGS INDICATING FINAL LOCATIONS OF ALL DEVICES FOR REVIEW BY THE BUILDER/ENGINEER. THESE SHOP DRAWINGS SHALL INDICATE OBSTRUCTIONS, DUCTWORK, EQUIPMENT, LIGHT FIXTURES, ETC., WHICH MUST BE COORDINATED WITH THE FINAL PLACEMENT OF THE FIRE ALARM DEVICES.
3. THE CONTRACTOR SHALL CERTIFY THE SYSTEM AS COMPLETE AND OPERATIONAL AT COMPLETION OF THE INSTALLATION OF THE SYSTEM.
4. DEVICES ARE INDICATED TO PROVIDE GENERAL PLACEMENT CONFORMANCE AND ARRANGEMENT ONLY, AND SHALL NOT BE CONSTRUED AS INDICATED ACTUAL QUANTITY OF DEVICES REQUIRED NOR FINAL DEVICE LOCATION. ANY ADDITIONAL DEVICES WHICH ARE REQUIRED BY THE ABOVE AUTHORITIES HAVING JURISDICTION WHICH ARE NOT INDICATED ON THESE DRAWINGS SHALL BE PROVIDED WITHOUT ADDITIONAL COST TO THE OWNER. IT SHALL BE THE FIRE ALARM CONTRACTOR'S RESPONSIBILITY TO PROVIDE A COMPLETE OPERATING SYSTEM WHICH SATISFIES THE ABOVE AUTHORITIES. FINAL LOCATIONS OF DEVICES SHALL BE COORDINATED WITH CABINET WORK, CHALKBOARDS, OR OTHER OBSTRUCTIONS WHICH PREVENT DEVICES FROM BEING LOCATED AT THE PROPER HEIGHT AND/OR VIEW.
5. ALL WIRING SHALL BE PLACED IN A CONDUIT SYSTEM WHICH COMPLIES WITH THE ELECTRICAL NOTES & REQUIREMENTS.
6. THE FIRE ALARM CONTRACTOR SHALL HAVE BEEN IN BUSINESS A MINIMUM OF FIVE (5) YEARS & SHALL HAVE EXPERIENCE IN INSTALLING FIRE ALARM SYSTEMS & DEVICES.

GENERAL NOTES: POWER

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- B. CONTRACTOR SHALL VERIFY ALL REQUIREMENTS BEFORE ANY ROUGH-IN IN ORDER TO COORDINATE MANUFACTURERS DRAWINGS FOR EQUIPMENT LOCATION AND INSTALLATION ACCESSORIES.
- C. COORDINATE RUNS FOR CONDUIT UP IN JOIST AND FOR SUSPENDING REQUIREMENT IN ACCORDANCE STRUCTURAL PLANS.
- D. COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITH MECHANICAL DRAWINGS TO MEET MECHANICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
- E. ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND ONE INCH CONDUIT (1" C) FOR H.V.A.C. CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- F. CONTRACTOR TO BRANCH TO CONNECTION WHERE REQUIRED AND TO CONNECT ALL ELECTRICAL EQUIPMENT AND FIXTURES AND DO ANY INTERNAL WIRING REQUIRED IN THE FIXTURE INCLUDING INTER-WIRING TO APPLIANCES AS REQUIRED BY THE SPECIFICATIONS.
- G. CONTRACTOR TO FURNISH GALVANIZED JUNCTION BOXES IN FIXTURE CUT-OUTS AS REQUIRED BY THE ITEM SPECIFICATION AND INCLUDING APPROPRIATE ELECTRICAL RECEPTACLE, STAINLESS STEEL FACEPLATE.
- H. WHERE ELECTRICAL COOKING EQUIPMENT IS SPECIFIED, ELECTRICAL CONTRACTOR TO PROVIDE TIE-IN WIRING BETWEEN FIRE PROTECTION BOTTLE CONTROL HEAD, MICRO-SWITCH AND COOKING EQUIPMENT TO COMPLY WITH APPLICABLE LOCAL CODE REQUIREMENTS FOR EMERGENCY SHUTDOWN OF ENTIRE COOKLINE.
- I. WHERE ELECTRICAL COOKING EQUIPMENT IS SPECIFIED, ELECTRICAL CONTRACTOR TO PROVIDE TIE-IN WIRING BETWEEN FIRE PROTECTION BOTTLE CONTROL HEAD, MICRO-SWITCH AND COOKING EQUIPMENT TO COMPLY WITH APPLICABLE LOCAL CODE REQUIREMENTS FOR EMERGENCY SHUTDOWN OF ENTIRE COOKLINE.
- J. CONTRACTOR TO PROVIDE WRAP AROUND HEATER CABLE ON ALL EVAPORATOR DRAIN LINES IN WALK-IN FREEZERS.
- K. THERE SHALL BE NO EXPOSED FLEX CONDUIT, COPPER TUBING, OR GAUGES LOCATED ABOVE WORKTABLES.
- L. ALL ELECTRICAL OUTLET COVER PLATES SHALL BE STAINLESS STEEL. THOSE REQUIRED IN BUILDING STRUCTURE ARE TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR, WITH RECEPTACLES.
- M. CONTRACTOR TO PROVIDE AND INSTALL ALL SWITCHES, STARTERS, DISCONNECTS, ETC., FOR ALL EQUIPMENT UNLESS NOTED OTHERWISE. ALL DISCONNECTS OR LOCK-OUT DEVICES, STARTERS, ETC. TO MEET AUTHORITY HAVING JURISDICTION. VERIFY WITH MANUFACTURER FOR CORRECT NEMA RATING FOR ALL EQUIPMENT PRIOR TO BID DATE.
- N. ALL ROUGH-INS SHOWN ARE TO BE RUN INSIDE WALLS, [EXCEPT STUB-UPS]. LOCATION INDICATE POINT OF EXIT FROM WALLS, CEILING OR FLOOR.
- O. ALL ELECTRICAL OUTLETS SHOWN ON THIS PLAN ARE FOR FIXTURE AND EQUIPMENT SPECIFIED AS FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR, UNLESS OTHERWISE NOTED. FOR ANY ADDITIONAL CONVENIENCE OUTLETS, SEE OTHER ELECTRICAL DRAWINGS AND REQUIREMENTS.
- P. CONTRACTOR TO INSTALL AND WIRE EXTRA LIGHTS IN WALK-IN COOLER AND FREEZER AS REQUIRED, THRU DOOR SWITCH.
- Q. ALL KITCHEN EQUIPMENT VOLTAGE SHALL BE AS SCHEDULED, NOTIFY ENGINEER IMMEDIATELY IF ANY DIFFERENT VOLTAGE.
- R. ALL EXHAUST FANS (EF-) LOCATED ON ROOF, PROVIDE ALL CONDUIT, WIRING, RACEWAY, AND BOXES FOR AN OPERABLE SYSTEM. COORDINATE WITH DIVISION 15 FOR EXACT LOCATION.
- S. CONTRACTOR SHALL REFER TO KITCHEN CONSULTANT DRAWINGS SHEETS FOR MORE ELECTRICAL INFORMATION.
- T. ALL KITCHEN DISCONNECTS, ENCLOSE BREAKERS, OR ANY ELECTRICAL GEAR ENCLOSURE SHALL BE NEMA-4X STAINLESS STEEL FINISH.
- U. CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C. EQUIPMENT, PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
- V. ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
- W. ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C. CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- Y. NEMA RATED OUTLETS, REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
- Y. CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.

KEYED NOTES: POWER

- 1 COORDINATE ALL REQUIRED CONNECTION WITH BUILDING FIRE ALARM PANEL AND LOCAL AHJ PRIOR TO COMMENCING ANY WORK.
- 2 PROVIDE J-BOX FOR FIRE SPRINKLER.
- 3 PROVIDE RECEPTACLE FOR CIRCULATING PUMP.
- 4 PROVIDE J-BOX FOR HOOD LIGHTS. LIGHTS CONTROL BY KITCHEN CONTROL PANEL.
- 5 PROVIDE J-BOX FOR FIRE ALARM CIRCUITS.
- 6 PROVIDE 3-2" CONDUITS, 1-FIRE AND 2-SPARES.
- 7 PROVIDE J-BOX FOR FIRE ALARM PANEL/ POWER SUPPLY FOR NEW DEVICES.
- 8 REFER TO SITE PLAN.



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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

DATE
AUG 26, 2019

SHEET NUMBER

E2.1

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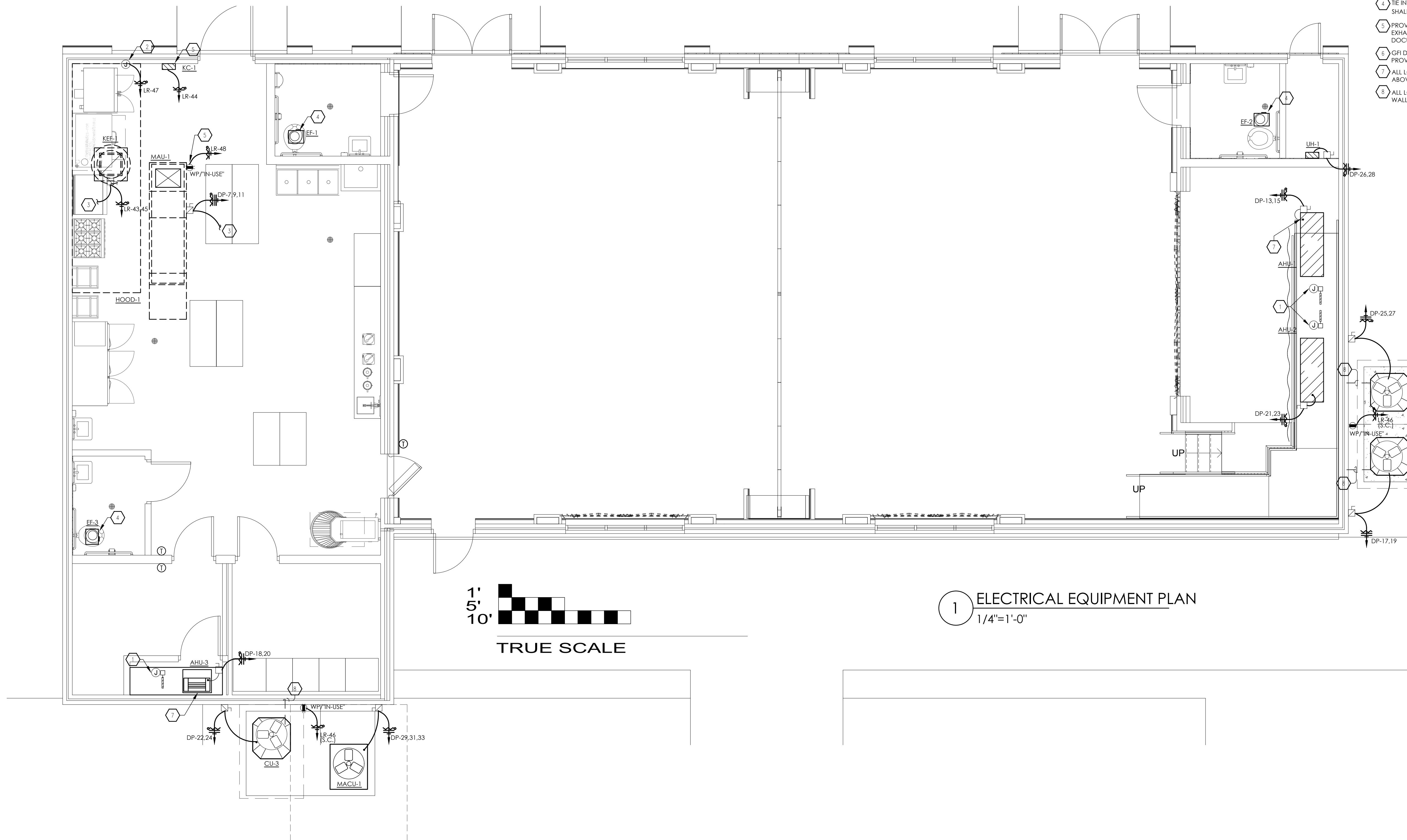
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GENERAL NOTES: ELECTRICAL

- COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C. EQUIPMENT, PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
- COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE W/MECHANICAL DRAWINGS TO MEET ELECTRICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
- COORDINATE EXACT LOCATION OF ISOLATED OUTLETS FOR COMPUTERS WITH OWNER.
- ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C. CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- NEMA RATED OUTLETS, REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
- CONTRACTOR SHALL REFER TO EQUIPMENT SUBMITTAL FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO COMMENCING ANY WORK.

KEYED NOTES: ELECTRICAL

- PROVIDE J-BOX FOR MOTORIZED DAMPERS, SHALL BE IN CIRCUIT LR-33.
- J BOX FOR HOOD SUPPRESSION SYSTEM. FIRE SUPPRESSION SHALL TIE INTO EXISTING FIRE ALARM SYSTEM.
- ROUTE TO KITCHEN KITCHEN VENTILATION CONTROL PANEL SYSTEM. COORDINATE WITH EQUIPMENT SUPPLIER AND MECHANICAL DOCUMENTS PRIOR TO COMMENCING ANY WORK. REFER TO MECHANICAL DOCUMENTS.
- TIE INTO ROOMS LIGHTING CIRCUIT AND INTERLOCK FAN WITH ROOMS LIGHTS. WIRING SHALL BE 2#12, 1#12G, $\frac{3}{4}$ " C.
- PROVIDE J-BOX FOR KITCHEN VENTILATION CONTROL PANEL SYSTEM TO CONTROL LIGHTS, EXHAUST FANS & MAKEUP AIR UNIT. REFER TO MANUFACTURERS INSTALLATION DOCUMENTS & COORDINATE W/ MECHANICAL DOCUMENTS & CONTRACTOR.
- GFI DUPLEX RECEPTACLE LOCATED ON ROOF. PROVIDE ROOF PITCH PAN FOR CONDUIT. PROVIDE WP/"IN-USE" ENCLOSURE FOR RECEPTACLE.
- ALL LOW VOLTAGE HVAC CONTROL WIRING SHALL BE IN CONDUIT, MINIMUM $\frac{3}{4}$ " C TO ABOVE THE CEILING.
- ALL LOW VOLTAGE HVAC CONTROL WIRING SHALL BE IN CONDUIT, MINIMUM $\frac{3}{4}$ " C TO FULL WALL TO ABOVE CEILING.



OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

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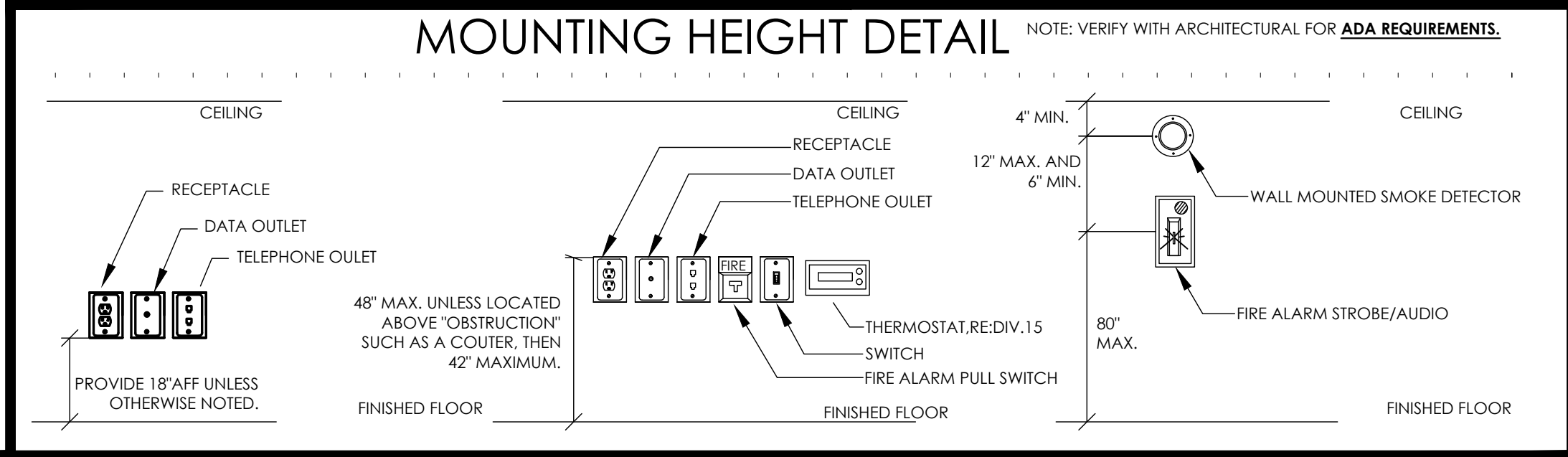


ELECTRICAL LEGEND-LIGHTING	
—ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.	
SYMBOL	DESCRIPTION
	2'x4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'X4' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	2'x2' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'X2' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	1'X4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	TRACK LIGHT WITH HEADS AS INDICATED
	INCANDESCENT, LED, FLUORESCENT, OR HID WALL WASHER LIGHT FIXTURE CEILING MTD, REFER TO LUMINAIRE SCHEDULE
	INCANDESCENT, LED, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	LED, FLUORESCENT, OR HID FIXTURE WITH EMERGENCY BATTERY PACK, CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT SAME AS ABOVE, EXCEPT WITH AN EMERGENCY UNIT AS A COMBO, REFER TO LUMINAIRE SCHEDULE
	CEILING FAN
	STRIP UTILITY LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	STRIP UTILITY STRIP LIGHT WITH EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
\$	WALL SWITCH SPST, 20A,120/277V
\$2	DOUBLE POLE TOGGLE SWITCH, 20A/120/277V
\$3	3-WAY WALL SWITCH, 20A,120/277V
\$4	4-WAY WALL SWITCH, 20A,120/277V
\$D	WALL DIMMER SWITCH
\$P	WALL SWITCH SPST, 20A,120/277V - PILOT LIGHT SWITCH
\$X	WALL SWITCH SPST, 20A,120/277V - KEYED SWITCH, X = 3 OR 4 WAY

ELECTRICAL LEGEND-SPECIAL SYTEMS	
—ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.	
SYMBOL	DESCRIPTION
	WALL MOUNTED TELEPHONE/DATA OUTLET, FURNISH AND INSTALL 1.25", WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED TELEPHONE OUTLET, FURNISH AND INSTALL 1" C, WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	WALL MOUNTED DATA OUTLET, FURNISH AND INSTALL 1.25", WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING, +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.
	PUBLIC TELEPHONE OUTLET - J-BOX & 1" C
	TELEVISION OUTLET. CLG. OR WALL MOUNTED - STUB 1" C, ABOVE CEILING FROM OUTLET BOX
	PUSHBUTTON WALL MOUNTED.
	AUDIO VIDEO DROP, REFER TO DETAIL
	INTERCOM - CALL SWITCH- JBOX WITH 3/4"C
	INTERCOM/PAGING LAY-IN SPEAKER
	PA EXTERIOR SPEAKER 10'-6" AFF
	SECURITY DOOR CONTACT SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX
	SECURITY MOTION DETECTOR SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX
	SECURITY GLASS BREAK SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX
	SECURITY KEY PAD - STUB 3/4"C ABOVE CEILING FROM OUTLET BOX
	SECURITY PANEL JUNCTION BOX 54"
	ACCESS CONTROL PANEL JUNCTION BOX - BY OTHERS 54"
	CARD READER BOX - STUB 3/4"C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	MAGNETIC LOCK BOX - STUB 3/4"C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS
	INTRUSION EXTERIOR SPEAKER 10'-6" AFF
	SINGLE SIDED CLOCK, J-BOX W/3/4"C 96" AFF MIN.
	DOUBLE SIDED CLOCK, J-BOX W/3/4"C 96" AFF MIN.
	CAMERA J-BOX W/ 3/4" CONDUIT ----
	TELEPHONE BOARD- 3/4"x8" FIRE RATED
	DUCT SMOKE DETECTOR: STUB 3/4"C ABOVE CEILING FROM J-BOX

ELECTRICAL ABBREVIATIONS:			
ABBV:	DESCRIPTION	ABBV:	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	MFR.	MANUFACTURER
BFC	BELOW FINISHED CEILING	(S.C.)	SHARE CIRCUIT
C	CONDUIT	QRCPT(S)	QUAD RECEPTACLE(S)
CB	CIRCUIT BREAKER	RCPT(S)	DUPLEX RECEPTACLE(S)
EC	EMPTY CONDUIT	CRCPT(S)	I.G. RECEPTACLE(S)
EX	EXISTING	QCRCPT(S)	QUAD I.G. RECEPTACLE(S)
F	FUSE	SO (S.O.)	SPACE ONLY
G	GROUND (EQUIPMENT)	SP	SPARE
GFI	GROUND FAULT INTERRUPTER	ST (S.T.)	SHUNT TRIP
MTD	MOUNT OR MOUNTED	SW	SWITCH
NF	NONFUSED	UF	UNDERFLOOR
NIC	NOT IN CONTRACT	UG	UNDERGROUND
H.D	HEAVY DUTY	UNO(U.N.O.)	UNLESS NOTED OTHERWISE
NL	NIGHT LIGHT	WG	WIRE GUARD
AC	ABOVE COUNTER	WP	WEATHERPROOF
HT.	HEIGHT	XFMR	TRANSFORMER
MTD.	MOUNTING	WP	WEATHERPROOF
FDR.	FEEDER	XFMR	TRANSFORMER
CKT.	CIRCUIT	MB	MAIN BREAKER
LTG.	LIGHTING	MLO	MAIN LUGS ONLY
LC	LIGHTING CONTACTOR	RMC	RIGID METAL CONDUIT
IG	ISOLATED GROUND	RNC	RIGID NONMETALLIC CONDUIT
EA.	EACH	EMT	ELECTRICAL METALLIC TUBING CONDUIT
N1	NEMA-1	S/N	SOLID NEUTRAL
N3R	NEMA-3R	AC	ABOVE COUNTER
N4X	NEMA-4X	AHJ	AUTHORITY HAVING JURISDICTION
SS	STAINLESS STEEL		
NOTES:			
1.) 48" AFF INDICATES TO TOP OF DEVICE;			
15" AFF INDICATES TO BOTTOM OF DEVICE;			
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.			
AC INDICATES 6" ABOVE COUNTER TO BOTTOM OF DEVICE.			

ELECTRICAL LEGEND-GENERAL	
—ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.	
SYMBOL	DESCRIPTION
	HEAVY DUTY DISCONNECT SWITCH FUSED
	HEAVY DUTY DISCONNECT SWITCH NONFUSED
	HEAVY DUTY COMBINATION DISCONNECT/MOTOR STARTER
	HEAVY DUTY MOTOR STARTER
	ENCLOSED BREAKER, RE. TO SCH. FOR MORE INFO.
	ROTARY TYPE DISCONNECT SWITCH
	120/277-208/480V 20AMP, MOTOR RATED SWITCH, NEMA-1 (INTERIOR) ENCLOSURE, NEMA-3R (EXTERIOR) ENCLOSURE. VOLTAGE TO BE SELECTED PER EQUIPMENT CIRCUIT REQUIREMENTS.
	MOTOR
	PANELBOARD, CLEARANCE AS PER LATEST NEC SWITCH LEG
	ELECTRICAL CONDUIT
	UNDERGROUND ELECTRICAL CONDUIT
	COMMUNICATION CONDUIT AND WIRING
	MULTI-POLE DEVICE CIRCUIT NUMBERS
	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS
	CONDUIT AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATES OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	UNDERGROUND CONDUIT, AND WIRE HOMERUN TO PANEL, SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS, AND LONG HATCH WITH CIRCLE INDICATES ISOLATED OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
	DETAIL NUMBER
	SHEET NUMBER
	THERMOSTAT WALL MOUNTED - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX. COORDINATE EXACT LOCATION AND HEIGHT WITH MECHANICAL DIVISION.
	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED MINIMUM OF 4" SQUARE
	PHOTO CELL (MFR.INTERMATIC #K4136M)
	LIGHTING CONTACTOR, NEMA-1, W/H.O.A. SWITCH
	TIME CLOCK (MFR.TORK #72022)
	CIRCULATING PUMP
	ELECTRICAL DEVICE AS SHOWN ON PLANS SURFACE MOUNT RACEWAY. SURFACE MOUNT RACEWAY SHALL BE WIREMOLD #V700 SERIES. PROVIDE ALL RELATED #V700 SERIES ACCESSORIES FOR AN OPERABLE SYSTEM.



ELECTRICAL LEGEND-FIRE ALARM	
—ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.	
SYMBOL	DESCRIPTION
	FIRE ALARM PULL STATION: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FIRE ALARM AUDIBLE/VISUAL SIGNAL: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FIRE ALARM VISUAL SIGNAL: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FIRE ALARM CEILING MOUNT SPEAKER STROBE, UL LISTED. : J-BOX WITH 3/4"C
	FIRE ALARM CEILING WALL MOUNT OUTDOOR SPEAKER STROBE, UL LISTED. : J-BOX WITH 3/4"C
	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED: STUB 3/4"C ABOVE CEILING FROM J-BOX
	HEAT DETECTOR CEILING OR WALL MOUNTED: STUB 3/4"C ABOVE CEILING FROM J-BOX
	DUCT SMOKE DETECTOR: STUB 3/4"C ABOVE CEILING FROM J-BOX
	SMOKE DETECTOR WITH AN AUDIBLE BASE: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FIRE ALARM CONTROL PANEL, ADDRESSABLE, SURFACE MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM, ADDRESSABLE, FLUSH MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
	FIRE ALARM EMERGENCY VOICE EVACUATION SYSTEM, FLUSH OR SURFACE.
	FIRE ALARM REMOTE ANNUNCIATOR PANEL, FLUSH MOUNTED UNO
	POWER SUPPLY, DEDICATED 110V
	DOOR HOLDER DEVICE: STUB 3/4"C ABOVE CEILING FROM J-BOX
	TAMP SWITCH: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FLAME SWITCH: STUB 3/4"C ABOVE CEILING FROM J-BOX
	FIRE ALARM OUTDOOR SPEAKER, WEATHER PROOF: STUB 3/4"C ABOVE CEILING FROM J-BOX

ELECTRICAL LEGEND - WIRING DEVICES	
—ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.	
	SINGLE RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	HOSPITAL GRADE DUPLEX RECEPTACLE/GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT, WEATHER RESISTANT "WR", GFI INSTALLED IN A "IN-USE" WEATHER PROOF, STEEL ENCLOSURE - 20A/125V/2P/3W/G NEMA 5-20R W/ "IN-USE" SHALL BE EQUAL TO MFR. CARLON METALLIC SERIES SINGLE GANG, VERTICAL MOUNT #MEPU2VMG DOUBLE GANG, VERTICAL MOUNT #MEPU2VMG
	QUADRUPLEX RECEPTACLE
	ISOLATED GROUND QUADPLEX RECEPTACLE
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R
	208V RECEPTACLE, VERIFY NEMA NO. WITH EQUIPMENT SUPPLIER
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. AS INDICATED)
	J-BOX - AIR HAND DRYER; (RECESSED HAND DRYERS TO BE PROVIDED BY DIVISION 16. ELECTRICAL) #B-750 AUTOMATIC HANDCRAFT AS MANUFACTURER BY BOBICK, (COLOR WHITE) QUANTITY: REFER TO DRAWINGS (MIN. ONE PER LAV. COMPLETE W/ ELE. CONNECTIONS TYP.)
	2-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE) FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#CFB2G30CR-CFB51R8CVRALU(COVER)-(2)FBMPDUP-FBMPBNK (MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	4-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FLOOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#CFB4G30CR-CFB51R8CVRALU(COVER)-(2)FBMPDUP-FBMPBNK (MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FLOOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#CFB6G30CR-CFB51R8CVRALU(COVER)-(3)FBMPDUP-FBMP&KS (MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6" FIRE RATED POKE-THROUGHS BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE) -MFR.-HUBBELL MODEL#S1R6PTFS11R6SP-S1R6SP-S1R6SPH(SO/SO DEVICE PLATE COMBINATION)-S1R6CVRALU(COVER) -VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
	6" FIRE RATED POKE-THROUGHS BOX, FURNITURE FEED - MFR.-HUBBELL MODEL#S1R6PTFALU(ALUMINUM COVER) -VERIFY FLOOR FINISH PRIOR TO ORDER.

GENERAL ELECTRICAL NOTES	
1.	ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR ON THIS SET OF DRAWINGS.
2.	USE DIRECTIONAL ARROW ON EXIT SIGNS AS REQUIRED.
3.	IEEE STANDARD C37.2-1991, ELECTRICAL POWER SYSTEM DEVICE FUNCTION NUMBERS.
4.	CONTRACTOR SHALL NOT INSTALL MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY. IF CONTRACTOR IS PLANNING ON GROUPING MULTIPLE CIRCUITS IN A SINGLE RACEWAY, THE CONTRACTOR MUST SUBMIT ALL DERATING CALCULATIONS FOR THE PROPOSED INSTALLATION IN ACCORDANCE WITH NEC ARTICLE 310.15 (B) (2) FOR APPROVAL PRIOR TO INSTALLATION. NON APPROVED INSTALLATIONS WILL BE REMOVED AND REINSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE NEC AT NO ADDITIONAL COST TO THE OWNER.
5.	THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF THREE 90° BENDS (270 DEGREES TOTAL) BETWEEN PULL POINTS. WHERE THERE ARE MORE THAN THREE QUARTER BENDS, CONTRACTOR SHALL PROVIDE PULL BOXES AS SPECIFIED AND SIZED IN ACCORDANCE WITH NEC.
6.	COMPLY WITH NEC REQUIREMENTS FOR ELECTRICAL INSTALLATIONS. ALL ELECTRICAL EQUIPMENT AND MATERIAL TO BE APPROVED, LISTED, LABELED, IDENTIFIED AND INSTALLED PER RECOGNIZED ELECTRICAL TESTING LABORATORY.
7.	ALL RECEPTABLES, SWITCHES AND JUNCTION BOXES SERVED BY EMERGENCY BRANCH CIRCUITS SHALL BE "RED" IN COLOR. COVERPLATES SHALL BE LABELED IN ACCORDANCE WITH SPECIFICATIONS TO INDICATE PANELBOARD AND CIRCUIT NO. (IE: E1*LA-3).

LUMINAIRE SCHEDULE					
MARK	VOLTAGE	LAMP	MOUNTING	DESCRIPTION	MODEL NO.
A	120V	LED 60W 3000K	PENDANT	ARCHITECTURAL DECORATIVE PENDANT	WAC LIGHTING QMP-LED311-3/12-MR
B	120V	LED 1500LM 4000K 11W	RECESSED	6"LED OPEN DOWN- LUMINAIRE, SEMI-SPECULAR REFLECTOR, WITH 0-10V DRIVER	HALO HC615D010-HM612840-61-WD-C
B2	120V	LED 2000LM 3500K 22W	RECESSED	6"LED OPEN DOWN- LUMINAIRE, SEMI-SPECULAR REFLECTOR, WITH 0-10V DRIVER	HALO HC62000D010-HM612835-61-WD-C
B2E	SAME AS TYPE B2E EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
C	120V	LED 3200 LM 4000K 32W	RECESSED	2'X2' LED TROFFER FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	METALUX 22FP3240C
CE	SAME AS TYPE 'CE' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
D	120V	LED 4600LM 3500K 42W	SURFACE	14" DIAMETER LED ARCHITECTURAL DECORATIVE CEILING MOUNTED	WAC LIGHTING PM-4313-35-CH
F	120V	LED 4700LM 4000K 41W	RECESSED	2'X4' LED TROFFER FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	METALUX 24FP4740C
FE	SAME AS TYPE 'FE' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK				
G	120V	LED 3200 LM 3500K 32W	SURFACE	4" LED SQUARE VANITY FIXTURE	METALUX 4BCELED-LD4-32SL-F-UNV-L835-CD1
E	120V	INCLUDED	SURFACE	EMERGENCY LIGHTING UNIT W/ SELF-DIAGNOSTICS	SURE-LITES AFLX7RG
E2	120V	INCLUDED	SURFACE @8'-0"	EMERGENCY LIGHTING UNIT W/ SELF-DIAGNOSTICS	SURE-LITES AEL2-31-WH
H	120V	LED 3500K 32W	SURFACE	48" TRANSLUCENT ACRYLIC FIXTURE	CAMMAN LIGHTING P67899-48
J2	120V	LED 2800LM 4000K 29W	SURFACE	2' LED STRIP FIXTURE	METALUX LIGHTING 2BCELED-LD4-28HL-F-UNV-840
J4	120V	LED 2800LM 4000K 29W	SURFACE	4' LED STRIP FIXTURE	METALUX LIGHTING 4BCELED-LD4-28HL-F-UNV-840
K	120V	LED 2000LM 3500K	PENDENT	4" LED CYLINDER, 0-10V DIMMING, UL LISTED	LITHONIA LDN4CYL-35/20-LO4-AR-LSS-MVOLT-G210-PM-DNA
T	120V	LED 4-42W 3000K	SURFACE	6" TRACK WITH 4 LED HEADS, COLOR OPTICS BEAM CONTROL ACCESSORIES TO BE CHOSEN BY OWNER.	TRACK: WAC LIGHTING# J2-TB-XX HEAD: WAC LIGHTING# J-2042-930-XX
X1	120V	LED	SURFACE	LED THERMOPLASTIC EXIT COMBO WITH EMERGENCY UNIT WITH SELF-DIAGNOSTICS	SURE-LITES AFLC7RG
AA	120V	LED 3200 LM 3500K 32W	SURFACE @10'-0"	LED WALL LUMINAIRE, WET LOCATION RATED, UL LISTED	COOPER LIGHTING GWC-1.0A-01-LED-E1-T3-AP-AHD245
BB	120V	LED 3200 LM 3500K 32W	SURFACE @10'-0"	LED WALL LUMINAIRE, WET LOCATION RATED, UL LISTED	COOPER LIGHTING GWC-600MA-01-LED-E1-T3-AP-AHD245

- NOTE:
- 1.) EQUAL MANUFACTURER SHALL BE ACCEPTABLE WITH EQUAL PERFORMANCE OF SPECIFIED EQUIPMENT AND APPROVED BY ENGINEER.
 - 2.) SUBMIT EQUAL MANUFACTURES TO ENGINEER 10 DAYS PRIOR TO BID DATE.
 - 3.) SUBMIT LIGHT FIXTURE CUTSHEETS TO OWNER FOR APPROVAL PRIOR TO ORDER.
 - 4.) CONTRACTOR SHALL VERIFY THAT ANY IRRIGATION SPRINKLER HEAD IS AWAY FROM ANY LIGHT POLE A MINIMUM OF 75' TO AVOID CONSISTENT WATER TO LIGHT POLE. COORDINATE WITH IRRIGATION CONTRACTOR PRIOR TO ANY WORK.
 - 5.) CONTRACTOR SHALL VERIFY THAT ANY LIGHT POLES ON COMMON AREAS AND SIDE WALKS, THAT THE LOCATION OF THE POLE TO MEET THE ADA REQUIREMENTS.
 - 6.) CONTRACTOR SHALL FIELD VERIFY FOR EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.



OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055
PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

DATE
AUG 26, 2019

SHEET NUMBER

E3.1

TRINITY
MEP ENGINEERING
3533 Moreland Dr. Ste A | Weslaco, TX 78596
p:956.973.0500 | f:956-351-5750
www.trinitymep.com | Copyright 2019
Texas Registered Engineering Firm - F10082
Project number: 19.3.6



120/208V, 3Ø, 4W ELECTRICAL LOAD ANALYSIS		
DESCRIPTION	TOTAL KVA	
LIGHTING	4	
GENERAL POWER	21	
A/C	55	
WATER HEATER	8.5	
EQUIPMENT	43	
TOTAL WATTS:	131	KVA
TOTAL AMPS:	315	AMPS
TOTAL AMPS+25%:	394	AMPS
WIRE SIZE AMPS:	400	AMPS

DISCONNECT SCHEDULE	
LABEL	DESCRIPTION
AHU-1,2,3	60AMP, 1Ø, 3W, N1,240V, S/N, N.F., H.D. DISCONNECT
CU-1,2,3	60AMP, 1Ø, 3W, N3R,240V, S/N, H.D. FUSED DISCONNECT
IWH-1	30AMP, 1Ø, 3W, N1,120V, S/N, N.F., H.D. ROTARY TYPE DISCONNECT
WH-1	60AMP, 1Ø, 3W, N1,240V, S/N, N.F., H.D. ROTARY TYPE DISCONNECT

NOTE: 1. REFER TO BREAKER SIZE FOR FUSE SIZE.
2. REFER TO PANELBOARD FOR DISCONNECT PHASES AND VOLTAGE.

GENERAL NOTES:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
- F. PROVIDE 4"CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
- G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS, INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.
- I. ELECTRICAL SERVICE 480/277V 1000AMPS OR MORE SHALL INCLUDE GROUND FAULT PROTECTION.
- J. ELECTRICAL SERVICE 120V THRU 480V 1000AMPS OR MORE SHALL INCLUDE AN ARC REDUCTION MAINTENANCE SWITCH. COORDINATE EXACT LOCATION OF SUCH SWITCH.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1 PROVIDE 1-RUN 4#600KCMIL, 1#3G, 4"C.
- 2 EXISTING GOULD ITE SWITCHBOARD 120/240V, 3Ø, 4W SWITCHBOARD. FIELD VERIFY EXISTING "CAFETERIA BREAKER" SIZE BREAKER AND VERIFY CONDITIONS PRIOR TO ANY WORK.
- 3 EXISTING ITE SWITCHBOARD 120/240V, 3Ø, 4W 800AMPS NEMA-3R TO REMAIN. PROVIDE 1-400AMP 3-POLE BREAKER IN SPACE AVAILABLE. PROVIDE ALL NEW MOUNTING HARDWARE KIT FOR NEW BREAKER.

LIGHTING CONTROL SENSORS LEGEND

SYMBOL	ACUITY MODEL NUMBER	CONDUIT	COMMENTS
§ OS2	WSX-PDT-SA	3/4"C	
[LCP]	BLUE BOX LT	RE: PLANS	LIGHTING CONTROL RELAY PANEL. REFER TO RELAY PANEL SCHEDULE.
§ SW1	nPODM-2LAB-WH	3/4"C	WALL MOUNT SWITCH WITH ON/OFF WITH RAISE /LOWER FUNCTION AND WITH STAINLESS STEEL PLATE
§ PS	nPODM-4S(B)	3/4"C	WALL MOUNT SWITCH WITH ON/OFF WITH RAISE /LOWER FUNCTION AND WITH STAINLESS STEEL PLATE

- GENERAL NOTES:
- A. CONTRACTOR SHALL REFER TO MANUFACTURERS INSTRUCTIONS AND WIRING DIAGRAMS PRIOR TO BID DATE.
- B. CONTRACTOR SHALL INCLUDE ALL COST IN BID FOR AN OPERABLE LIGHTING SYSTEM.
- NOTES:
- All sensor locations are approximate, refer to manufacturers installation instructions prior to installation.
 - Ultrasonic ceiling mount sensors should be located a minimum of six feet from HVAC supply/return vents.
 - Contractor is responsible for: proper sensitivity & time delay settings (for non-adaptive products) recommended placement, and field verification of circuits with in respect to power placement.
 - Contractor is responsible for field verification of required number of power packs:
 - One power pack is required for each circuit to be controlled.
 - One power pack is required for every three sensors in the zone.
 - If multiple circuits are to be controlled by a sensor, an auxiliary relay can be used in conjunction with the power pack.
 - The maximum number of sensors that can be put on a power pack is to be reduced by one for each slave pack used.
 - Sensors mounted over the door must be placed one foot inside the threshold.
 - Contractor is responsible for ensuring that the sensor bill of materials complies with the sensor design and layout specifications.
 - Contractor is responsible for installing equipment in compliance with local code.
 - Refer to manufacturers wiring diagrams.
 - NOTE: Contractor shall include all cost for a manufacturer certified technician to provide a complete training session to owner representatives. Training shall include but not limited to the following: calibrate sensors settings, programming existing conditions and how to add new circuits, trouble shooting, overview of panel and any request from owner. Training may take days; contractor/manufacturer shall include all cost in bid. Contractor shall notify owner/Architect/Engineer on the day for the training. Technician shall calibrate all sensors to owners desire, include cost for technician to provide service after the job is complete.

OLD SORENSEN ELEMENTARY
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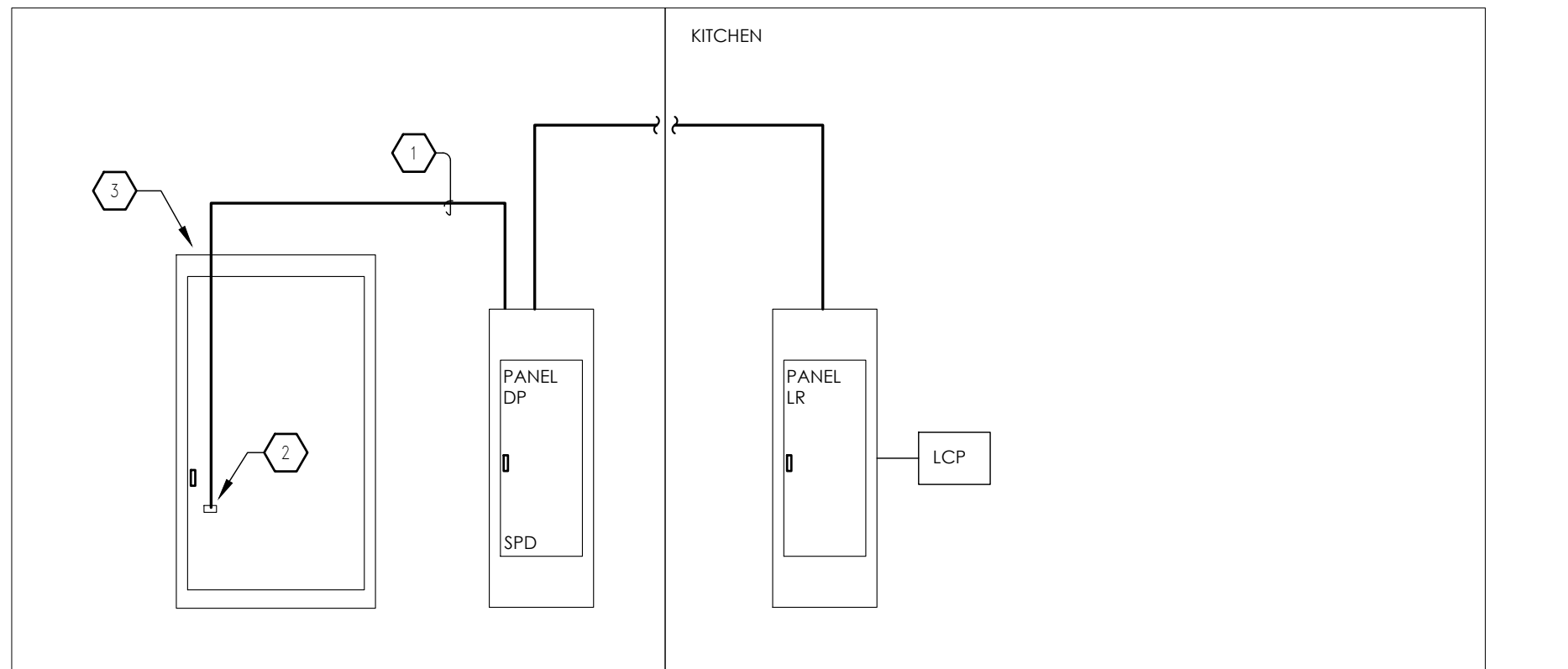
PSJA ISD
SAN JUAN, TEXAS

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DATE
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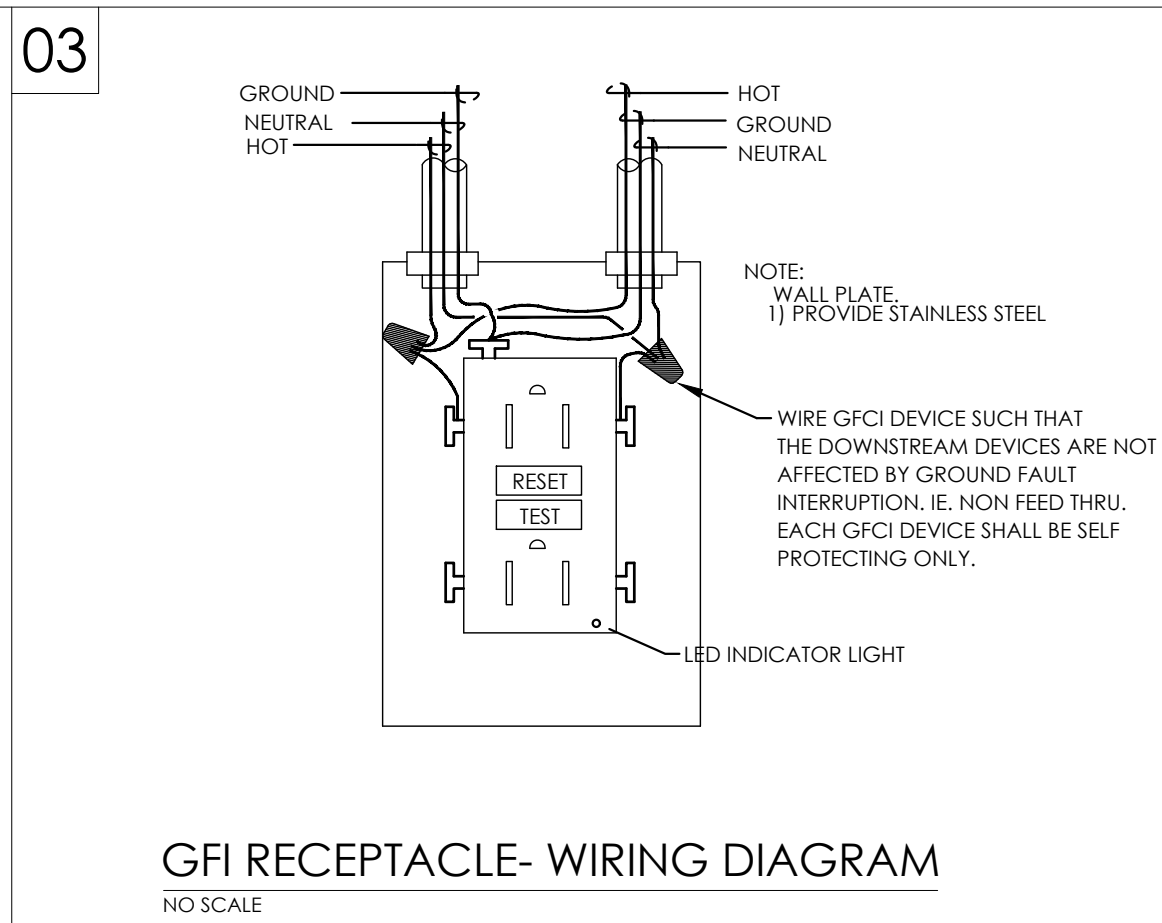
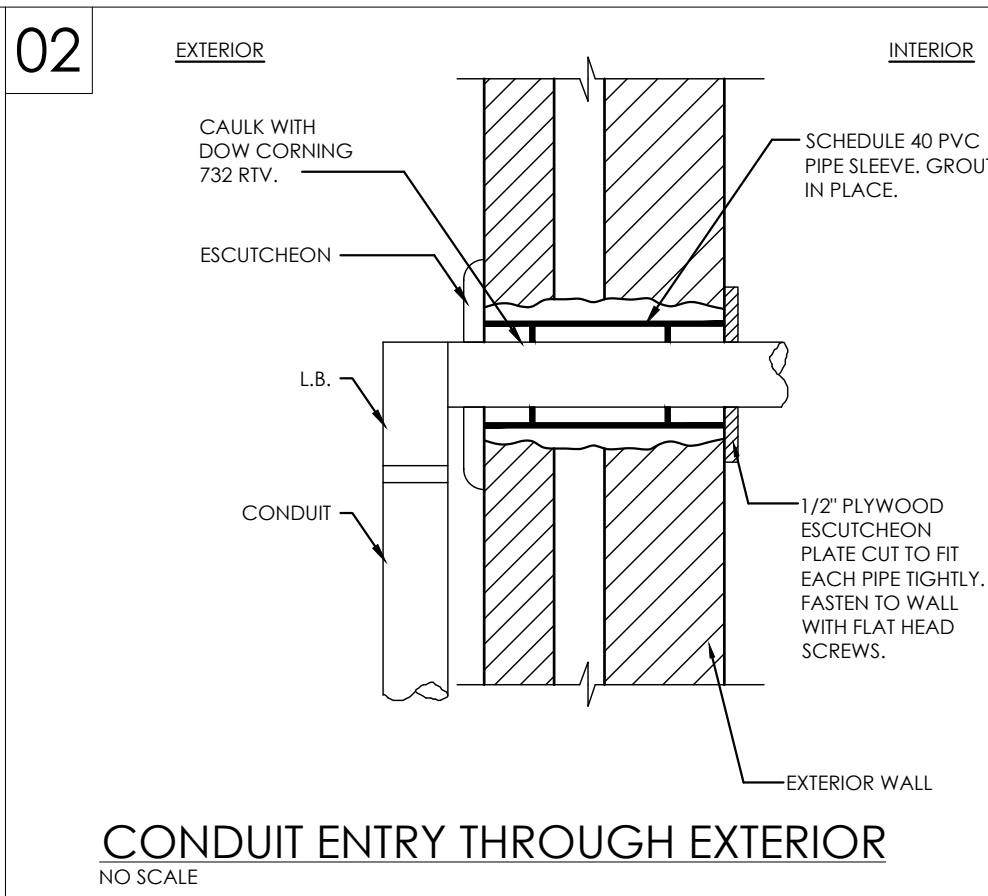
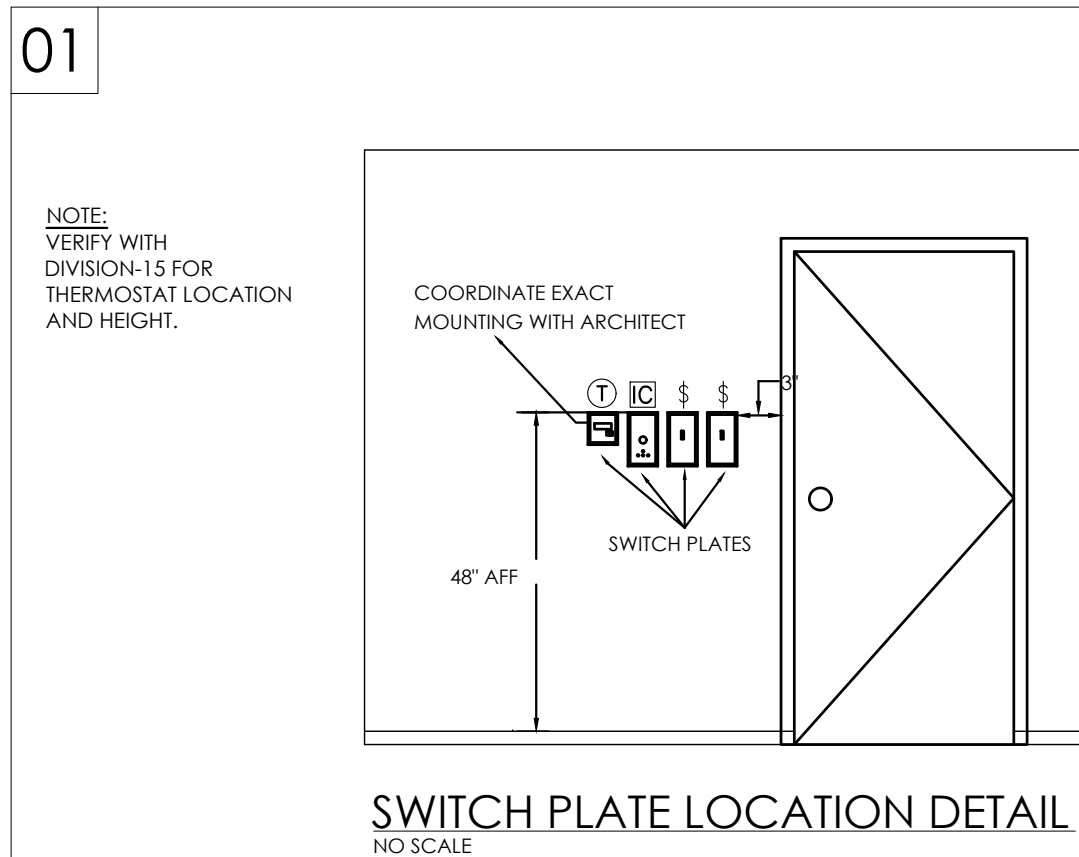
E4.1



1 ELECTRICAL SCHEMATIC DIAGRAM
SCALE: NTS

PANEL-LR LOCATION:	AMP 225	LUGS MLO	NEMA 1	V(LL) 240		(P) 1	(W) 3		V(LN) 120	MNT FLU	KAIC 25	FDR 1-RUN 3#4/0, 1#4G, 2 1/2"C	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
EMERGENCY/EXITS	1	0.6	20	1	2#10, 1#10G, 3/4"C	*		2#8, 1#10G, 3/4"C	1	20	0.6	2	LIGHTING
CONF LTG 304	3	0.3	20	1	2#6, 1#10G, 1"C	*	*	2#10, 1#10G, 3/4"C	1	20	0.6	4	KITCHEN LTG
CONF LTG 304	5	0.3	20	1	2#6, 1#10G, 1"C	*		2#8, 1#10G, 3/4"C	1	20	0.6	6	EXTERIOR LIGHTING
CONF LTG 304	7	0.3	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.3	8	CONF LTG 304
STAGE LTG AREA	9	1	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.3	10	CONF LTG 305
CONF LTG 305	11	0.3	20	1	2#12, 1#12G, 1/2"C	*	*	-	1	20	0.3	12	CONF LTG 305
CONF LTG 305	13	0.3	20	1	2#12, 1#12G, 1/2"C	*		2#10, 1#10G, 3/4"C	1	25	2.4	14	IRW-1
10-MIXER	15	1.92	20	2	3#10, 1#10G, 3/4"C	*	*	2#12, 1#12G, 1/2"C	1	20	3	16	3 RCPTS
"	17	1.92			-	*		3#12, 1#12G, 1/2"C	2	20	1.6	18	9-TORTILLA PRESS
8-BLENDER	19	1.6	20	1	2#12, 1#12G, 1/2"C	*	*	-			1.6	20	"
8-BLENDER	21	1.6	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	1.2	22	1 RCPT
6-REFRIGERATOR	23	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	24	1 RCPT
1,J 3-TOP GAS RANGE	25	0.4	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1	26	5 RCPTS
1,J 4-GAS FLAT GRILL	27	0.4	20	1	2#12, 1#12G, 1/2"C	*	*	-	1	20	1.2	28	6 RCPTS
CIRCULATING PUMP	29	0.2	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.6	30	3 RCPTS
FIRE SPRINKLER	31	0.6	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1	32	5 RCPTS
MOTORIZED DAMPERS	33	0.6	20	1	2#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	1.2	34	1,J 2-BAKING OVEN
QUAD STAGE	35	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	2#10, 1#10G, 3/4"C	1	35	3	36	WH-1
QUAD STAGE	37	0.8	20	1	2#12, 1#12G, 1/2"C	*	*	-			3	38	"
1 RCPT	39	0.6	20	1	2#12, 1#12G, 1/2"C	*	*	-				40	SPARE
2 RCPTS	41	0.4	20	1	2#12, 1#12G, 1/2"C	*	*	-				42	SPARE
SPARE	43				-	*	*	-				44	SPARE
SPARE	45				-	*	*	-				46	SPARE
SPARE	47				-	*	*	-				48	SPARE
SPARE	49				-	*	*	-				50	SPARE
SPARE	51				-	*	*	-				52	SPARE
SPARE	53				-	*	*	-				54	SPARE
SPARE	55				-	*	*	-				56	SPARE
SPARE	57				-	*	*	-				58	SPARE
SPARE	59				-	*	*	-				60	SPARE
SPARE	61				-	*	*	-				62	SPARE
SPARE	63				-	*	*	-				64	SPARE
LOADS	-	(KVA)				25	24			(KVA)	-		DESCRIPTIVE LOADS
CONNECTED LOAD	-	49					KVA/PHASE			6	-		LIGHTING
RESERVE	0	0								31	-		RECEPTACLES
TOTAL LOAD	-	49								0	-		COOLING
										3	-		EQUIPMENT
TOTAL AMPS	-	202								8	-		OTHER
NOTES: 1) PROVIDE SHUNT BREAKER, INTERLOCK WITH FIRE SUPPRESSION SYSTEM. 2) 3)													

PANEL-DP	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR		
LOCATION:	400	MLO	3R	240		3	4		120	SUR.	65	1-RUN 4#600KCMIL, 1#3G, 4"C		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	C	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
2) 1-DOUBLE OVEN	1	8.3	70	3	4#4, 1#8G, 1 1/2"C	*			4#12, 1#12G, 1/2"C	3	20	0.8	2	7-FOOD PROCESSOR
"	3	8.3			-	*			-			0.8	4	"
"	5	8.3			-	*			-			0.8	6	"
MAU-1	7	5.67	50	3	4#6, 1#10G, 1"C	*			4#12, 1#12G, 1/2"C	3	20	0.8	8	7-FOOD PROCESSOR
"	9	5.67			-	*			-			0.8	10	"
"	11	5.67			-	*			-			0.8	12	"
AHU-1	13	7.2	60	2	3#6, 1#10G, 1"C	*			3#4/0, 1#4G, 3"C	2	225	25	14	PANEL-LR
"	15	7.2			-	*			-			24	16	
CU-1	17		60	2	3#6, 1#10G, 1"C	*			3#6, 1#10G, 1"C	2	50	6	18	AHU-3
"	19				-	*			-			6	20	"
AHU-2	21	6	50	2	3#6, 1#10G, 1"C	*			3#6, 1#10G, 1"C	2	60	22	22	CU-3
"	23	6			-	*			-			24		"
CU-2	25		45	2	3#6, 1#10G, 1"C	*			3#12, 1#12G, 1/2"C	2	20	0.5	26	UH-1
"	27				-	*			-			0.5	28	"
MACU-1	29		45	2	3#6, 1#10G, 1"C	*			-			30		SPARE
"	31				-	*			-			32		SPARE
"	33				-	*			-			34		SPARE
SPARE	35				-	*			-			36		SPARE
SPD	37		60	3	4#6, 1#10G, 1"C	*			-			38		SPARE
"	39				-	*			-			40		SPARE
"	41				-	*			-			42		SPARE
LOADS	-	(KVA)				54	53	28	(KVA)	-	DESCRIPTIVE LOADS			
CONNECTED LOAD	-	135							0	-	LIGHTING			
RESERVE	0	0							0	-	RECEPTACLES			
TOTAL LOAD	-	135							30	-	EQUIPMENT			
									56	-	HEATING			
TOTAL AMPS	-	324							49	-	OTHER			
NOTES: 1) PROVIDE INTEGRAL SURGE PROTECTION DEVICE, 160KA 2) PROVIDE SHUNT BREAKER, INTERLOCK WITH FIRE SUPPRESSION SYSTEM. 3)														



OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

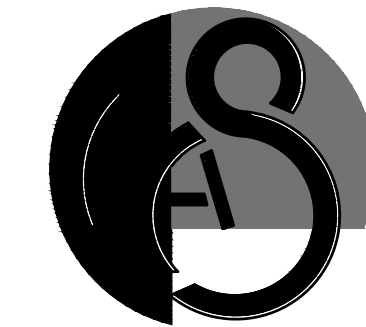
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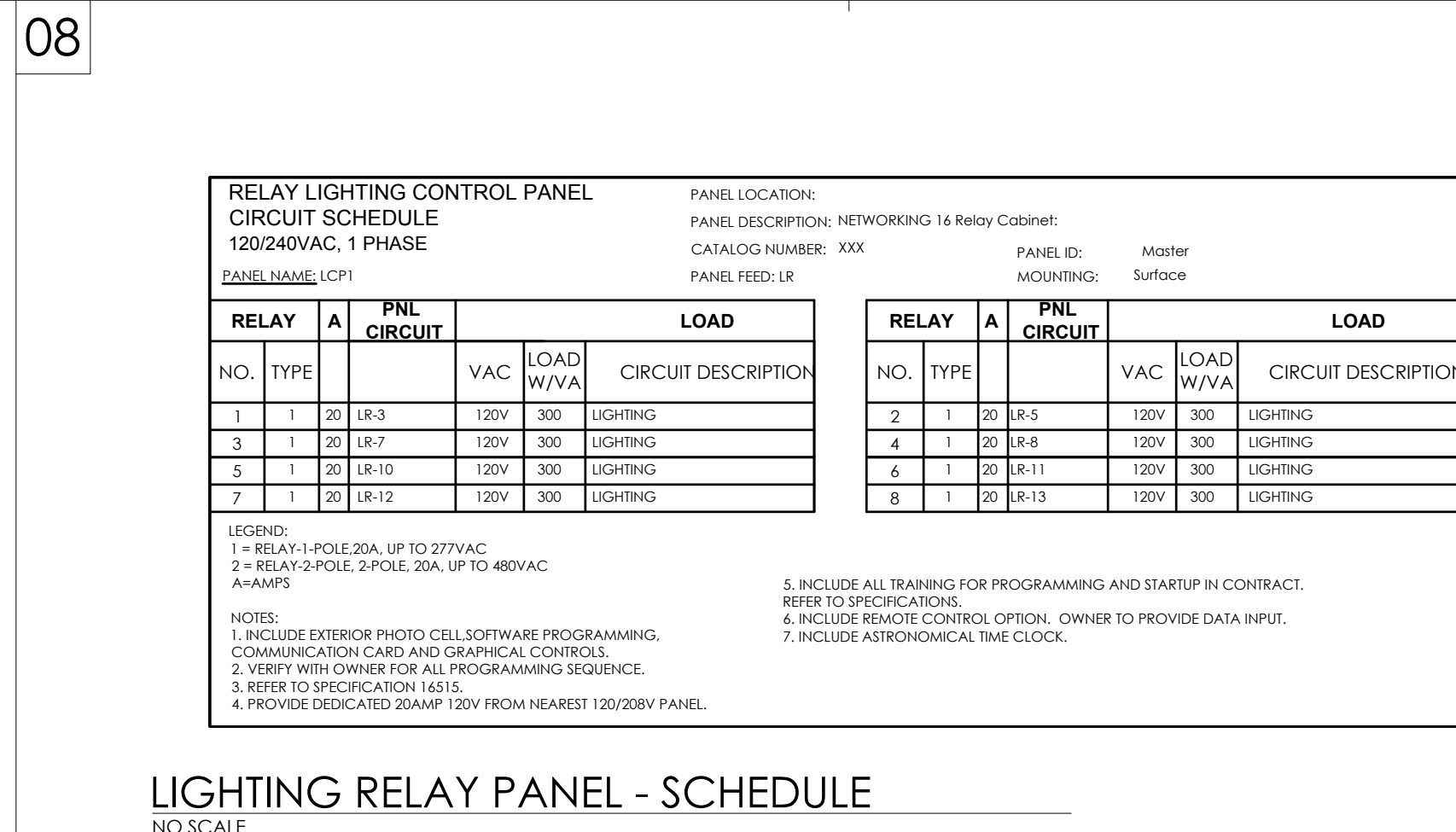
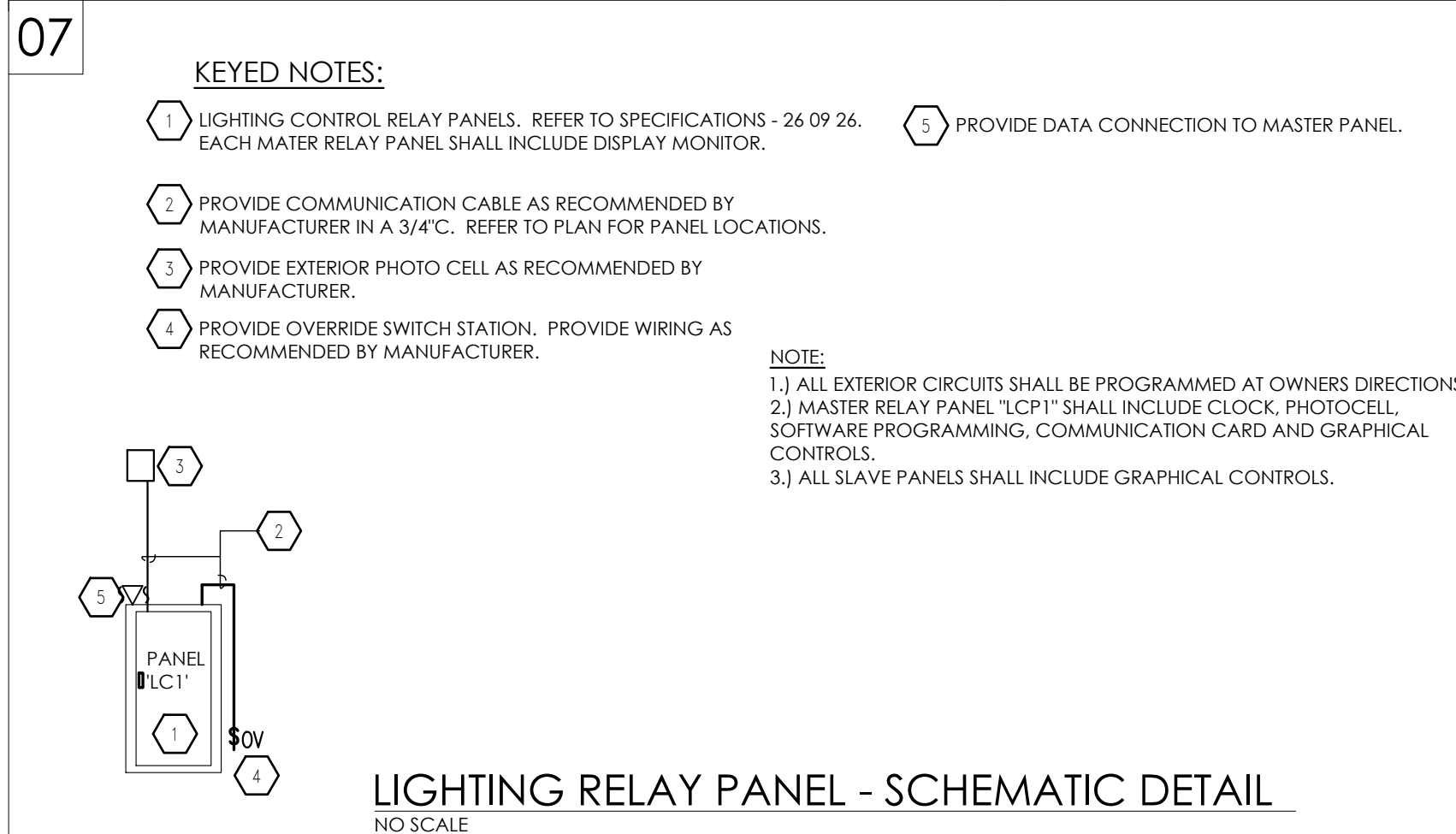
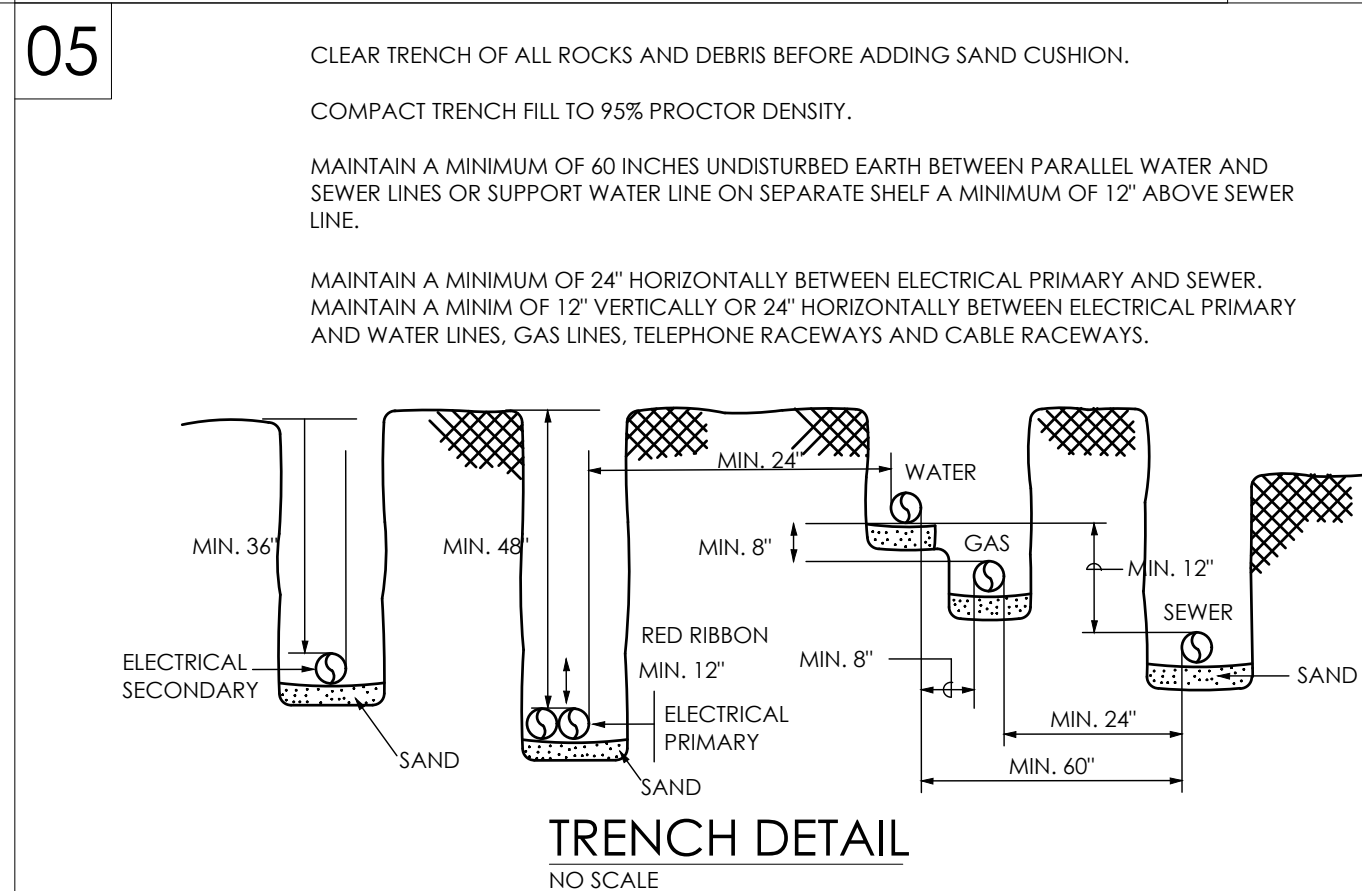
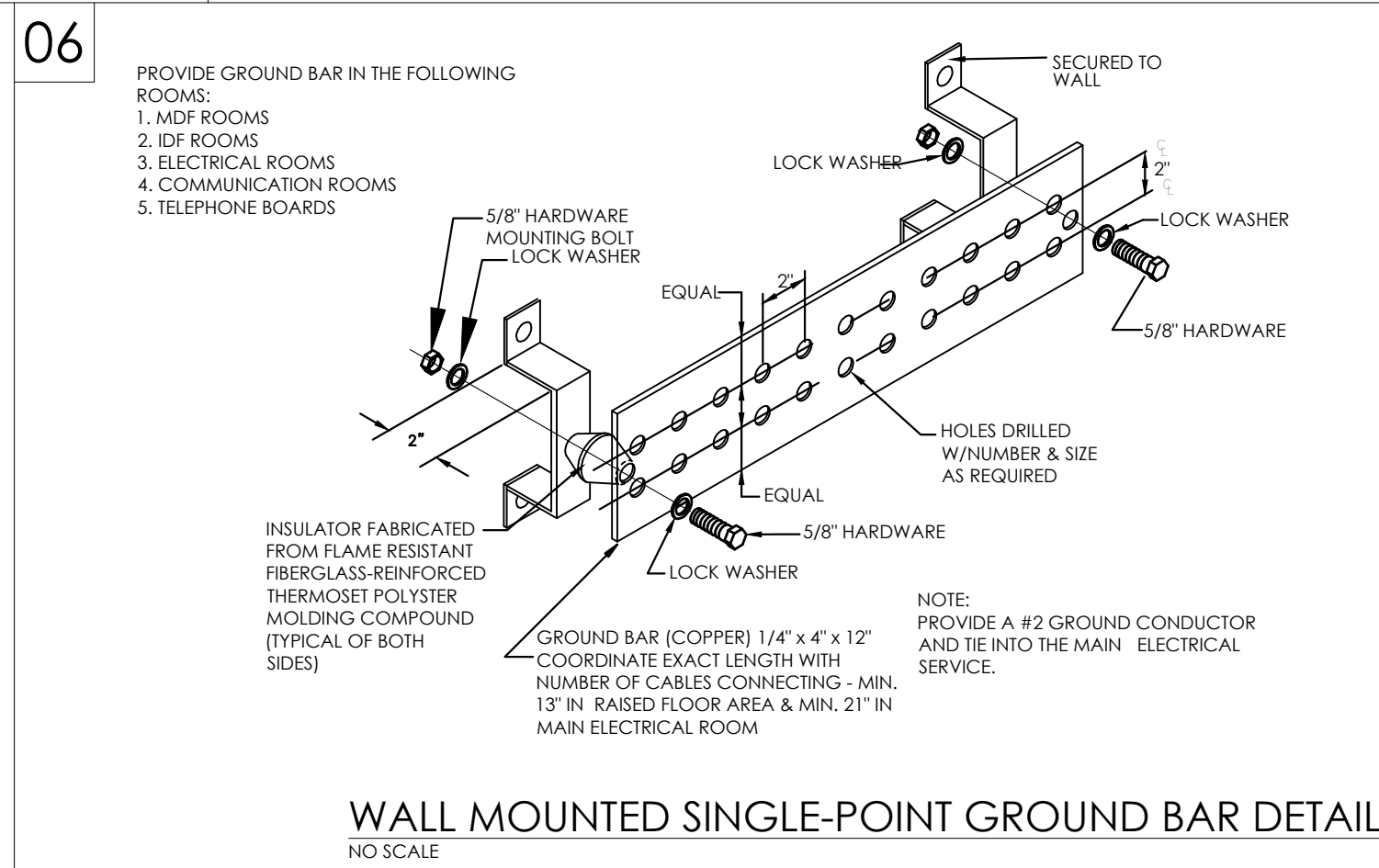
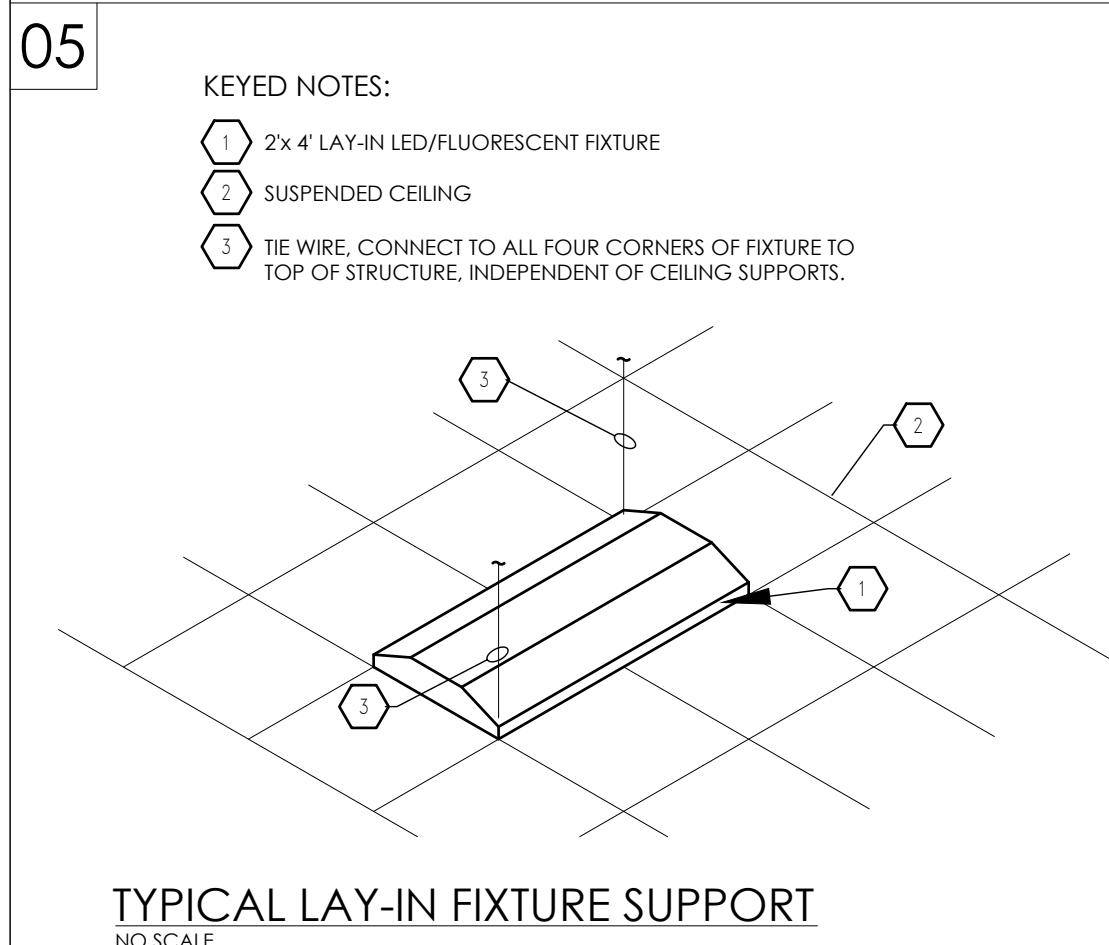
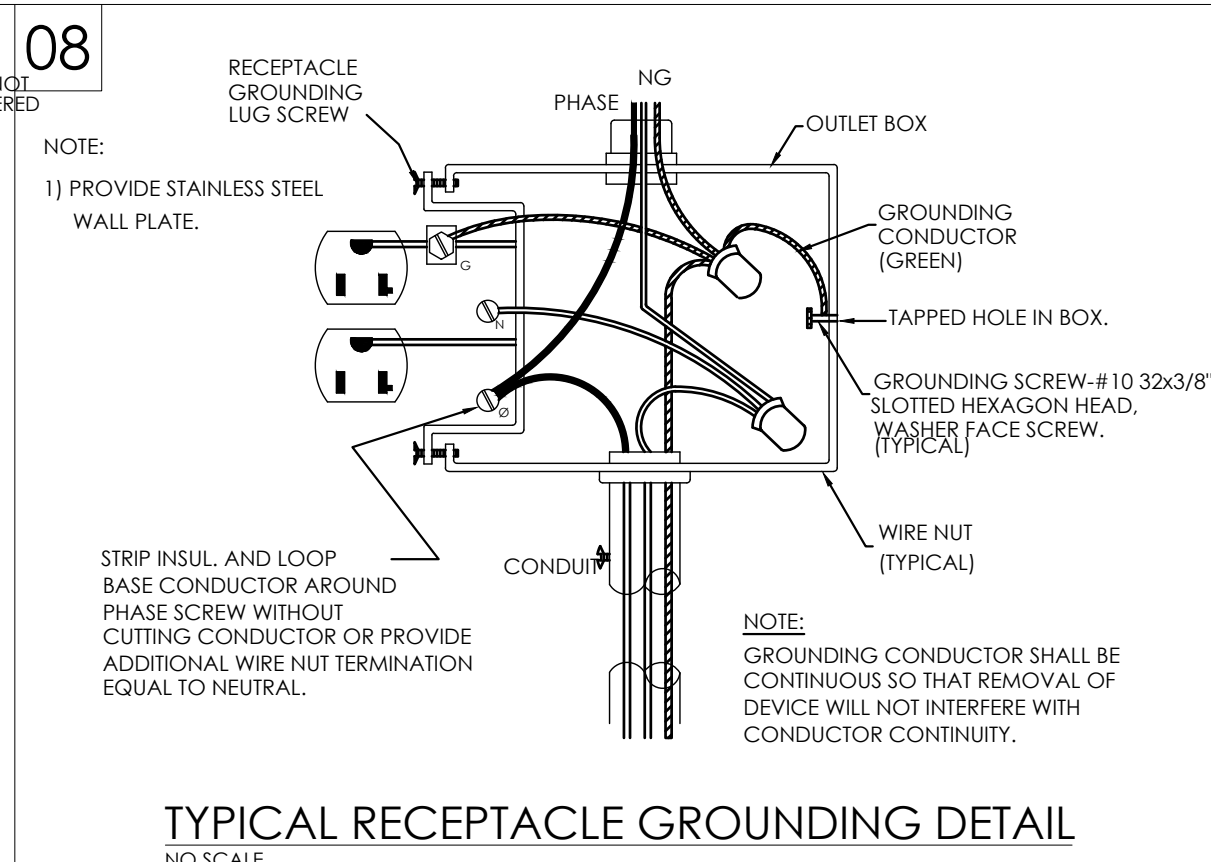
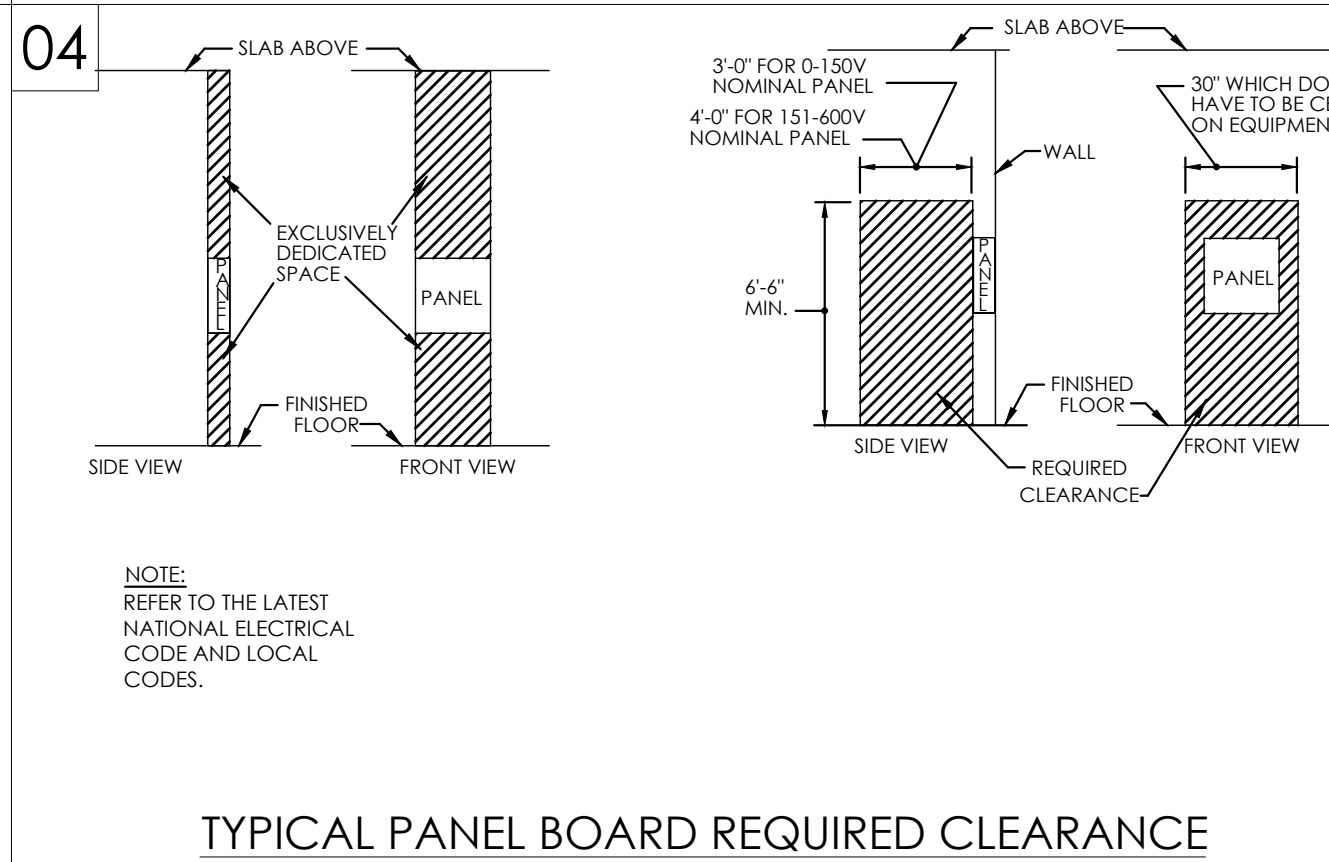
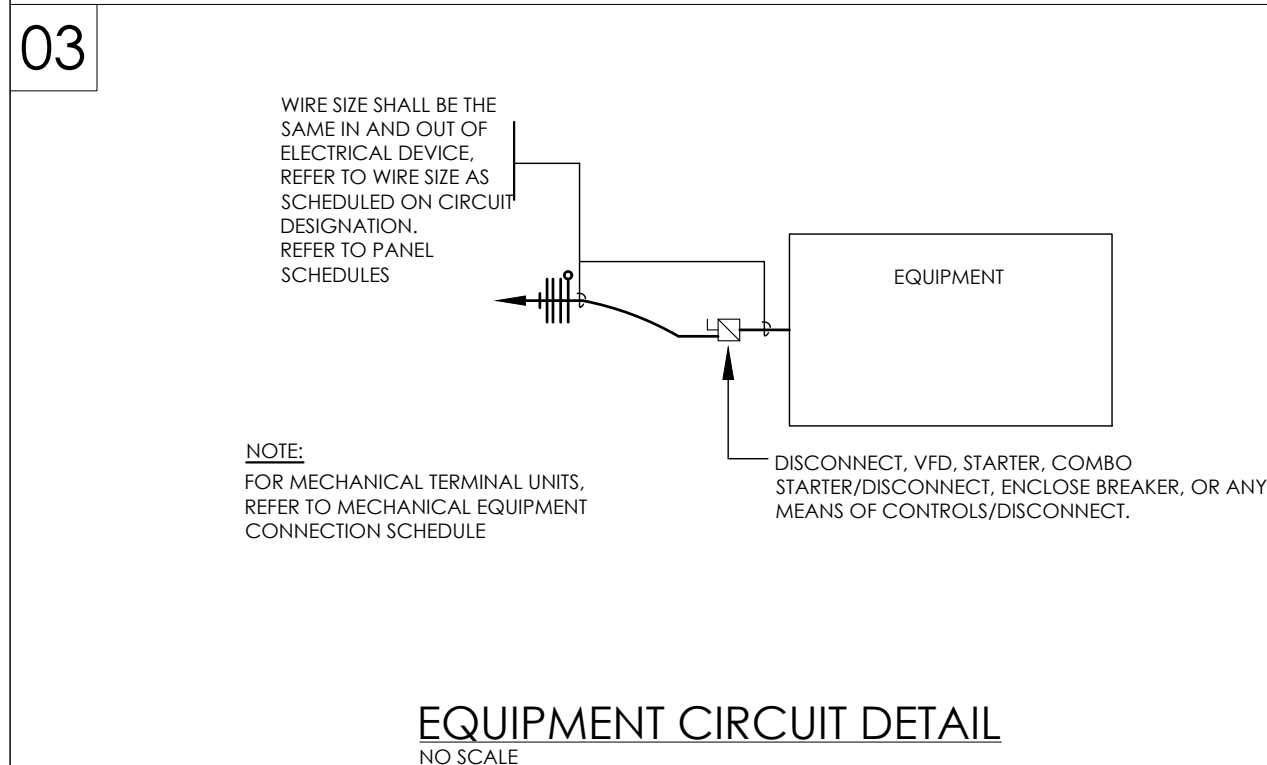
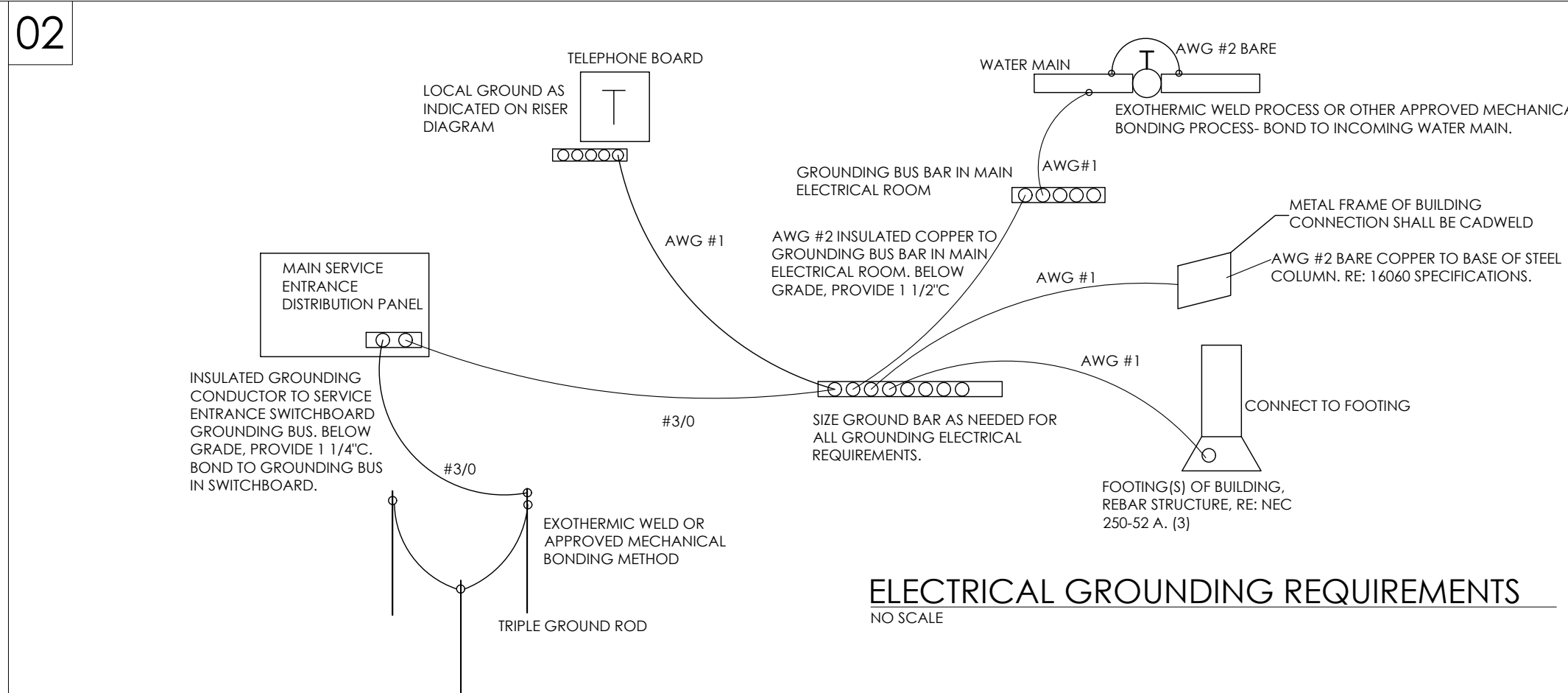
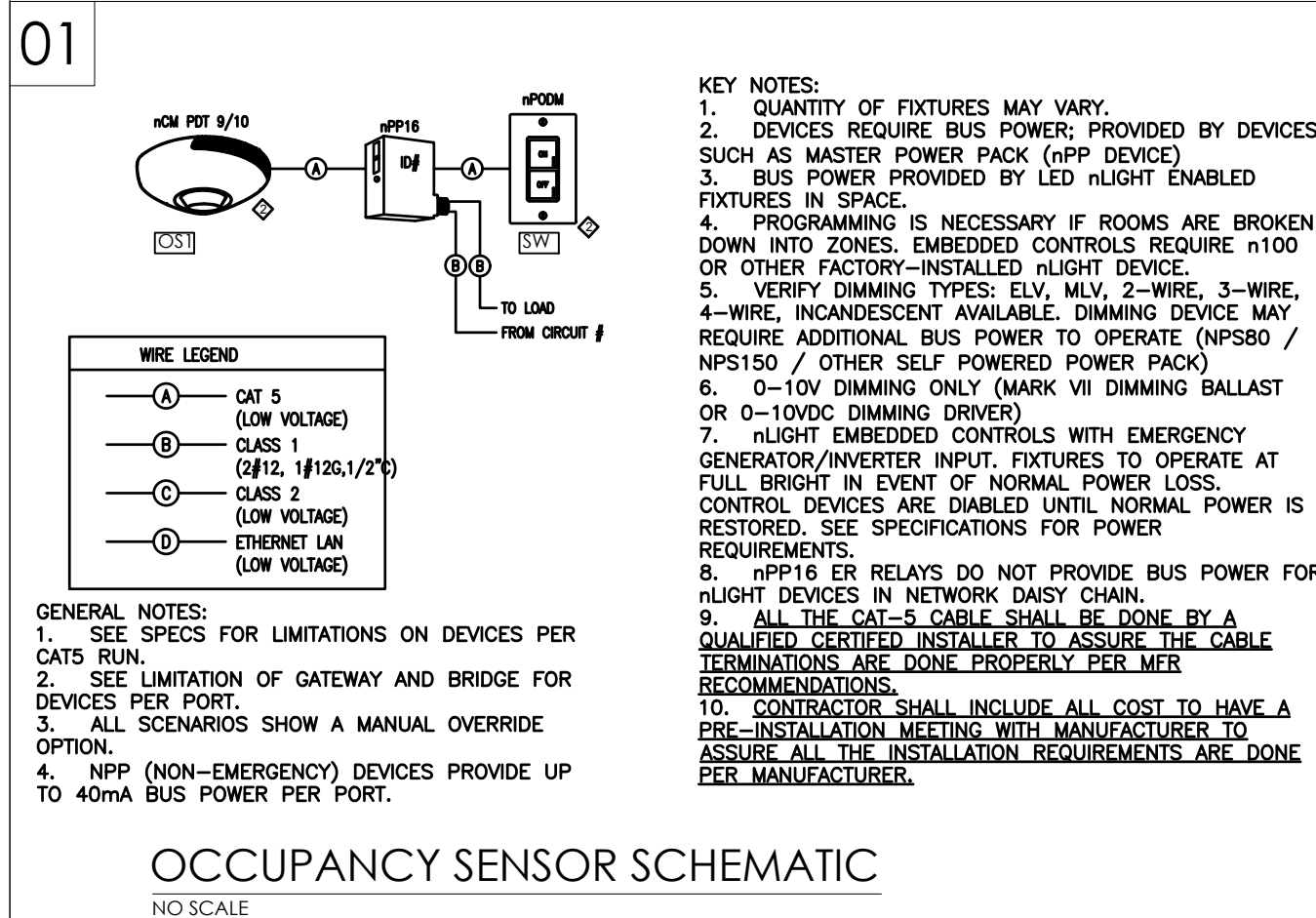
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GENERAL DEMOLITION NOTES

- A. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE DEMOLITION WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES INCLUDING THOSE PUBLISHED BY OSHA AND EPA.
- B. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED PRIOR TO BIDDING. CONTRACTOR SHALL IDENTIFY/VERIFY ALL WATER, GAS AND SANITARY LINES BEFORE STARTING ANY DEMOLITION WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK.
- C. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF PLUMBING FIXTURES AND EQUIPMENT AND ASSOCIATED SERVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- D. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCH'L DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.

- E. WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.
- F. WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED SERVICES SHALL BE REMOVED AND CAPPED. NEW MATERIALS SHALL BE USED TO EXTEND SERVICES TO NEW LOCATION.
- G. WHERE SERVICES RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE TO REMAIN UNDISTURBED, SERVICES SHALL BE CAPPED AT CONCEALED LOCATION AND ABANDONED
- H. WHERE THE REMOVAL OF FIXTURES OR EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO THE DOWN-STREAM FIXTURES OR EQUIPMENT SO THAT THE FIXTURES OR EQUIPMENT IS LEFT IN OPERATING CONDITION.
- I. COORDINATE DEMOLITION OF DIVISION 15 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.
- J. ALL EXISTING PLUMBING FIXTURES AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.

- K. WHERE EXISTING FIXTURE OR EQPT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- L. EXISTING FIXTURES OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- M. ALL DEVICES WITH AN (E) SYMBOL ARE EXISTING TO REMAIN. (UNO).
- N. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.
- O. CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW. HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS AS REQUIRED BY DRAWINGS OR SPECIFICATIONS. PATCH AND SEAL OPENINGS AS REQUIRED. COORDINATE ALL CUTTING AND PATCHING WITH OTHER TRADES.

KEYED NOTES: DEMO

- 1 REMOVE ALL EXISTING PLUMBING FIXTURES IN THIS AREA INCLUDING ALL CONNECTING SERVICES. CAP ALL SERVICE LINES AT A CONCEALED LOCATION.



1 PLUMBING DEMOLITION
1/4"=1'-0"

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OLD SORENSEN ELEMENTARY
RENOVATIONS BID #18-19-055

PSJA ISD
SAN JUAN, TEXAS

PROJECT NUMBER
219006

DATE
AUG 26, 2019

SHEET NUMBER

PD1.1

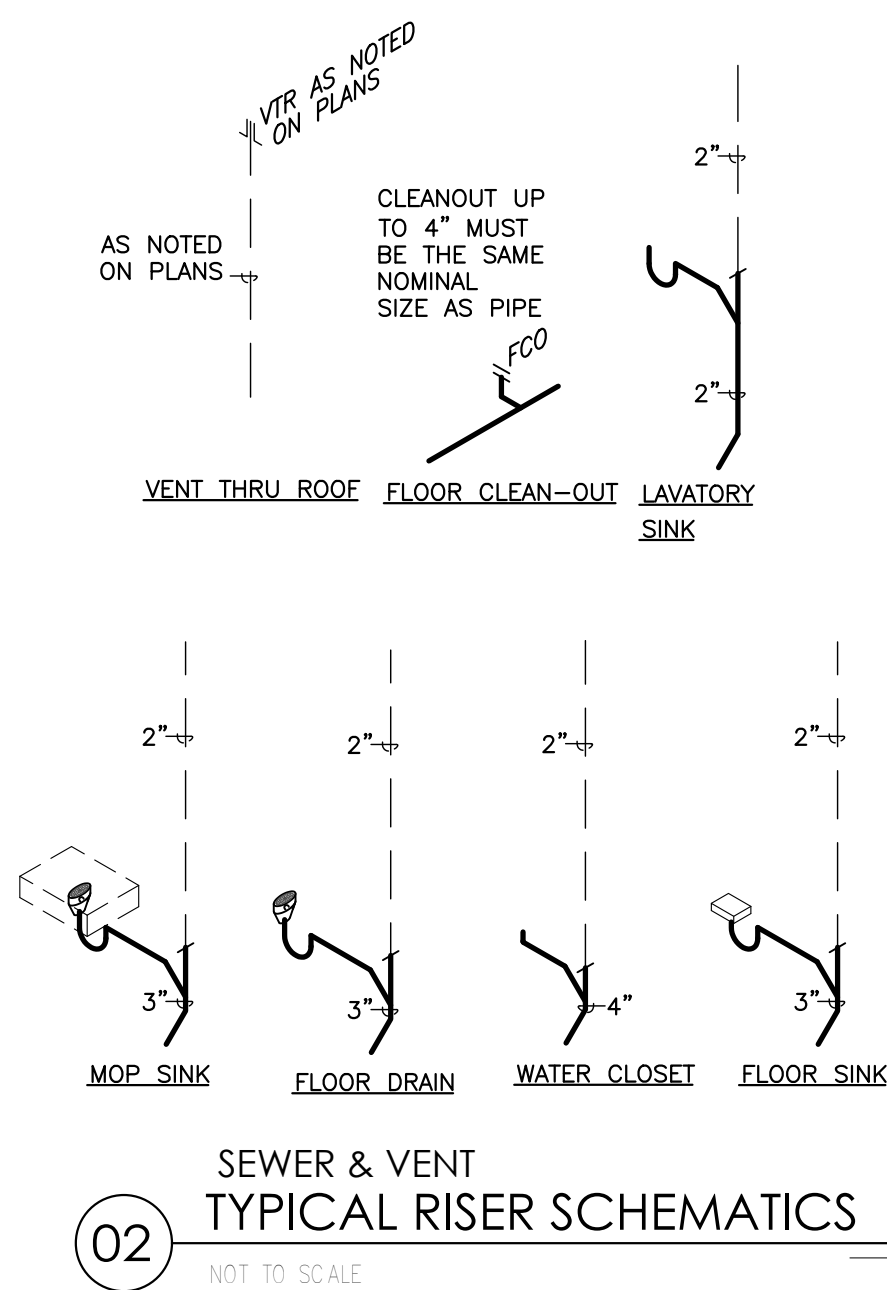
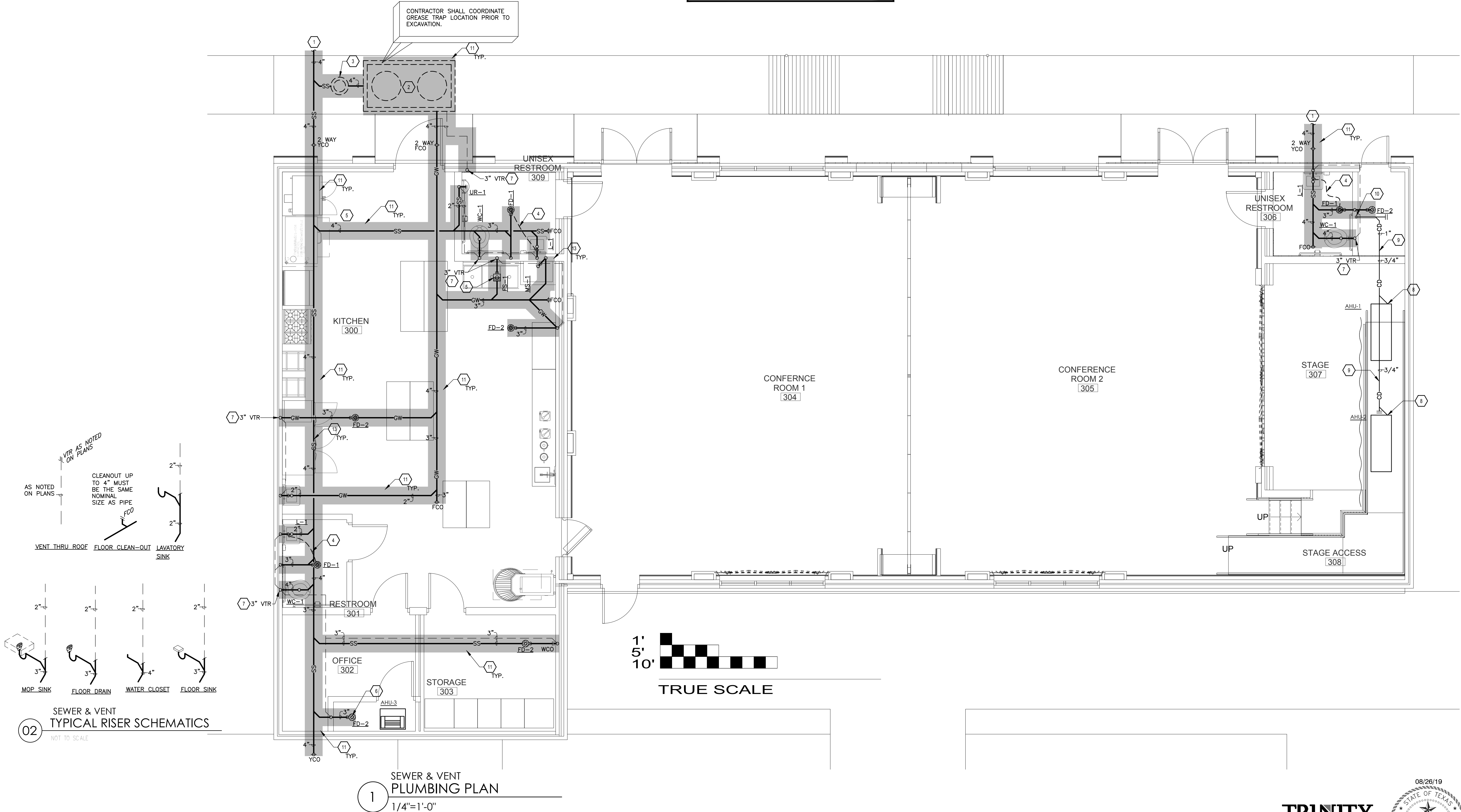
GREASE TRAP SIZING CALCULATIONS									
NUMBER OF MEALS	X	TOTAL WASTE FLOW RATE	X	RETENTION TIME	X	STORAGE FACTOR	=	SIZE REQUIREMENT (LIQUID CAPACITY)	
120	X	2	X	1.5	X	1	=	360	

NOTE:
DRAWING IS SCHEMATIC IN NATURE AND SHOW THE GENERAL LAYOUT OF THE PLUMBING SYSTEM. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO PLUMBING FIXTURES AND KITCHEN EQUIPMENT. THIS INCLUDES, BUT NOT LIMITED TO FURNISHINGS AND INSTALLING ALL TRAPS, DRAINS AND SUPPLIES WITH STOPS.
PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SHUTOFF COCKS, QUICK DISCONNECTS AND FLEXIBLE LINES AT GAS EQUIPMENT.
PLUMBER TO REFER TO FSE DRAWINGS FOR ROUGH-IN AND OTHER INSTALLATION INFORMATION.

IT IS MANDATORY FOR GENERAL CONTRACTORS TO FIELD VERIFY AND SURVEY THE ENTIRE SITE PRIOR TO BIDDING. CONTRACTOR TO IDENTIFY ANY POSSIBLE DISCREPANCIES.

- KEYED NOTES: PLUMBING
- 1 PLUMBER TO MAKE FINAL CONNECTION TO SANITARY SEWER. FIELD VERIFY EXACT LOCATION, SIZE, FLOW AND INVERT ELEVATIONS OF EXISTING SANITARY SEWER PRIOR TO ANY ROUGH-INS.
 - 2 GREASE TRAP PARK GT500 OR EQUAL. REFER TO DETAIL 01/P4.2 COORDINATE LOCATION WITH EXISTING UTILITIES IN THE AREA.
 - 3 SAMPLE WELL EQUAL TO PARK SWB-154. REFER 02/P4.2 FOR DETAIL.
 - 4 1/2" COPPER FROM TRAP PRIMER, PROVIDE SINK WITH WATER SAVER TRAP PRIMER. SEE DETAIL 06/P4.1. COVER WITH SLEEVE "POLY SLEEVE" OR EQUAL. TYPICAL FOR ALL TRAP-PRIMERS.
 - 5 COORDINATE EXACT LOCATION OF ALL FLOOR DRAINS, FLOOR SINKS AND TRENCH DRAIN WITH KITCHEN EQUIPMENT CONTRACTOR.
 - 6 FLOOR DRAIN FOR CONDENSATE FROM AHU's AND COOLER CONDENSATE.

- 7 KEEP ALL VENT THRU ROOF (VTR) AT LEAST 10 FEET AWAY FROM ANY FRESH AIR INTAKE. COORDINATE LOCATION OF ALL VTRs WITH HVAC CONTRACTOR.
- 8 COPPER CONDENSATE LINE FROM AHU, COORDINATE ROUTING WITH HVAC CONTRACTOR.
- 9 COPPER CONDENSATE LINE, PROVIDE 1/2" INSULATION AND 1/8" SLOPE. TYPICAL FOR ALL CONDENSATE LINES.
- 10 1" COPPER CONDENSATE DRAIN LINE DOWN THRU WALL, DISCHARGE TO FLOOR DRAIN.
- 11 SAW-CUT THRU CONCRETE TO TRENCH FOR NEW UNDERGROUND PLUMBING. PATCH CONCRETE FLOOR TO MATCH EXISTING. FIELD VERIFY EXISTING CONCRETE SLAB SYSTEM BEFORE ANY SAW CUTTING COMMENCES.

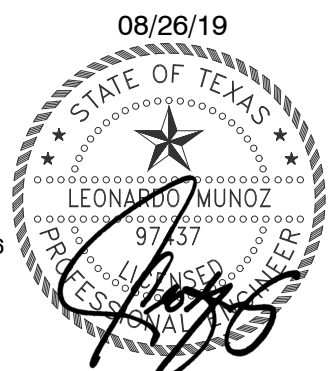


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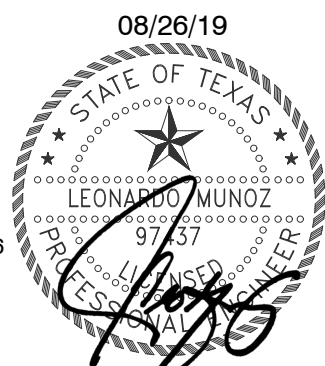
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NOTE:

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THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO PLUMBING FIXTURES AND KITCHEN EQUIPMENT. THIS INCLUDES, BUT NOT LIMITED TO FURNISHINGS AND INSTALLING ALL TRAPS, DRAINS AND SUPPLIES WITH STOPS.

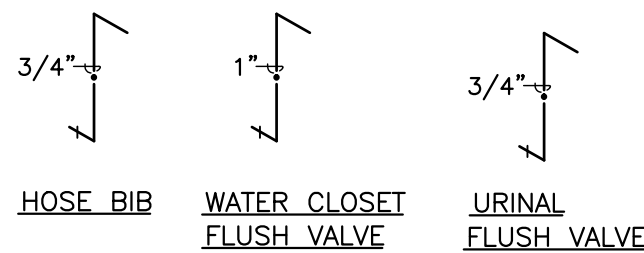
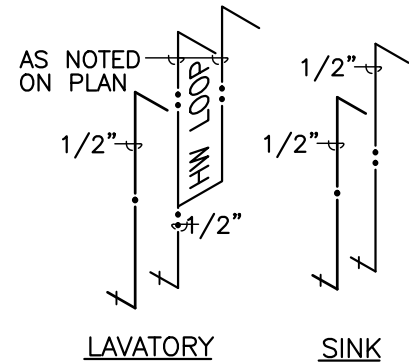
PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SHUTOFF COCKS, QUICK DISCONNECTS AND FLEXIBLE LINES AT GAS EQUIPMENT.

PLUMBER TO REFER TO FSE DRAWINGS FOR ROUGH-IN AND OTHER INSTALLATION INFORMATION.

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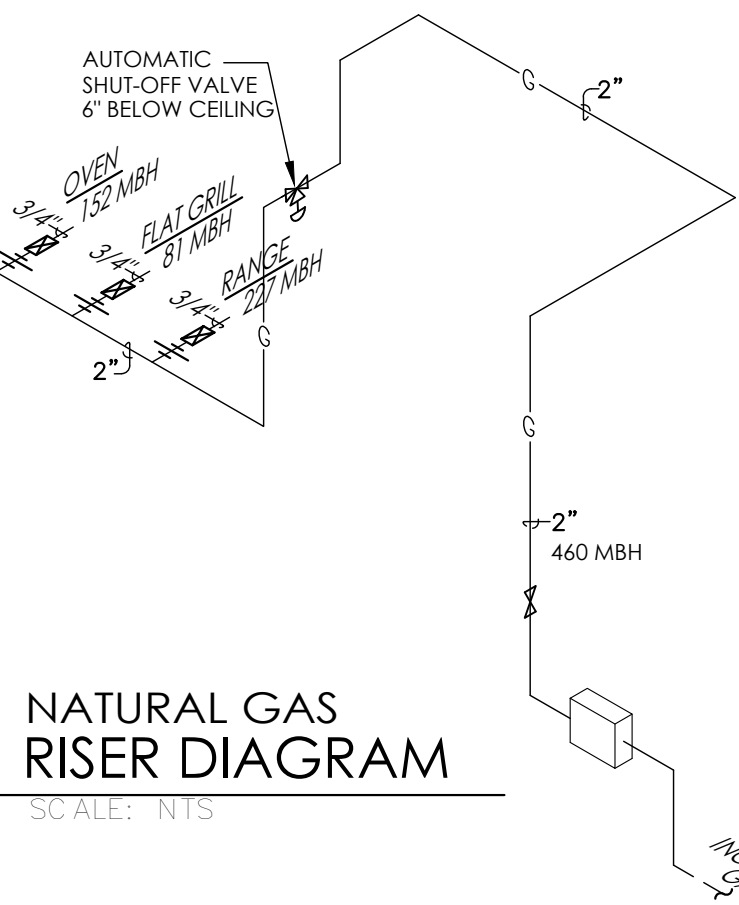
PLUMBING KEYED NOTES:

- 1 CONNECT NEW 1-1/4" CW TO EXISTING CW OF EQUAL OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE BACKFLOW PREVENTER PER LOCAL JURISDICTION REQUIREMENTS.
- 2 WATER SERVICE ENTRANCE. REFER TO DETAIL 01/P4.1.
- 3 CUT-OFF VALVE IN CAST IRON BOX. SET BOX FLUSH WITH FINISHED GRADE.
- 4 WATER HAMMER ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"x12" PAINTED TO MATCH CEILING.
- 5 BRONZE CUT-OFF VALVE ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"x12" PAINTED TO MATCH CEILING.
- 6 PROVIDE POINT OF USE INSTANTANEOUS WATER HEATER TO SERVE LAVATORY.
- 7 PROVIDE ELECTRICAL WATER HEATER, REFER TO DETAIL 8/P4.1. INSTALL AS PER MANUFACTURER'S INSTRUCTION. PROVIDE 6" CONCRETE PAD.
- 8 PROVIDE A CIRCULATING PUMP @ NEW WATER HEATER. SEE DETAIL 03/P4.2.
- 9 PROVIDE SINK/LAV WITH SINGLE OUTLET THERMOSTATIC MIXING VALVE (TMV), WATTS LFMV-US-M1. SET TEMPERATURE AS PER LOCAL JURISDICTION.
- 10 PRESSURE DROP ACTIVATED TRAP PRIMER. PROVIDE ACCESS PANEL IF INACCESSIBLE. SEE DETAIL 04/P4.1.
- 11 1/2" COPPER FROM TRAP PRIMER COVER WITH POLYETHYLENE SLEEVE "POLY SLEEVE" OR EQUAL. TYPICAL ALL TRAP-PRIMERS.
- 12 ROUTE RECIRCULATED HOT WATER LINE DOWN WALL. ROUTE MAXIMUM 2' LONG 1/2" BRANCH TO HOT WATER CONNECTION OF LAVATORY. CONTINUE RECIRCULATED HOT WATER LINE BACK UP WALL.
- 13 UNDERGROUND GAS SERVICE LINE, AND GAS SERVICE REGULATOR APPROVED BY LOCAL GAS COMPANY. SITE VERIFY EXACT LOCATION. COORDINATE INSTALLATION AND PAY ALL ASSOCIATED FEES. APPROXIMATED 50 FEET DISTANCE TO EXISTING GAS POINT OF CONNECTION. RUN LOW PRESSURE GAS UP EXTERIOR WALL TO ABOVE CEILING, AND INTO BUILDING. REFER TO GAS LOAD SUMMARY AND GAS RISER DIAGRAM.
- 14 AUTOMATIC GAS VALVE EXPOSED 6" BELOW CEILING HEIGHT. PROVIDED BY OWNER INSTALLED BY CONTRACTOR. INTERLOCK WITH HOOD SUPPRESSION SYSTEM. PROVIDE UNION ON INLET AND OUTLET.



DOMESTIC WATER
TYPICAL RISER SCHEMATICS

SCALE: NTS

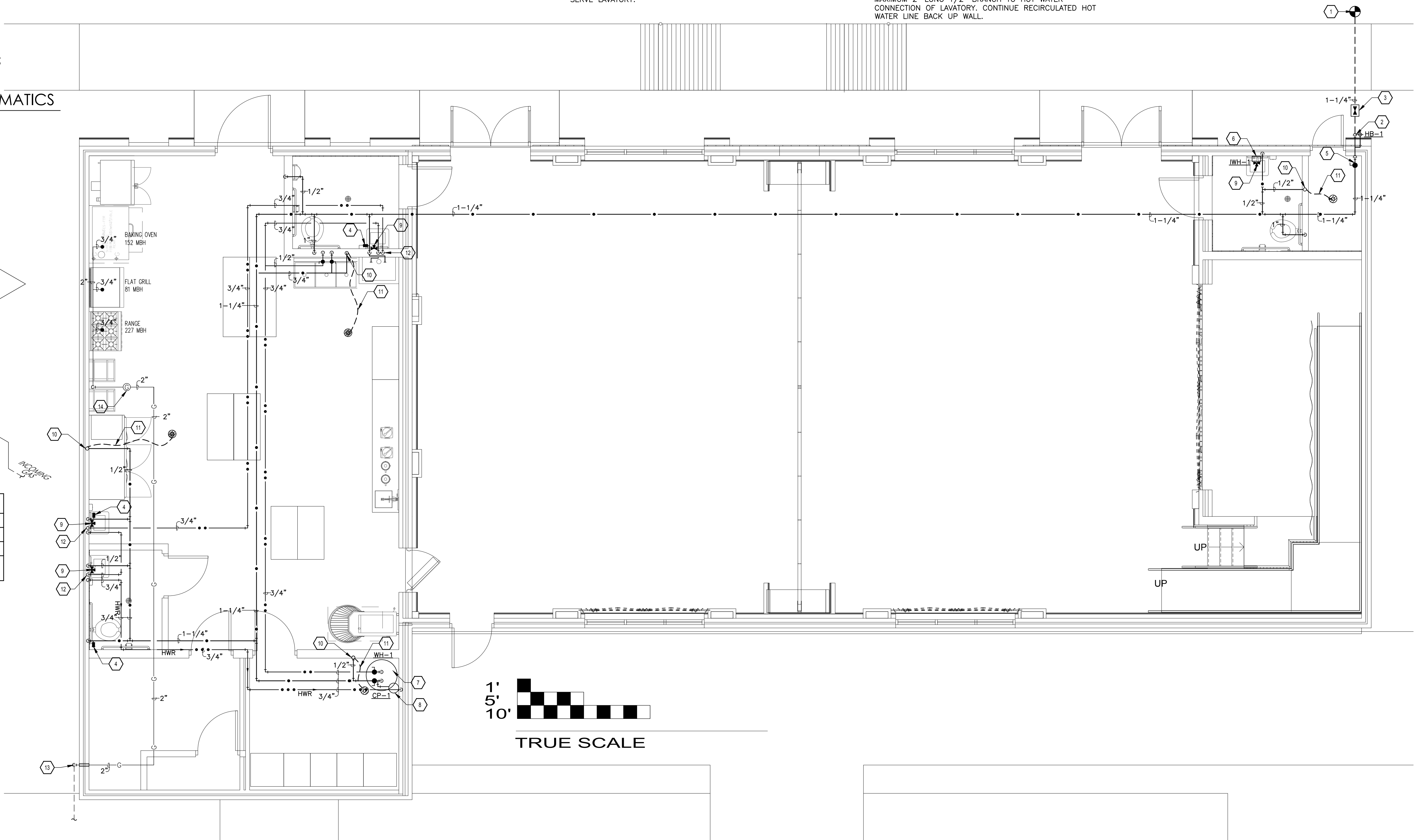


NATURAL GAS
RISER DIAGRAM

SCALE: NTS

GAS LOAD SUMMARY	
DESCRIPTION	GAS LOAD (BTUH)
KITCHEN EQUIPMENT	460,000
TOTAL GAS LOAD	460,000 BTUH

GAS PIPING SIZING IS BASED ON 2015 INTERNATIONAL FUEL GAS CODE INLET PRESSURE - LESS THAN 2 PSI TABLE 402.4 (1).



DOMESTIC WATER
PLUMBING PLAN
1/4"=1'-0"

1

ABBREV. DESCRIPTION

AC	ABOVE CEILING
AFF	ABOVE FINISHED FLOOR
ASA	AMERICAN STANDARDS ASSOCIATION
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AW	ACID WASTE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AV	ACID VENT
BTUH	BRITISH THERMAL UNIT PER HOUR
CA	COMPRESSED AIR
CI	CAST IRON
CO	CLEANOUT
CU	COPPER
DN	DOWN
EQ	EQUAL
FCO	FLOOR CLEANOUT
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
GAL	GALLON(S)
GALV	GALVANIZED
GW	GREASE WASTE
HB	HOSE BIBB
HP	HORESPOWER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
RD	ROOF DRAIN(S)
RE:4/P6	REFER TO DETAIL 4 DRAWING P-6
RO	REVERSE OSMOSIS
SD	STORM DRAIN
SPEC	SPECIFICATION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
VTR	VENT THRU ROOF
V	VACUUM
W/	WITH
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT

PLUMBING PIPING MATERIAL:

1. SANITARY DRAIN & VENT INSIDE BUILDING BELOW GRADE: SCHEDULE 40 PVC
2. SANITARY DRAIN OUTSIDE BUILDING: SCHEDULE 40 PVC
3. SANITARY DRAIN & VENT INSIDE BUILDING ABOVE GRADE: SCHEDULE 40 PVC
4. SANITARY DRAIN & VENT IN PLENUM CEILING: NO-HUB CAST IRON
5. DOMESTIC HOT & COLD WATER: COPPER, TYPE "L" HARD DRAWN
6. DOMESTIC WATER BELOW GRADE: COPPER, TYPE "K" SOFT ANNEALED
7. DOMESTIC WATER BELOW GROUND OUTSIDE OF BUILDING PIPING 2" SIZE AND SMALLER: COPPER, TYPE "L" HARD DRAWN

PLUMBING FIXTURE SCHEDULE						
MARK	FIXTURE TYPE	CONNECTION SIZE				DESCRIPTION
		San. Sewer	Vent	Cold Water	Hot Water	
WC-1	WATER CLOSET FLOOR MOUNTED ADA	4"	2"	1"	–	ZURN MODEL NO. Z5665-BWL, FLOOR MOUNTED WATER CLOSET, WITH ELONGATED RIM, 16-3/4" RIM HEIGHT, VITREOUS CHINA, SIPHON JET FLUSH ACTION 10"– 12" ROUGH IN, WITH ZURN FLUSHVALVE MODEL NO. Z6000AV-HET 1.28 GPF, 1" TOP SPUD INLET AND 2 BOLT CAPS, WITH "BENEKE" OPEN FRONT SEAT LESS COVER MODEL 533SS. FLUSH LEVER SHALL BE MOUNTED ON APPROACH SIDE OF FIXTURE.
UR-1	URINAL (STANDARD & HANDICAPPED) REFER TO ARCH'L DRAWING FOR MOUNTING HEIGHTS	2"	2"	3/4"	–	ZURN MODEL NO. Z5738.206.00 SIPHON JET WALL HUNG URINAL. VITREOUS CHINA, .5 GPF FLUSH, COMPACT DESIGN, WITH INTEGRAL TRAP, 3/4" TOP INLET, 14" LIP, INCLUDES WALL HANGERS, 2" IPS OUTLET FLANGE AND RUBBER GASKET. WITH ZURN FLUSHOMETER .5 GPF MODEL NO. Z6003AV-EWS. PROVIDE ZURN CARRIER SYSTEM MODEL NO. Z-1221.
L-1	LAVATORY COUNTER TOP STANDARD & HANDICAPPED	2"	2"	1/2"	1/2"	ZURN MODEL NO. Z5110 SELF-RIMMING OVAL BASIN COUNTERTOP LAVATORY. CONCEALED FRONT OVERFLOW, VITREOUS CHINA. COMPLETE WITH INSTALLATION TEMPLATE. FAUCET HOLES ON 4" CENTERS. PROVIDE FAUCET EQUAL TO MOEN MODEL 8419 WATER SENSE, SINGLE HANDLE, VANDAL RESISTANT, ADA APPROVED. PROVIDE PROTECTIVE COVER ON P-TRAP AND STOPS.
MS-1	MOP SINK	3"	2"	1/2"	1/2"	FIAT MODEL NO. TSB100, 24"x24"x12" TERRAZO MOP SINK, COMPLETE WITH FAUCET MODEL 830-AA, MOP SINK SHALL INCLUDE ALL HOSE BRACKETS, HOSE, AND MOP HANGER. WITH 3" DRAIN WITH STRAINER & DEEP SEAL P-TRAP. PROVIDE WALL GUARD MSG2424.
HB-1	HOSE BIB EXTERIOR GENERAL USE	–	–	3/4"	–	MILD TEMPERATURE WALL HYDRANT SHALL BE WOODFORD MODEL B65 3/4" INLET WITH BRONZE CASING, BRONZE FACE AND STRAIGHT INLET CONNECTION WITH INTEGRAL BACKFLOW PREVENTER.
FS-1	FLOOR SINK KITCHEN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 49364A-4-31-Z-SSLF, 12" SQUARE A.R.E. TOP, WITH 9-7/8" DEEP SUMP STAINLESS STEEL FLOOR SINK LESS FLANGE, 3/4 GRATE, ALUMINUM SEDIMENT BUCKET.
FD-1	RESTROOM FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-6A-Y-50, CAST IRON BODY WITH CLAMP RING, FLANGE, ADJUSTABLE NIKALOY STRAINER, HUB OUTLET WITH GASKET AND 1/2" PRIMER TAP.
FD-2	FLOOR DRAIN TRACTOR GRATE	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-7E-Y-50, COATED CAST IRON BODY WITH CLAMP RING, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WITH 7" TRACTOR GRATE STRAINER AND 1/2" PRIMER TAP. HUB OUTLET WITH GASKET.
FCO	FLOOR CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C1100-R-1" ADJUSTABLE FLOOR CLEANOUT, COMPLETE WITH NICKEL BRONZE TOP ASSEMBLY, LACQUERED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, AND PRIMARY GASKET SEAL.
YCO	YARD CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C-1220" LACQUERED CAST IRON CLEANOUT, THREADED BRONZE PLUG FOR AIR TIGHT SEAL AND STANDARD REINFORCED SATIN FINISHED NICKEL BRONZE ADJUSTABLE TOP ASSEMBLY.
WCO	WALL CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C1430-RD" CAST BRONZE CLEANOUT PLUG. COMPLETE WITH STAINLESS STEEL WALL ACCESS COVER AND ANCHOR SCREW. MOUNT 24" A.F.F.

NOTES:

- 1.ALL VITREOUS CHINA FIXTURES SHALL BE WHITE.
2. PROVIDE SINGLE FIXTURE WATER HAMMER ARRESTORS EQUAL TO MINI-RESTER/HYDRA-RESTER SIOUX CHIEF. FOR ALL PLUMBING FIXTURES IN THE WATER SUPPLY SYSTEM.
3. INSULATE ALL WATER AND WASTE PIPING UNDER LAVATORIES WITH HANDY-SHIELD JACKET BY PLUMBEREX.

ELECTRIC WATER HEATER SCHEDULE							
DESIG.	STORAGE GALLONS	RECOVERY G.P.H.	DEGREE RISE °F	WATER TEMP LEAVING	WATER INLET	WATER OUTLET	REMARKS
WH-1	80	30	80°	140°	3/4"	3/4"	RHEEM MODEL NO. ELD80, 6KW, 240V/1Ø, ELECTRIC TANK TYPE. PROVIDE 10 GAL EXPANSION TANK.

RECIRCULATING PUMP SCHEDULE							
MARK	GPM	FEET HEAD	H.P.	RPM	VOLTS/PHASE	REMARKS	
CP-1	0-20	0-11	1/25	3250	115 volts/Ø	EQUAL TO TACO MODEL 007-BF5 CARTRIDGE CIRCULATOR, MAINTENANCE FREE, WET-ROTOR, IN-LINE, SINGLE STAGE CIRCULATOR. PROVIDE WITH AQUASTAT AND TIME CLOCK.	

INSTANTANEOUS ELECTRIC WATER HEATER SCHEDULE								
MARK	MODEL	VOLTAGE	KW	AMPS	DEGREE RISE AT 0.5 GPM	WATER INLET	WATER OUTLET	MANUFACTURER
IWH-1	SP2412	120/1Ø	2.4	20	33	3/8"	3/8"	EEMAX "SINGLE POINT" WATER HEATER

PLUMBING GENERAL NOTES: (ALL SHEETS)

- A. ALL WORK AND MATERIAL SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
- B. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH ALL ELECTRICAL WORK, MECH'L WORK AND STRUCTURAL MEMBERS. COORDINATE WITH MECHANICAL, ELEC'L AND STRUCTURAL FOR PROPER CLEARANCES.
- C. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION OF WORK.
- D. SLEEVE ALL OUTSIDE WALL, FLOOR SLAB, AND GRADE BEAM PENETRATIONS PER DETAILS AND PER CODE.
- E. LOCATE ALL PLUMBING VENTS TO ROOF (VTR) SO THAT THEY TERMINATE A MINIMUM OF 1'-0" AWAY FROM ANY VERTICAL SURFACE AND 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKES.
- F. RECORD INVERT ELEVATIONS OF ALL YCO'S ON "AS-BUILT" DRAWINGS.
- G. MINIMUM 3" WASTE LINE BELOW FLOOR AND MINIMUM 2" WASTE RISER. UNLESS NOTED OTHERWISE (UNO).
- H. PLUMBING CONTRACTOR SHALL PAY FOR ALL UTILITY CONNECTIONS FEES, PERMITS, TESTS AND INSPECTIONS. FURNISH 3 COPIES OF INSPECTION CERTIFICATE BEFORE REQUESTING FINAL PAYMENT.
- I. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE DAMAGED BY HIS OPERATIONS.
- J. CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW, HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS.
- K. PRESSURE TEST ALL INSTALLATIONS PRIOR TO CONNECTING EQUIPMENTS.
- L. LABEL ALL PIPING PER ANSI STANDARD.
- M. PROVIDE PROPER INSULATION ON ALL HOT WATER PIPING, STORM PIPING AND CONDENSATE PIPING.
- N. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.
- O. PROVIDE ANY BACK FLOW PREVENTION DEVICE REQUIRED BY CODE OR GOVERNING AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY OR LOCAL AGENCIES AND INCLUDE COST OF SAME IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
- P. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
- Q. ALL EXPOSED PIPING FOR DESIGNATED DISABLED ACCESS FIXTURES SHALL BE COVERED OR OTHERWISE WRAPPED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND LOCAL AUTHORITY.
- R. ALTERNATE MATERIALS NOT IDENTIFIED IN SPECIFICATIONS/DRAWINGS BUT APPROVED BY LOCAL AUTHORITY SHALL BE SUBMITTED TO ARCHITECT AND PLUMBING ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- S. ISOMETRIC DIAGRAMS ARE FOR SIZING PURPOSES ONLY AND SHALL NOT BE USED FOR MATERIAL TAKE-OFFS, OR BE CONSTRUED TO INDICATE ACTUAL SITE INSTALLATION.
- T. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
- U. EVERY FLOOR DRAIN, FLOOR SINK OR HUB DRAIN SHALL BE SERVED BY AN AUTOMATIC TRAP PRIMER, UNO.
- V. CLEANING CLEAN AND DISINFECT POTABLE DOMESTIC WATER PIPING AS FOLLOWS:

1. PURGE NEW PIPING AND PARTS OF EXISTING DOMESTIC WATER PIPING THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED BEFORE USING.

2. USE PURGING AND DISINFECTING PROCEDURES PRESCRIBED BY AUTHORITIES HAVING JURISDICTION OR, IF METHODS ARE NOT PRESCRIBED, PROCEDURES DESCRIBED IN EITHER AWWA C651 OR AWWA C652 OR AS DESCRIBED BELOW:

A. FLUSH PIPING SYSTEM WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT OUTLETS.

B. FILL AND ISOLATE SYSTEM ACCORDING TO EITHER OF THE FOLLOWING:

1) FILL SYSTEM OR PART THEREOF WITH WATER/CHLORINE SOLUTION WITH AT LEAST 50 PPM (50 MG/L) OF CHLORINE. ISOLATE WITH VALVES AND ALLOW TO STAND FOR 24 HOURS.

2) FILL SYSTEM OR PART THEREOF WITH WATER/CHLORINE SOLUTION WITH AT LEAST 200 PPM (200 MG/L) OF CHLORINE. ISOLATE AND ALLOW TO STAND FOR THREE HOURS.

C. FLUSH SYSTEM WITH CLEAN, POTABLE WATER UNTIL NO CHLORINE IS IN WATER COMING FROM SYSTEM AFTER THE STANDING TIME.

D. SUBMIT WATER SAMPLES IN STERILE BOTTLES TO AUTHORITIES HAVING JURISDICTION. REPEAT PROCEDURES IF BIOLOGICAL EXAMINATION SHOWS CONTAMINATION.

B. PREPARE AND SUBMIT REPORTS OF PURGING AND DISINFECTING ACTIVITIES.

C. CLEAN INTERIOR OF DOMESTIC WATER PIPING SYSTEM. REMOVE DIRT AND DEBRIS AS WORK PROGRESSES.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	BALL VALVE		DOMESTIC COLD WATER
	CHECK VALVE		DOMESTIC HOT WATER
	GATE VALVE		DOMESTIC HOT WATER RETURN
	UNION		SANITARY SEWER VENT
	DIRECTION OF FLOW		SANITARY WASTE LINE
	WALL CLEANOUT		140° HOT WATER
	FLOOR CLEANOUT YARD CLEANOUT		SANITARY DIRECTION OF FLOW
	FLOOR SINK		BRANCH - TOP CONNECTION
	FLOOR DRAIN		PIPE RISER
	WALL HYDRANT OR HOSE BIBB		PIPE DROP
	WATER HAMMER ARRESTOR		POINT OF CONNECTION (APPROXIMATED FIELD VERIFY EXACT POINT OF CONNECTION)

- NOTE: 1. NOT ALL SYMBOLS USED ON THIS PROJECT
2. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDER SIDE OF WATER CLOSET OR DOOR OPENING.
3. INSTALL ADA APPROVED FLUSH VALVE HANDLE FOR ADA PLUMBING FIXTURES



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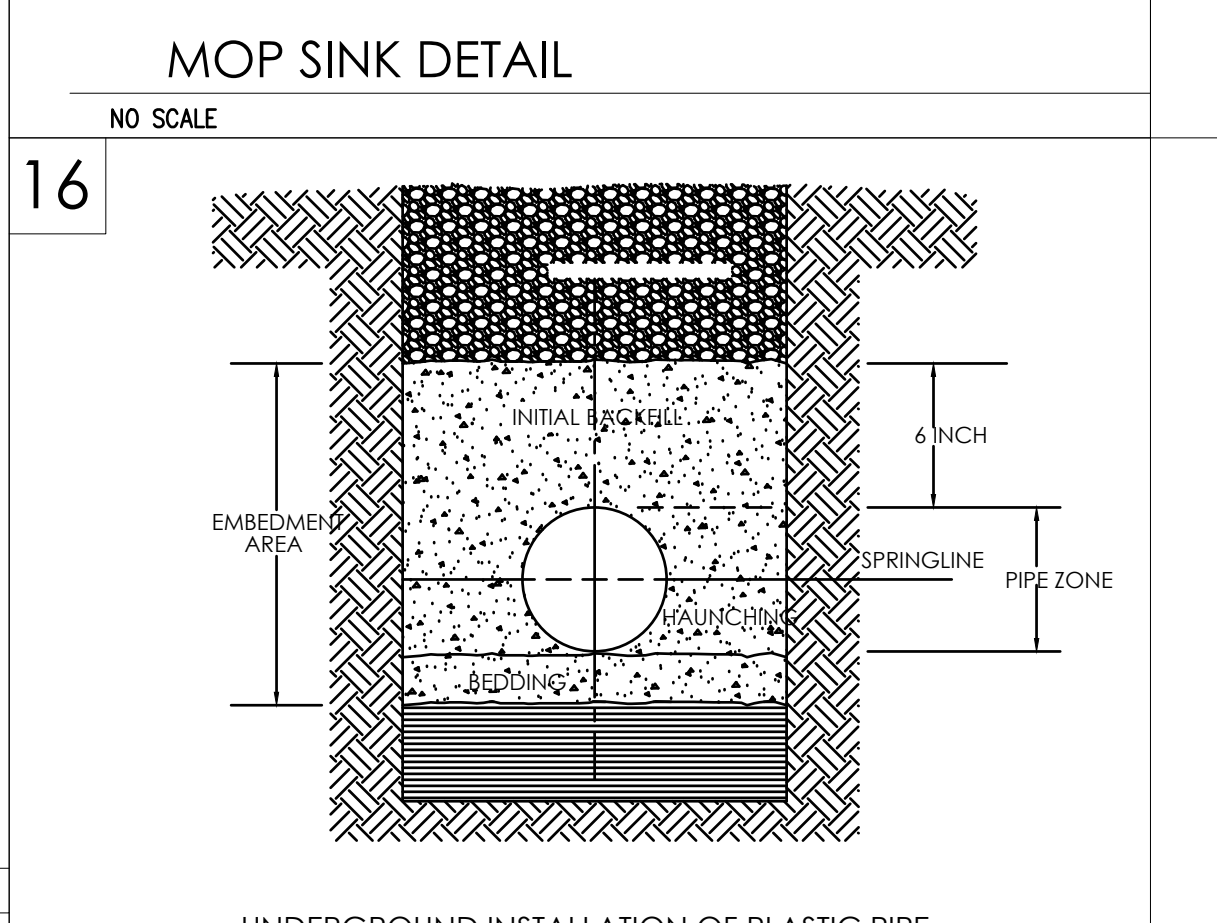
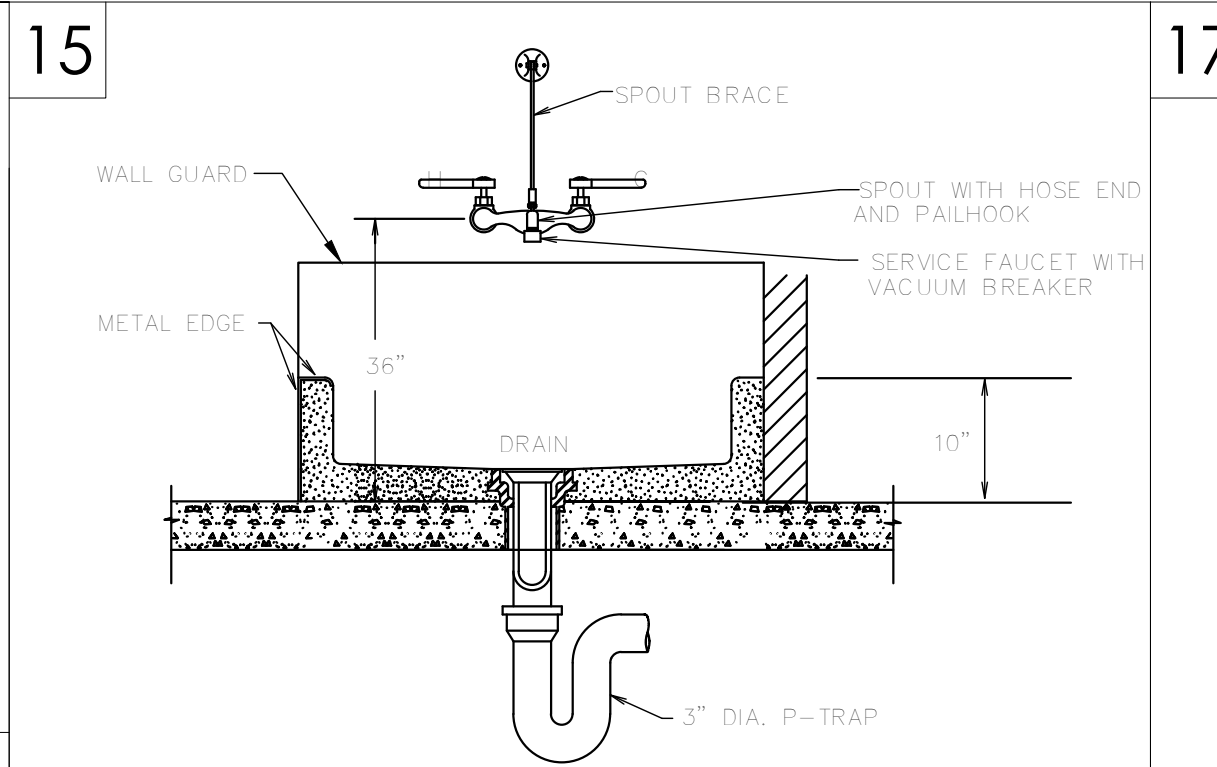
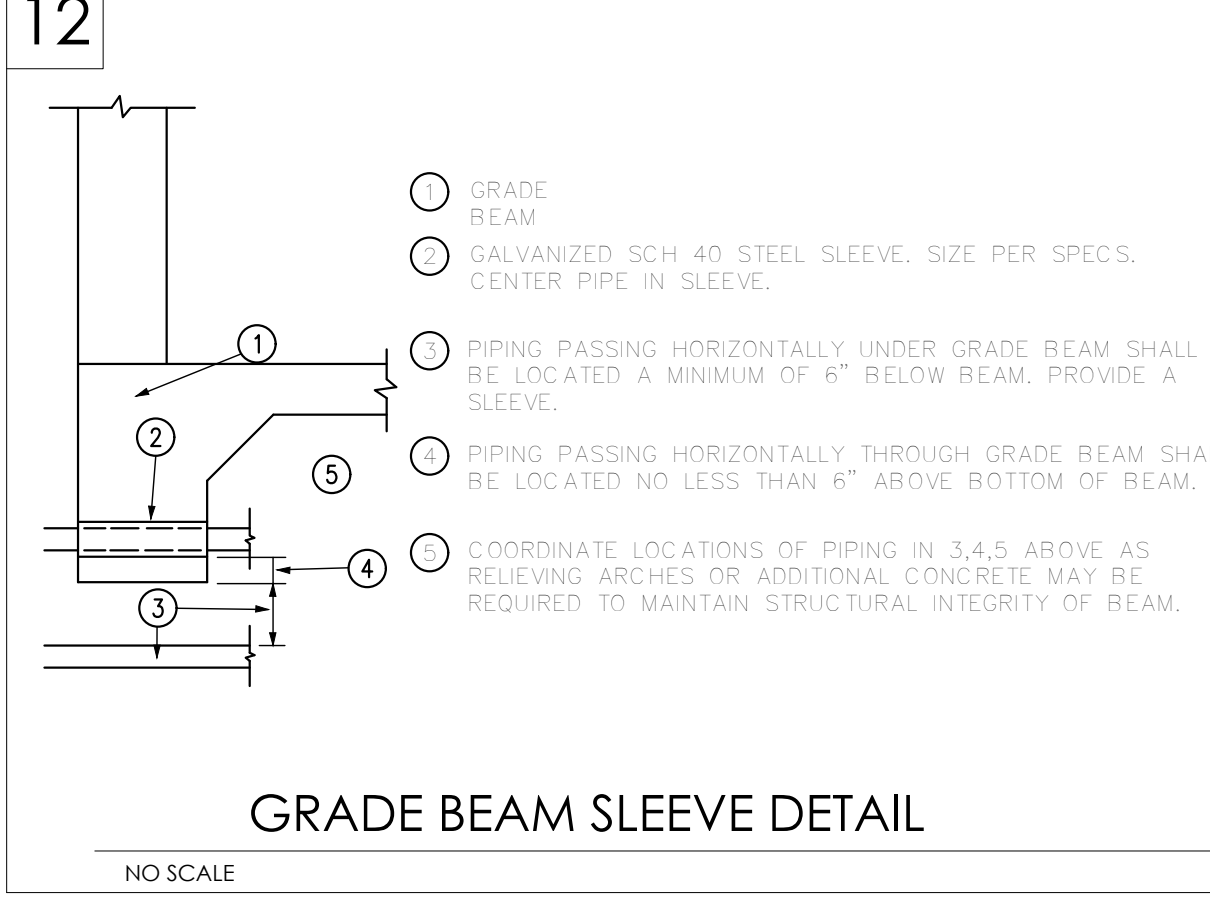
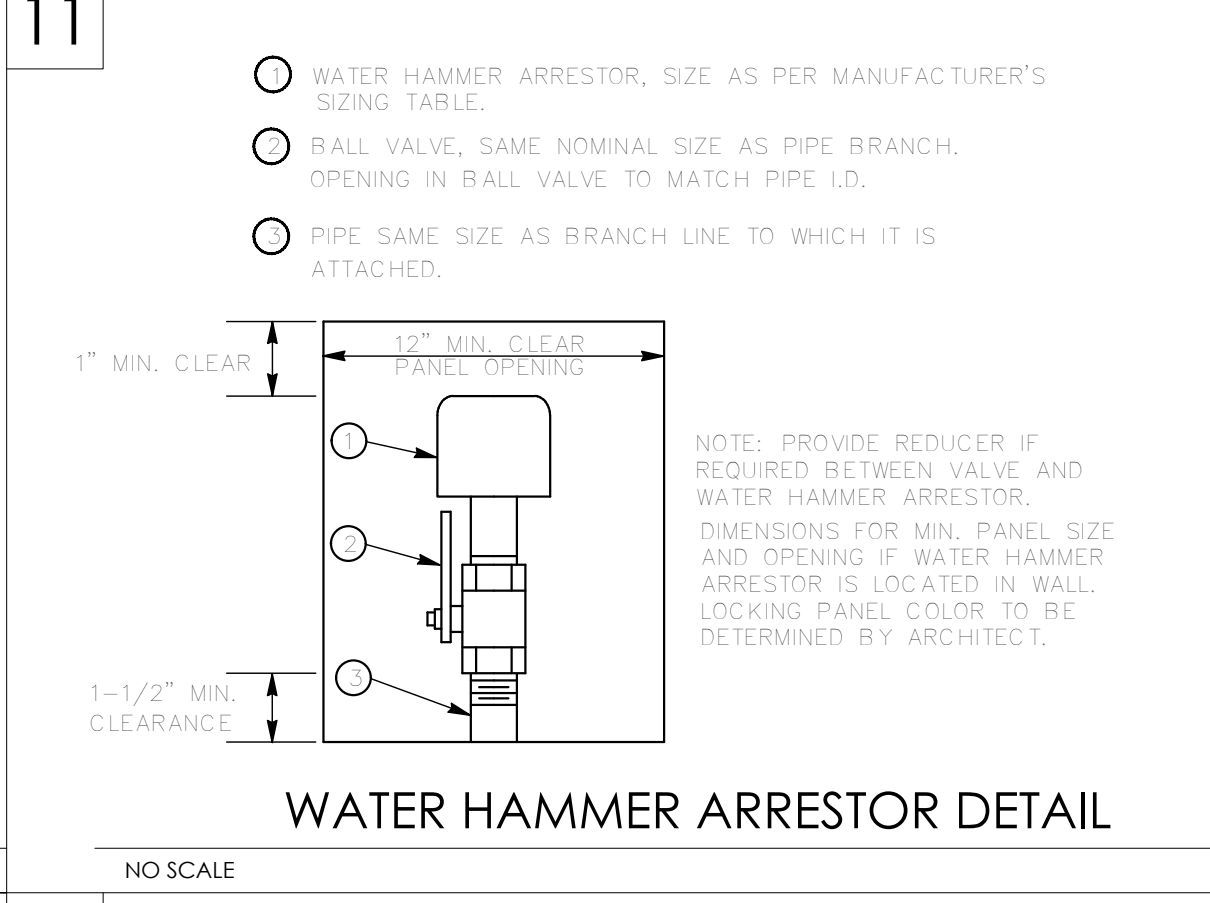
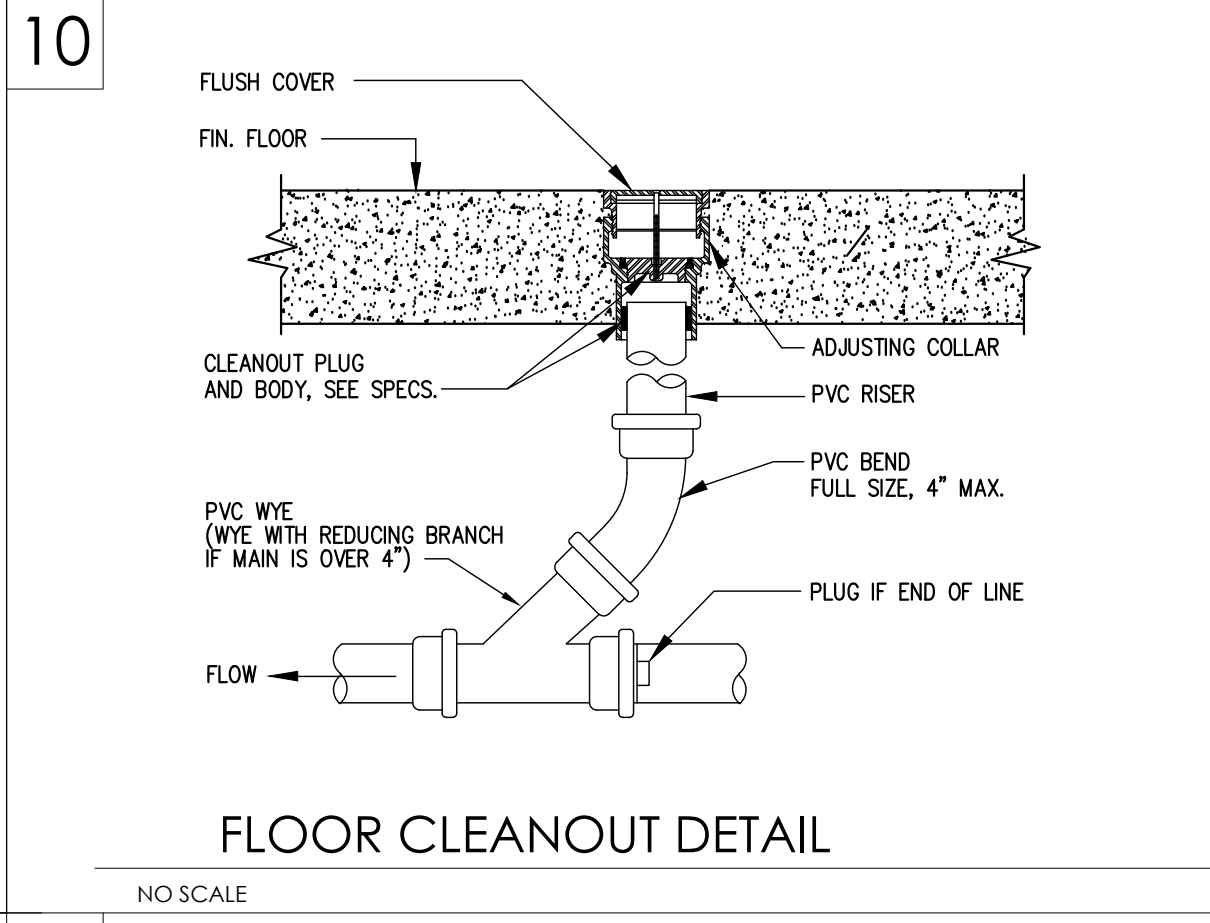
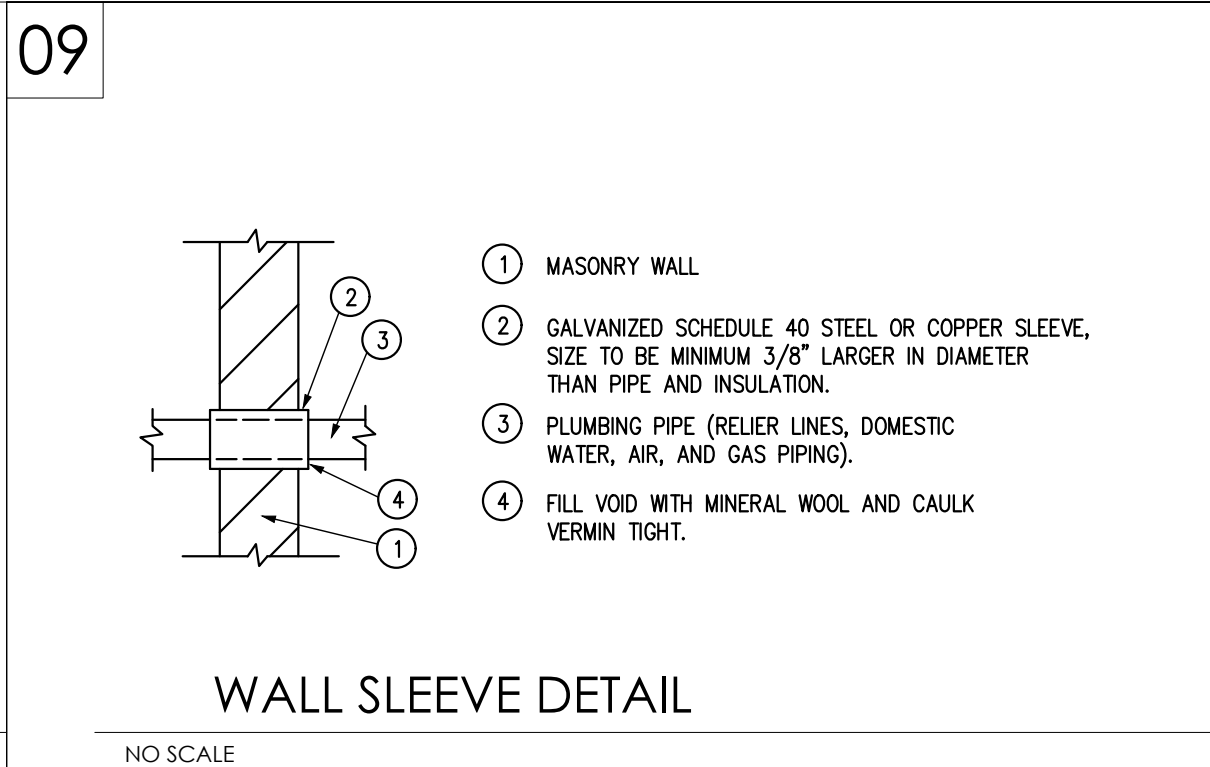
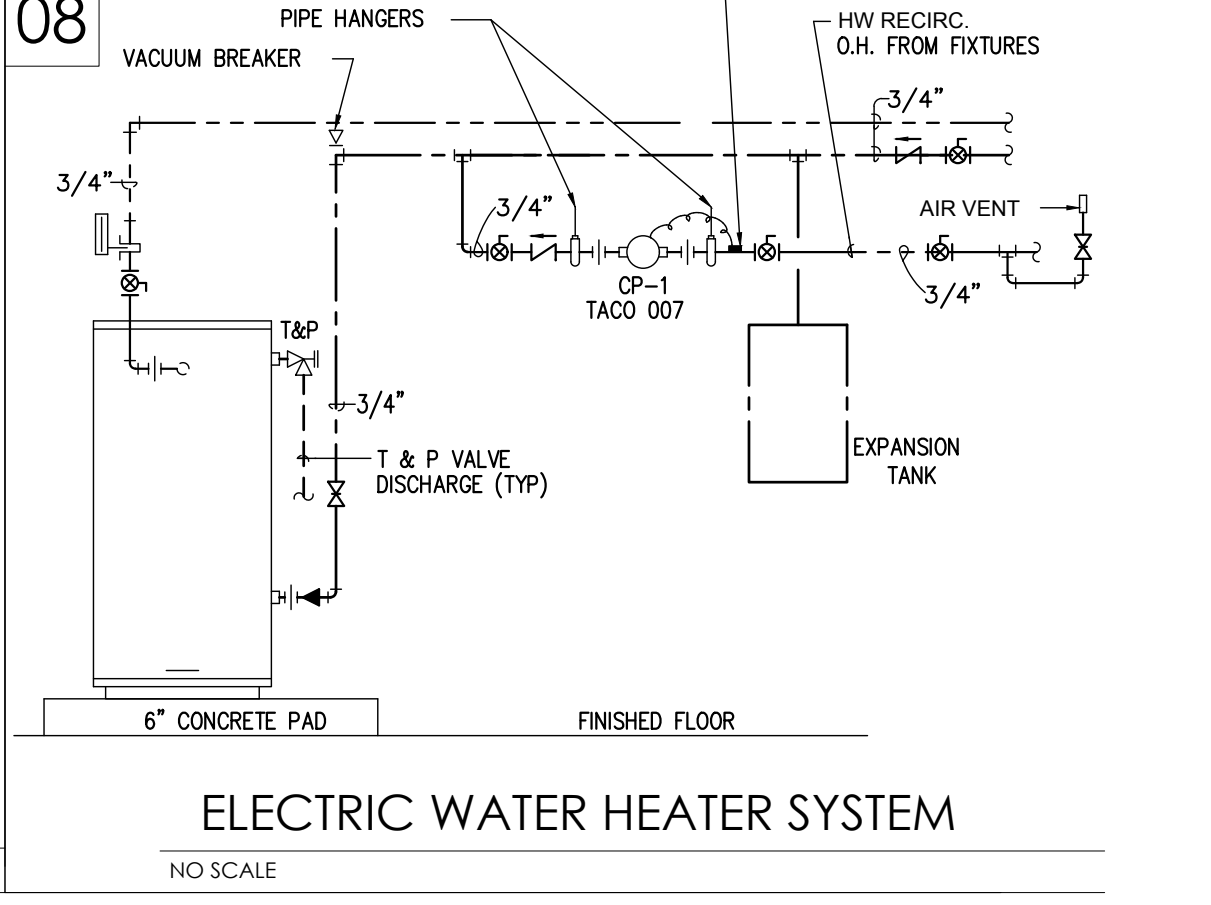
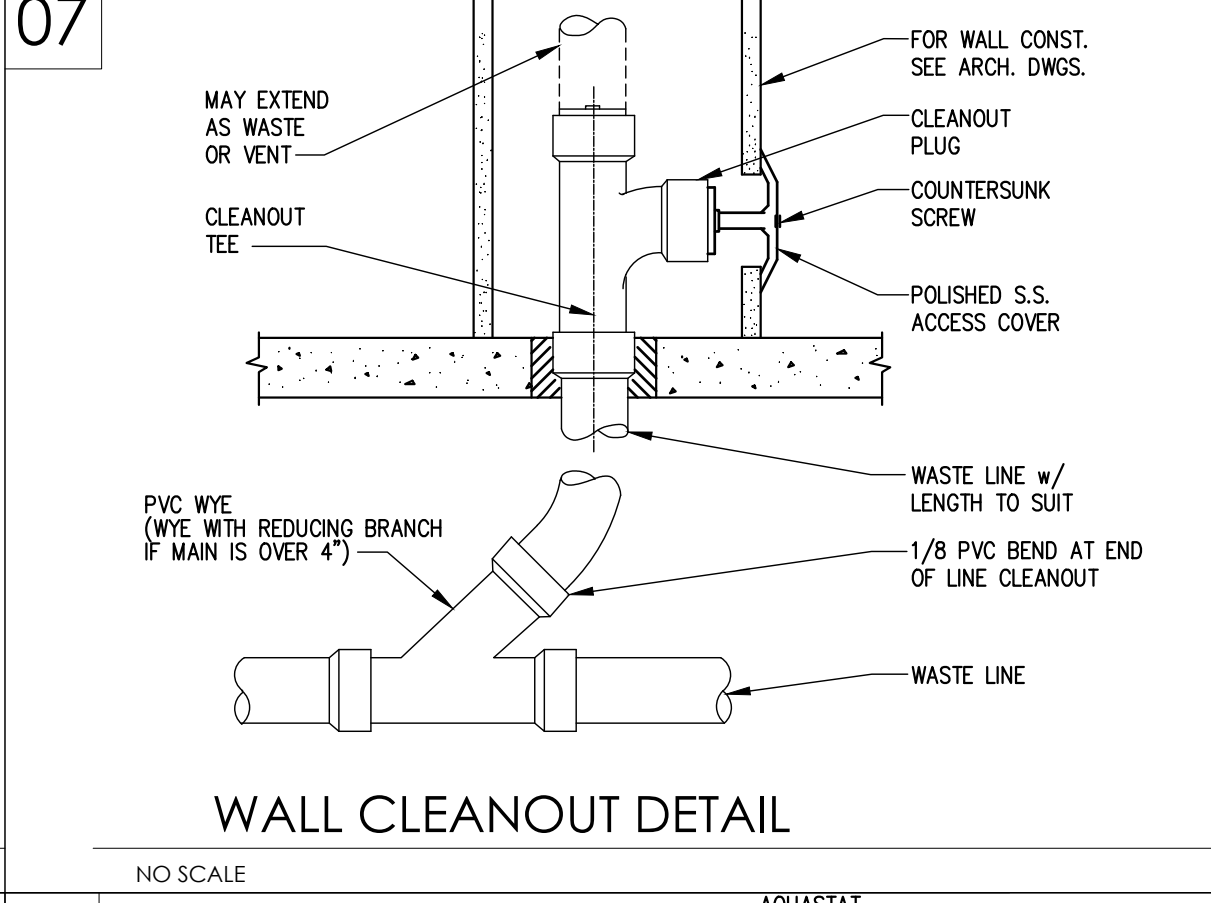
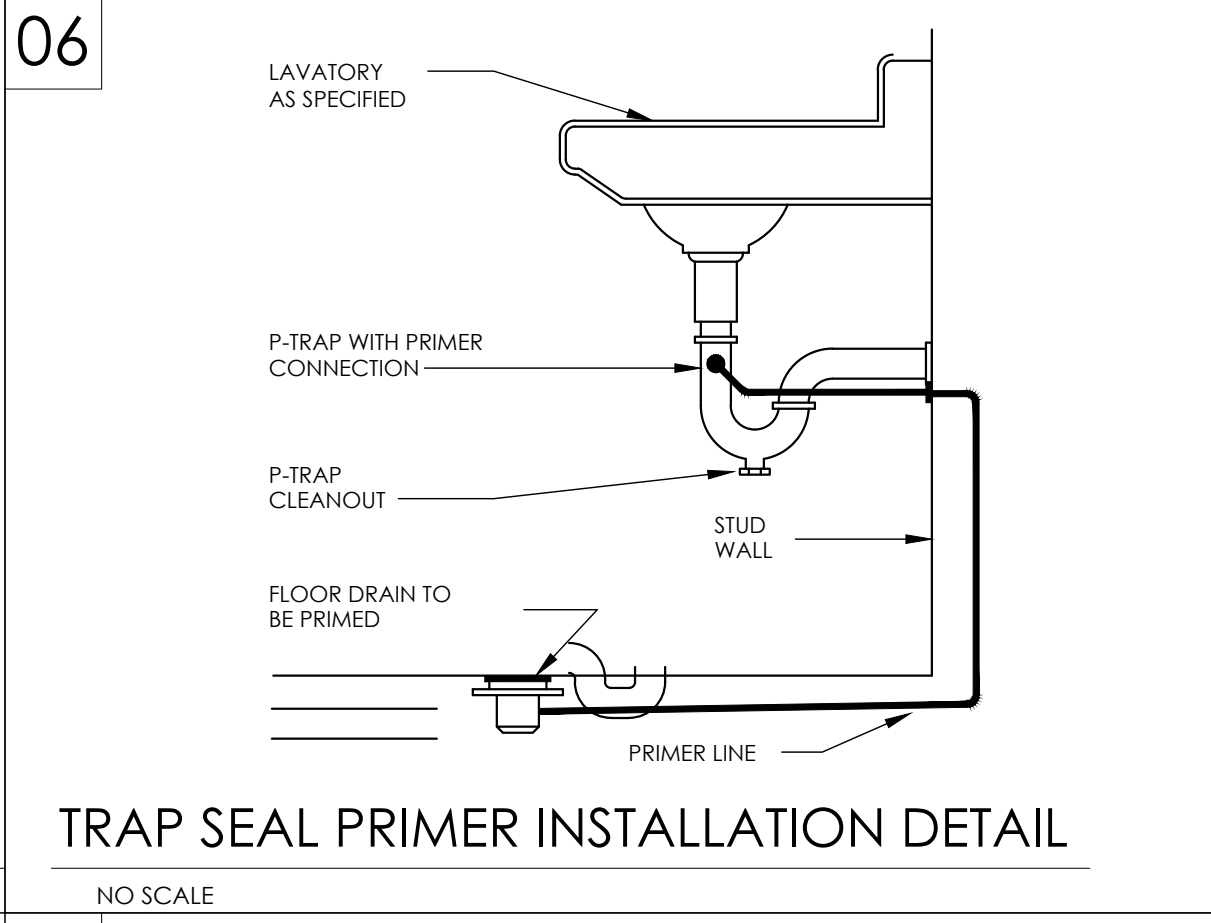
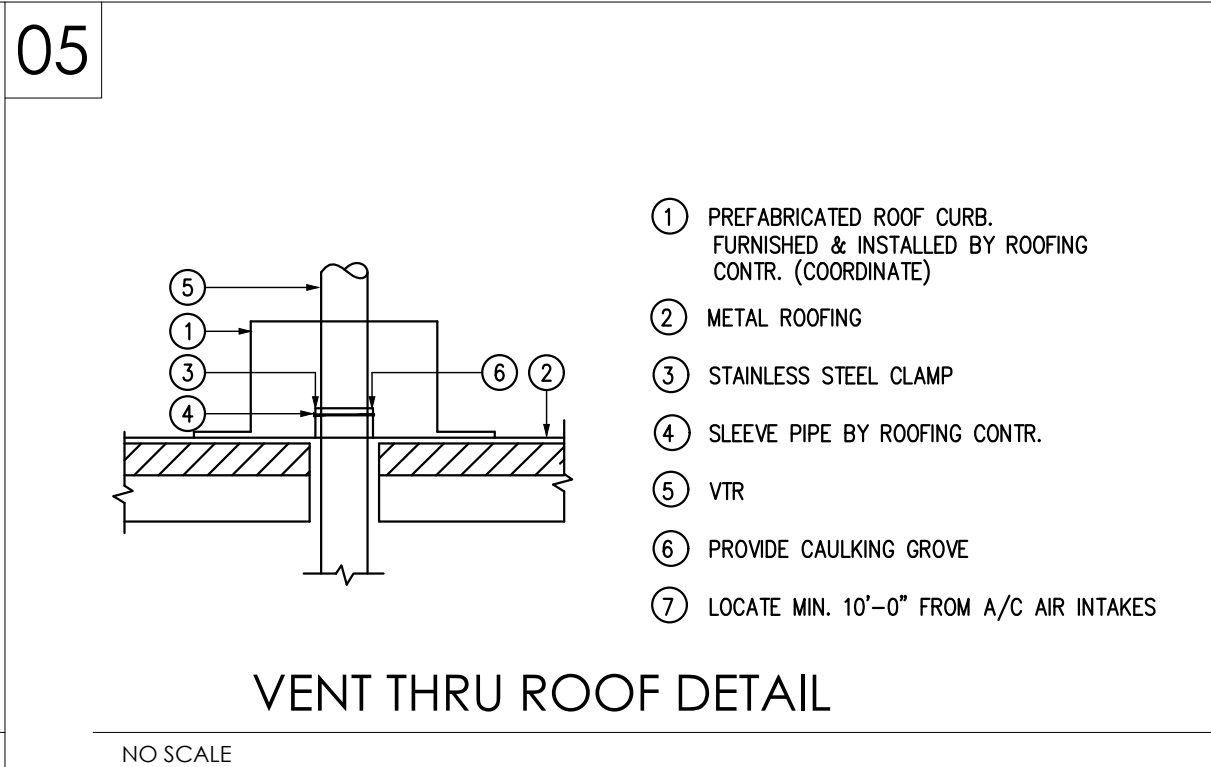
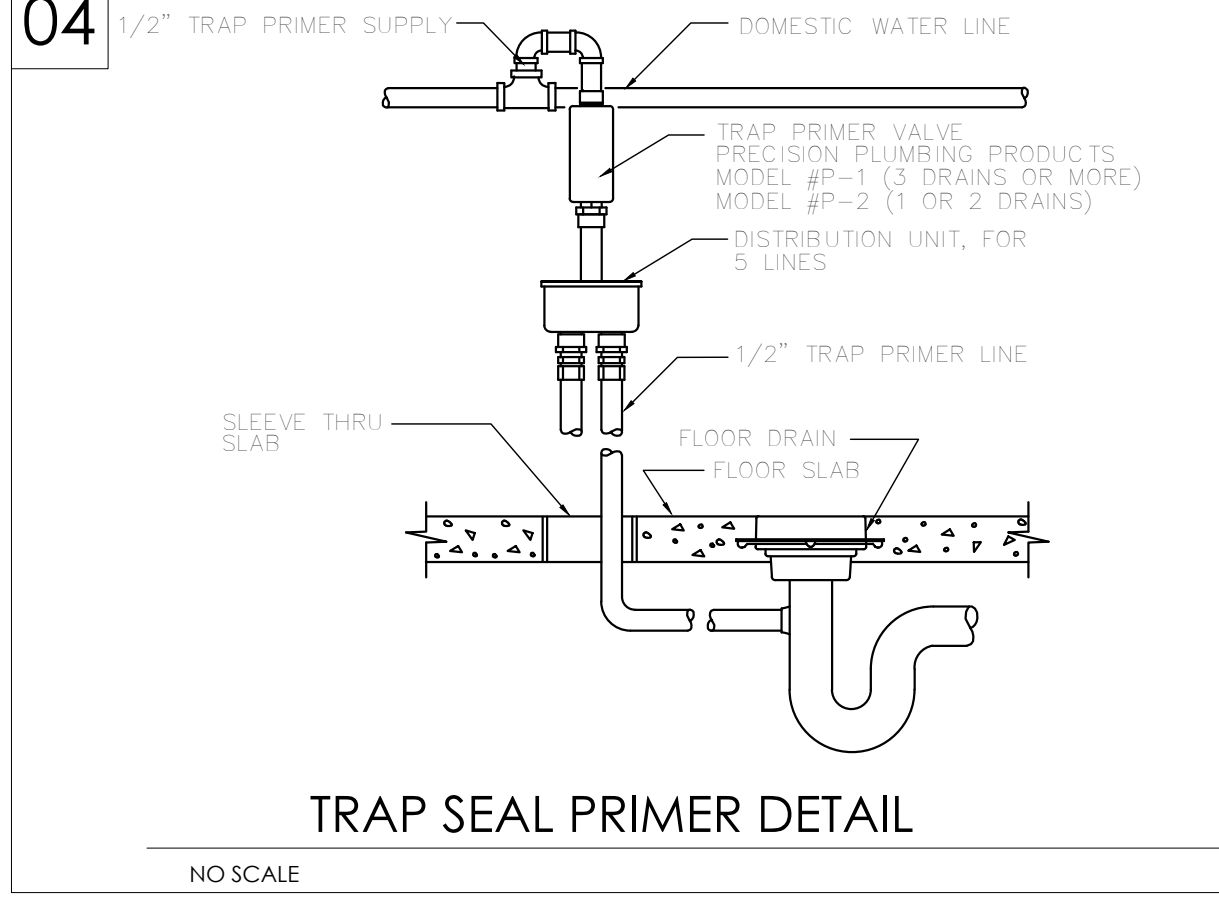
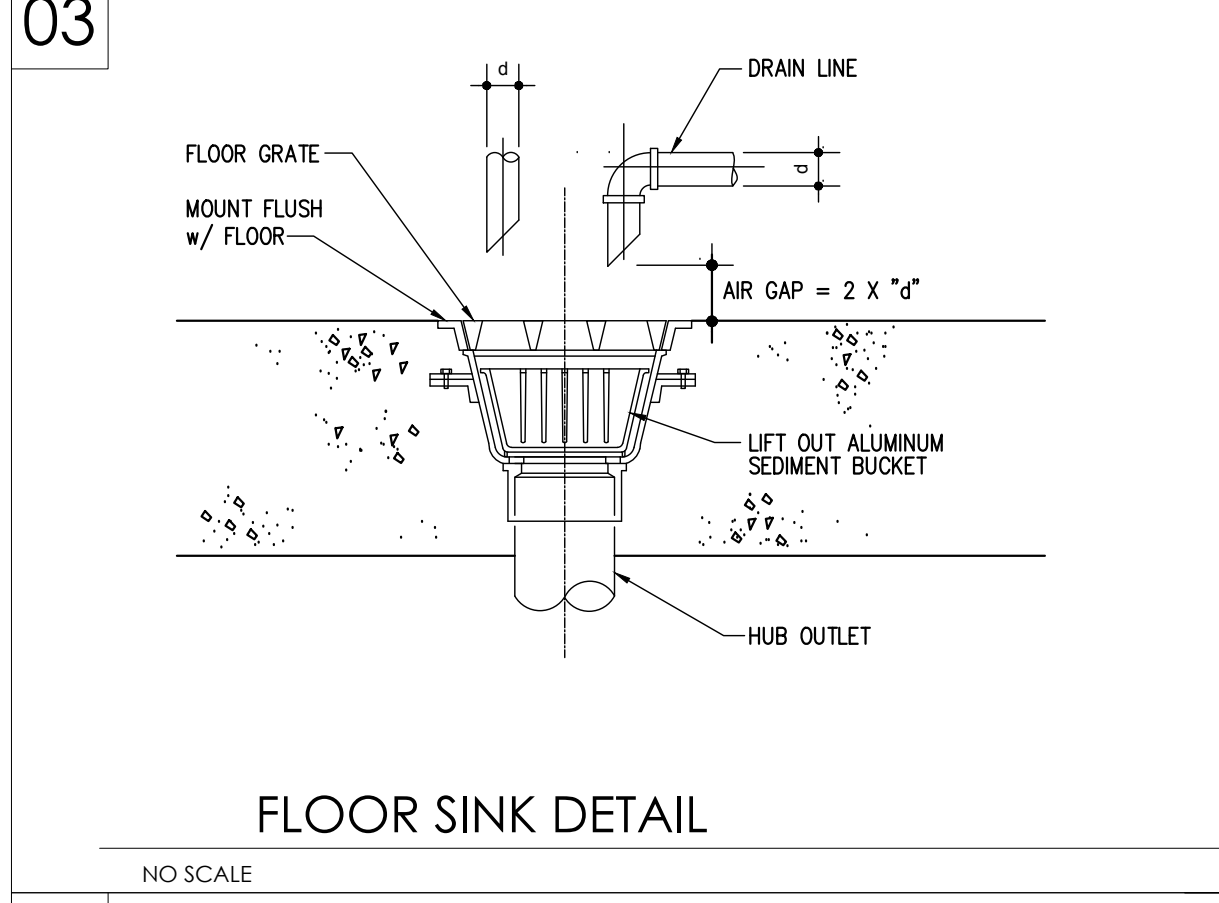
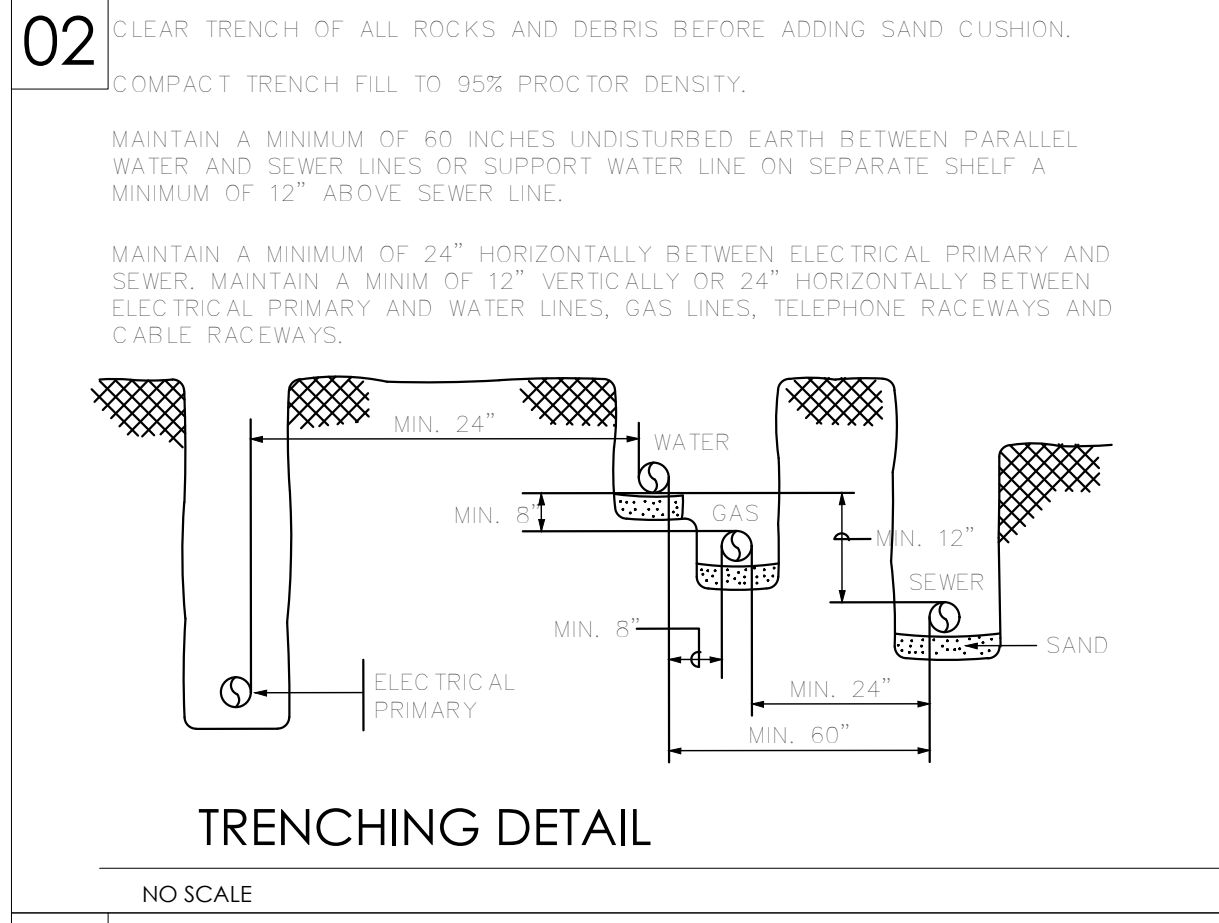
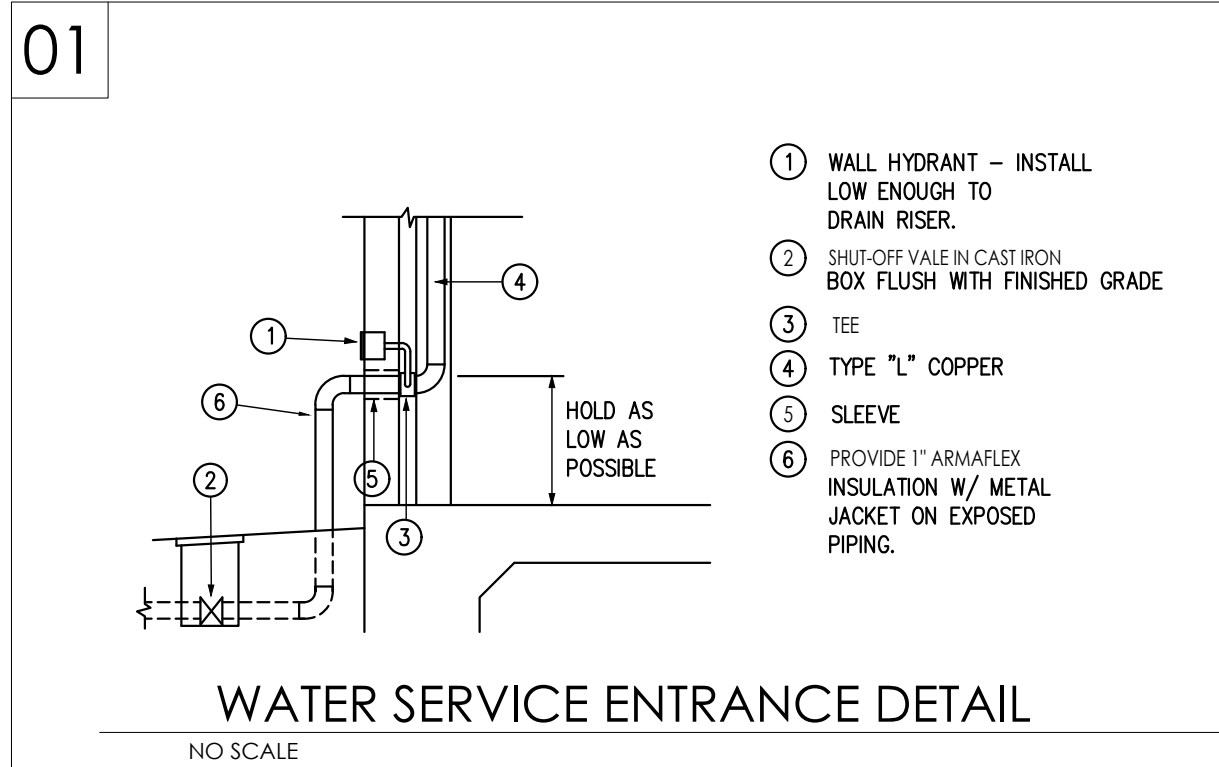
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PLASTIC PIPE SHOULD ALWAYS BE BURIED IN STRICT ACCORDANCE WITH THE ASTM STANDARD RELEVANT TO THE TYPE OF PLASTIC PIPING SYSTEM BEING INSTALLED. THOSE STANDARDS ARE: ASTM D2321 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS. ASTM D2774 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING.

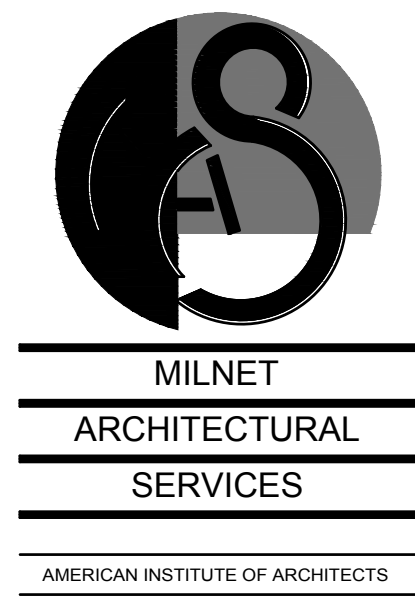
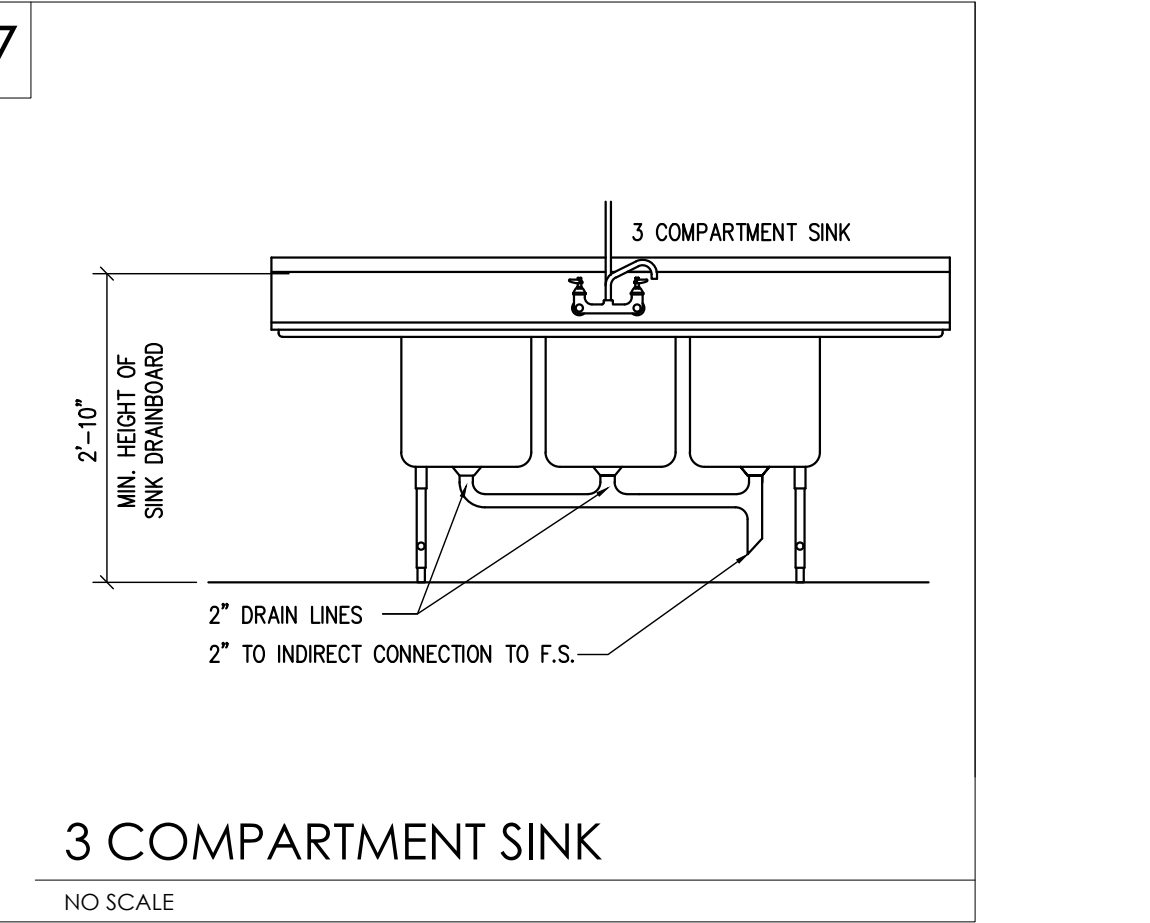
NOTE: IN ADDITION TO THESE STANDARDS, PIPE SHOULD ALWAYS BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODE REQUIREMENTS.

RECOMMENDATIONS FOR UNDERGROUND INSTALLATION OF PLASTIC DRAINAGE PIPE:

- THE MINIMUM WIDTH OF THE TRENCH SHOULD BE THE PIPE OD (OUTSIDE DIAMETER) PLUS 16 INCHES OR THE PIPE OUTSIDE DIAMETER TIMES 1.25 PLUS 12 INCHES. THIS WILL ALLOW ADEQUATE ROOM FOR JOINING THE PIPE, SHAKING THE PIPE IN THE TRENCH TO ALLOW FOR EXPANSION AND CONTRACTION WHERE APPROPRIATE AND SPACE FOR BACKFILLING AND COMPACTION OF BACKFILL. THE SPACE BETWEEN THE PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED TO COMPACT THE BACKFILL.
- PROVIDE A MINIMUM OF 4 INCHES OF FIRM, STABLE AND UNIFORM BEDDING MATERIAL IN THE TRENCH BOTTOM. IF ROCK OR UNYIELDING MATERIAL IS ENCOUNTERED, A MINIMUM OF 6 INCHES OF BEDDING SHALL BE USED. BLOCKING SHOULD NOT BE USED TO CHANGE PIPE GRADE OR TO INTERMITTENTLY SUPPORT PIPE OVER LOW SECTIONS IN THE TRENCH.
- THE PIPE SHOULD BE SURROUNDED WITH AN AGGREGATE MATERIAL WHICH CAN BE EASILY WORKED AROUND THE SIDES OF THE PIPE. BACKFILLING SHOULD BE PERFORMED IN LAYERS OF 6 INCHES WITH EACH LAYER BEING SUFFICIENTLY COMPACTED TO 85% TO 95% COMPACTION.
- A MECHANICAL TAMPER IS RECOMMENDED FOR COMPACTING SAND AND GRAVEL. THESE MATERIALS CONTAIN FINE-GRAINS, SUCH AS SILT AND CLAY. IF A TAMPER IS NOT AVAILABLE, COMPACTING SHOULD BE DONE BY HAND.
- THE TRENCH SHOULD BE COMPLETELY FILLED. THE BACKFILL SHOULD BE PLACED AND SPREAD IN UNIFORM LAYERS TO PREVENT ANY UNFILLED SPACES OR VOIDS. LARGE ROCKS, STONES, FROZEN CLODS, OR OTHER LARGE DEBRIS SHOULD BE REMOVED. STONE BACKFILL SHALL PASS THROUGH AN 1-1/2" SIEVE. ROCK SIZE SHOULD BE ABOUT ONE-TENTH OF THE PIPE OUTSIDE DIAMETER. HEAVY TAMPERS OR ROLLING EQUIPMENT SHOULD ONLY BE USED TO CONSOLIDATE THE FINAL BACKFILL.
- TO PREVENT DAMAGE TO THE PIPE AND DISTURBANCE TO PIPE EMBEDMENT, A MINIMUM DEPTH OF BACKFILL ABOVE THE PIPE SHOULD BE MAINTAINED. PIPE SHOULD ALWAYS BE INSTALLED BELOW THE FROST LEVEL. TYPICALLY, IT IS NOT ADVISABLE TO ALLOW VEHICULAR TRAFFIC OR HEAVY CONSTRUCTION EQUIPMENT TO TRAVERSE THE PIPE TRENCH.

NO SCALE

UNDERGROUND INSTALLATION DETAIL OF PLASTIC PIPING SYSTEMS



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GREASE TRAP RECEIVING AND
INSTALLATION INSTRUCTIONS

Overview
ParkUSA is a leader in pre-engineered environmental products. Products are catalogued with standard features as shown on specification material. However, these products are often furnished to meet specific engineering requirements, and have special features and arrangements.

In such cases, handling and installation procedures may vary slightly depending upon the actual type of construction. It is recommended that a company representative be consulted in each unique situation.

Codes and Installation
Local codes and regulations should supersede all recommendations made by ParkUSA and its representatives, and the appropriate authorities should be consulted before installation is made. Where an apparent conflict of code requirements and manufacturer recommendations or standard design exists, the assistance of a company representative should be requested. In almost every instance, ParkUSA will be able to make modifications necessary to comply with local codes, jurisdictions and interpretations, if notified prior to actual fabrication or upon order placement.

Field Preparation
The customer or his contractor shall prepare the excavation to the proper depth using dimensional data and weights from approved submitted drawings. Call 800-256-8041 to confirm excavation dimensions and crane requirements.

All excavations should be shored or stepped back in accordance to OSHA recommendations. A level base within the excavation and a minimum of twelve (12) inches of clearance on all sides of the unit is required. The depth of the base and the material shall meet the specifications and requirements for the type of soil at the setting location (consult with design engineer for base specifications). All field excavation and preparation is the sole responsibility of the customer/contractor.

Scheduling
The delivery of the unit should be scheduled at least 48 hours in advance, weather permitting. To reschedule a delivery, a 24 hour notice is required.

Delivery and Placement
Upon arrival of the interceptor, equipment may be needed to unload and set the interceptor in its final installed position. The equipment operator will perform rigging and setting unit. It will be necessary for the customer/contractor to furnish the required labor to install the joint sealant and assist our crane operator with the installation. Backfill is the sole responsibility of the owner/contractor.

Venting & Trapping
Each fixture discharging into the waste water interceptor must be individually trapped and vented.

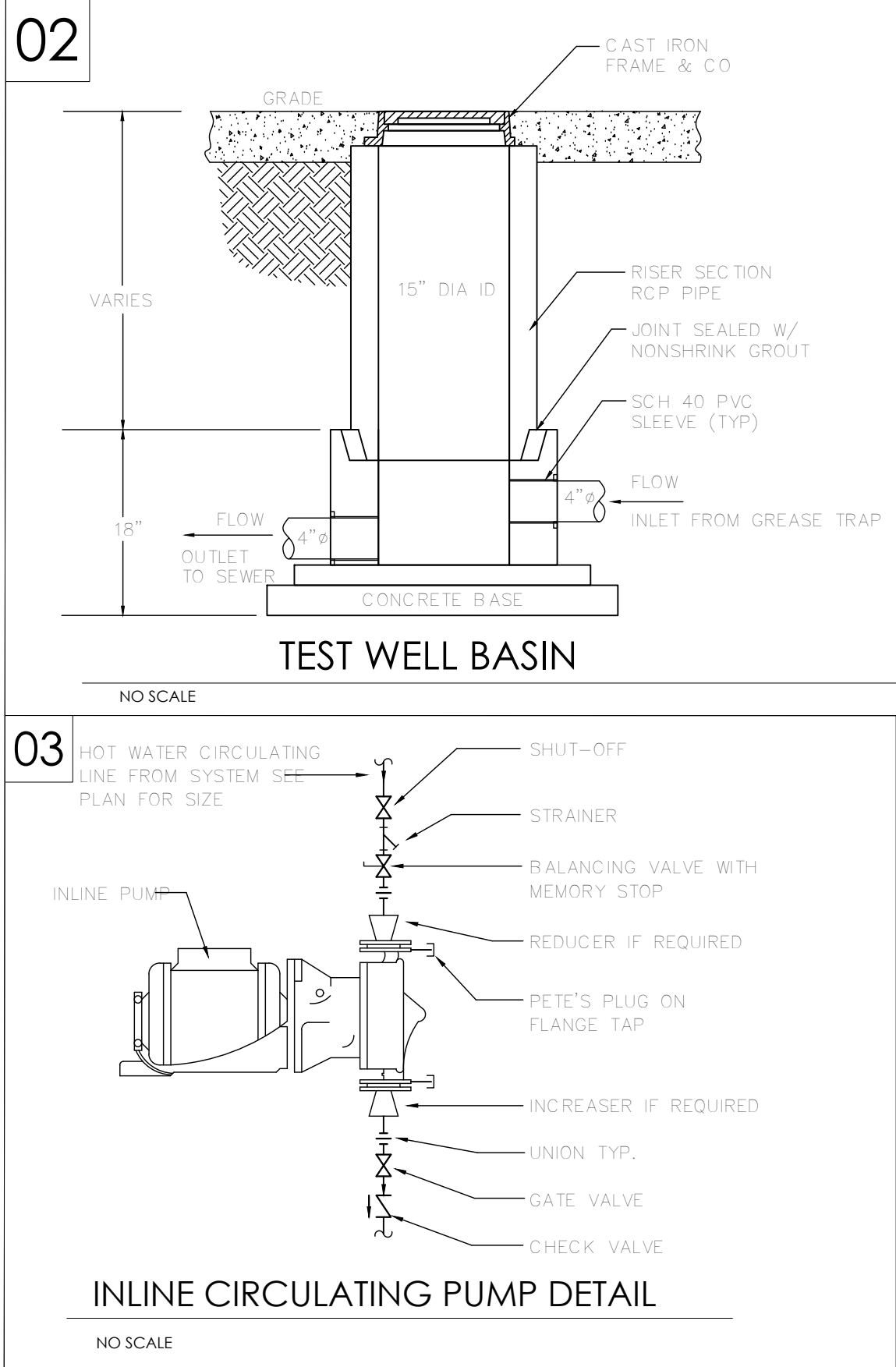
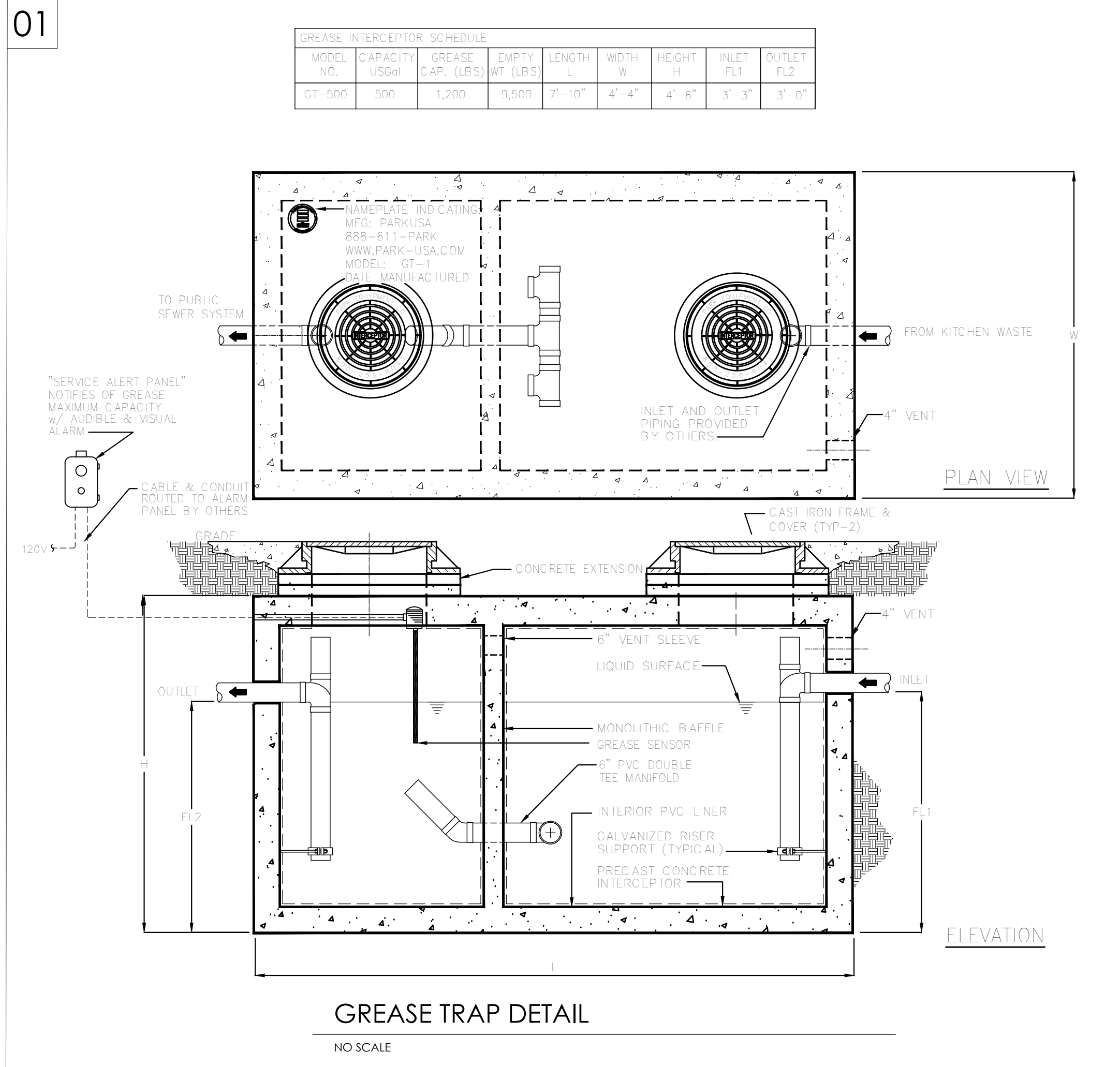
Fixtures
Wastewater Interceptor must be placed as close as practical to fixtures they serve and outside the building. Each interceptor will be accompanied with manufacturer's backfill instructions.

After unit is set, the excavation should be completely backfilled immediately and prior to filling with water. The backfill material shall meet the specifications and requirements for setting location (consult with design engineer for backfill specifications). It is recommended that backfill material be on site at the time of delivery. Two methods of backfill are:

a. With material excavated placed in (1) one foot lifts and compacted and tamped to original density or per owner/engineer's requirements.

b. Bank sand in (2) two foot lifts and compacted or waterjetted per owner/engineer's requirements.

Testing (for tanks)
If project specifications require testing of tanks, follow the following testing procedure. After completing the piping, the unit shall be properly backfilled. Fill the tank with water to the normal operating level. Record this level and let stand for 24 hours. Recheck the water level. A 5% or less variance is generally acceptable. Note that precast concrete tanks are designed for below grade installation with an earthen backfill. DO NOT fill tanks with water until the tanks are properly backfilled. Filling tanks prior to backfilling may cause abnormal stresses and may result in leakage and/or damage to the tanks and may void the manufacturer's warranty.



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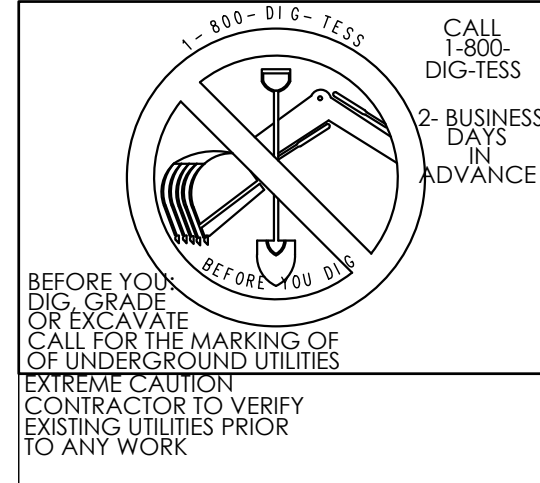
KEYED NOTES - FIRE PROTECTION:

1. FIRE SPRINKLER MAIN TO CONNECT TO CITY MAIN WATER LINE. SEE DETAIL #2.
2. THIS IS A WOOD STRUCTURE EXISTING BUILDING FACILITY. PROVIDE A NEW FIRE SPRINKLER SYSTEM. FIRE PROTECTION TO COORDINATE WITH ALL OTHER TRADES.
3. ESTIMATED LOCATION OF EXISTING CITY MAIN WATER LINE. CONTRACTOR VERIFY EXACT PIPE LOCATION AND SIZE.
4. 3000 PSI CONCRETE THRUST BLOCK AT EVERY CHANGE IN DIRECTION AS PER NFPA 24.
5. FIRE SPRINKLER SYSTEM RISER SHALL BE PLACED IN THIS PROPOSED RISER ROOM. REFER TO DETAIL #4.
6. PROVIDE FREE STANDING F.D.C. COORDINATE EXACT LOCATION WITH A.H.J. PROVIDE SIGN WITH BUILDING IT SERVE. REFER TO DETAIL #5.
7. RUN FIRE MAIN AND FDC LINES BETWEEN 3 AND 4 FEET DEEP. PROVIDE 4 INCHES OF SAND UNDER PIPE. COVER ALL PIPE AND LEAVE JOINTS EXPOSED FOR ENGINEER AND FIRE DEPARTMENT INSPECTION.
8. DROP F.D.C. LINE DOWN @ THIS POINT. PROVIDE STAINLESS STEEL IN BUILDING RISER @ FLOOR PENETRATION. CONTRACTOR COORDINATE EXACT LOCATION.
9. INSPECTOR'S TEST TO CONNECT TO FIRE PROTECTION SYSTEM. REFER TO DETAIL #3. CONTRACTOR COORDINATE WITH ARCHITECTURAL FOR PIPE ROUTE, VALVE LOCATION AND ACCESS. INSPECTOR'S TEST SHALL BE INSIDE A FURR-OUT WITH ACCESS PANEL IF INSPECTOR'S TEST IS LOCATED IN COMMON AREA.
10. PROVIDE NEW PENDANT SPRINKLER HEAD AND BRASS UPRIGHT IN OPEN AREAS.
11. SAW-CUT EXISTING ASPHALT/CONCRETE TO INSTALL FIRE LINE. REPAIR TO MATCH EXISTING AFTER LINES ARE INSTALLED AND APPROVED BY A.H.J.
12. EXISTING BUILDING. NO WORK WILL BE DONE AT THIS BUILDING.
13. PROVIDE A FIRE SPRINKLER SYSTEM TO PROTECT ATTIC @ THIS BUILDING. DESIGN SHALL BE AS PER NFPA 13.

GENERAL NOTES - FIRE PROTECTION:

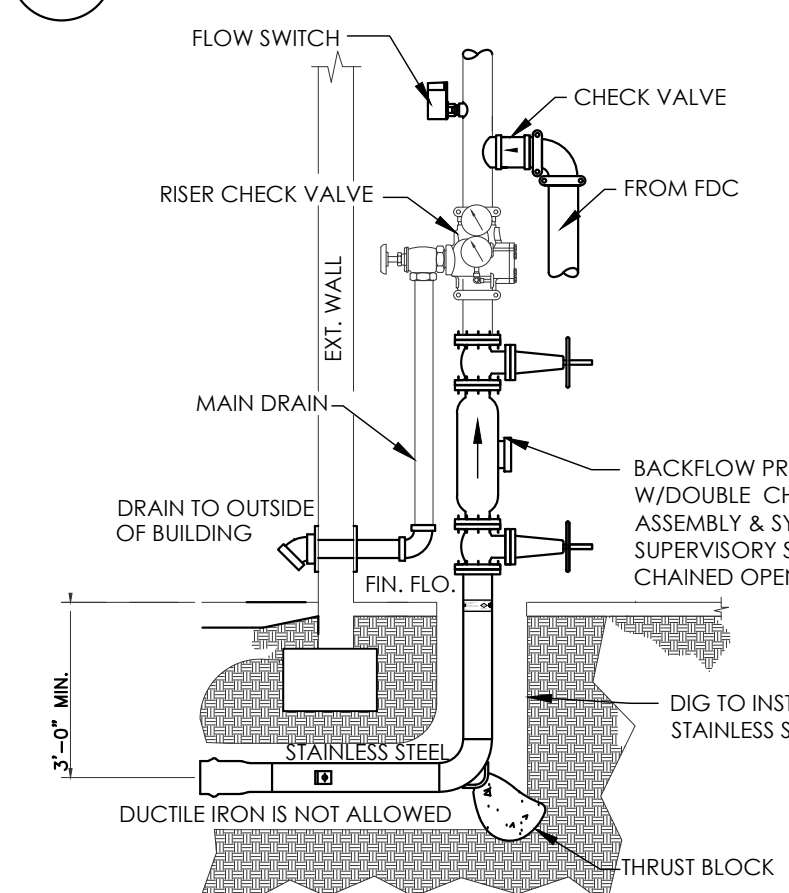
- A. SYSTEM TO BE DESIGNED TO MEET CITY OF SAN JUAN AND FIRE MARSHAL CODES. PLANS SHALL BE SUBMITTED TO THE CITY OF SAN JUAN FOR REVIEW AND APPROVAL. FIRE MARSHAL TO BE THE FINAL APPROVING AUTHORITY FOR ALL FIRE PROTECTION WORK.
- B. FIRE DEPARTMENT CONNECTION SHALL BE AS REQUIRED BY LOCAL FIRE MARSHAL.
- C. ALL PIPE TO BE SIZED HYDRAULICALLY.
- D. ALL PIPING UNDER SLAB SHALL BE STAINLESS STEEL. ELSE USE DUCTILE IRON. VERIFY WITH LOCAL APPROVING AUTHORITY.
- E. DETAILS DESCRIBE SOME SPRINKLER COMPONENTS REQUIRED BY A AUTOMATICALLY OPERATED SYSTEM. SPRINKLER CONTRACTOR TO PROVIDE ALL SYSTEM COMPONENTS REQUIRED FOR A TURN KEY FIRE SPRINKLER SYSTEM.
- F. PROVIDE SIGNS FOR FDC, ALL VALVES, AND RISER.
- G. HAZARD CLASSIFICATION SHALL BE AS PER NFPA 13.
- H. ALL UNDERGROUND PIPE TO BE DR-18 C900 AND TO BE INSTALLED AS PER NFPA 24.
- I. REFER TO SPECIFICATIONS FOR FURTHER INSTRUCTIONS.
- J. ALL ABOVE CEILING PIPING WILL NEED TO BE ROUTED AROUND EXISTING CONDUITS, BEAMS, MECHANICAL DUCT WORK AND DRAIN LINES. ALL PIPE LEFT WITH TRAP WATER NEEDS TO BE PROVIDED W/ A DRAIN VALVE.
- K. SEAL ALL WALL OPENINGS W/ MORTAR OR FIRE CAULKING.
- L. NO FIRE SPRINKLER PIPING TO RUN OVER ELECTRICAL EQUIPMENT, IT ROOM AND ANY OTHER SYSTEM THAT MAY BE DAMAGED FROM WATER LEAK.
- M. CONTRACTOR MUST VISIT SITE TO ASSESS PRESENT CONDITION BEFORE BID DATE.
- N. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCHITECTURAL DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- O. ALL EXPOSED PIPE TO BE PROTECTED AGAINST FREEZING AS PER NFPA 13.
- P. ALL NFPA CODES APPLICABLE SHALL BE USED AND FOLLOWED.

NOTE: CARE SHALL BE TAKEN DURING DIGGING. ALL LINES DAMAGED UNDERGROUND WILL BE FIXED BY THE CONTRACTOR.

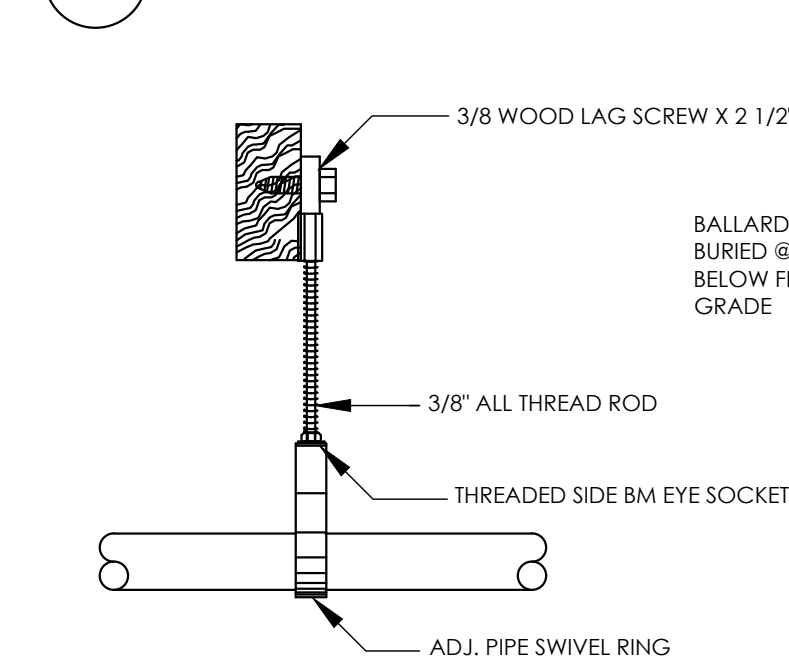


THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED AS REFERENCE FOR BIDDING PURPOSES ONLY. THIS DRAWING SHALL NOT BE USED FOR PERMIT OR CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE NEW FIRE SPRINKLER SYSTEM. ALL NFPA CODES APPLICABLE SHALL BE USED AND FOLLOWED.

2 FIRE LINE CONNECTION DETAIL



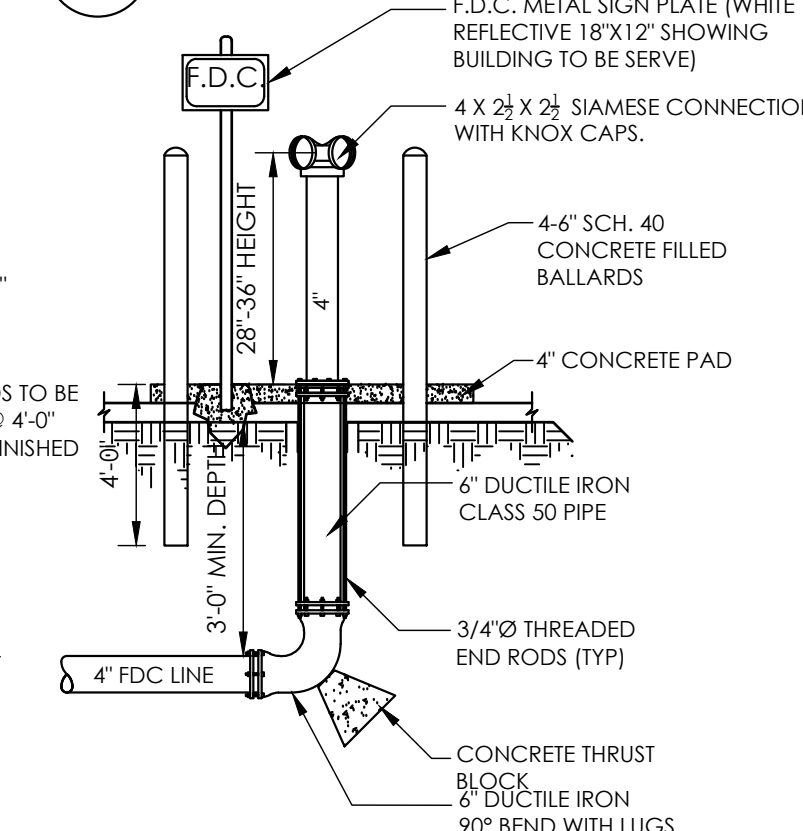
4 RISER ROOM DETAIL



6 HANGER DETAIL



3 INSPECTOR'S TEST DETAIL



5 FREE STANDING F.D.C. DETAIL



1 FIRE PROTECTION SITE PLAN

1/16"=1'-0"

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