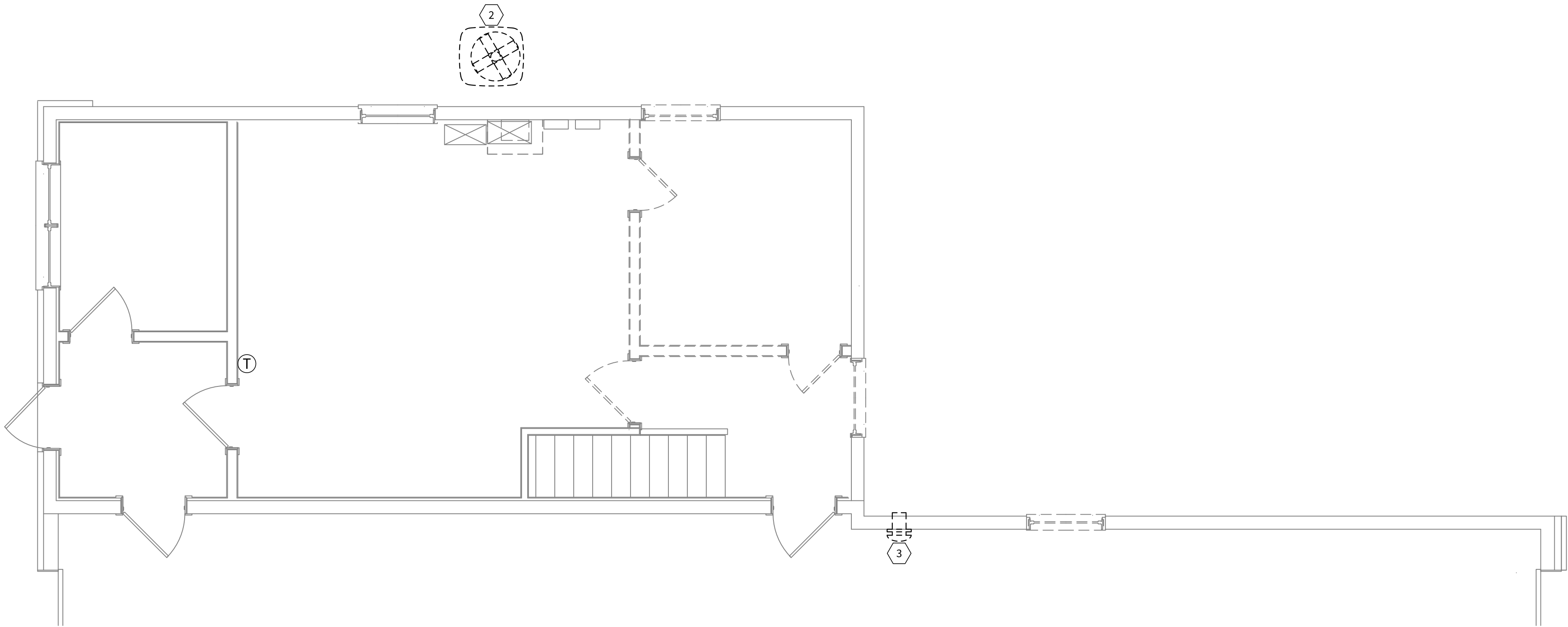


**BASEMENT
MECHANICAL DEMOLITION** 1
SCALE: 1/4" = 1'-0" MD1.0 NORTH



**FIRST FLOOR
MECHANICAL DEMOLITION** 2
SCALE: 1/4" = 1'-0" MD1.0 NORTH



**GENERAL MECHANICAL
DEMOLITION NOTES:**

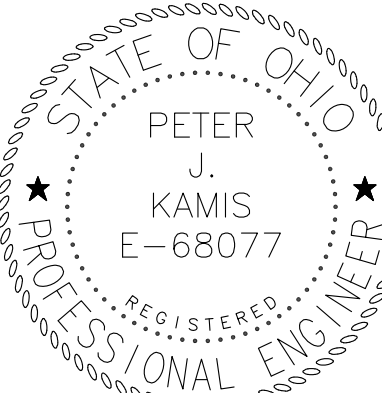
a. REMOVE ALL MECHANICAL SYSTEMS IN SCOPE OF WORK ENTIRELY TO CREATE CLEAN, EMPTY SHELL SPACE. PATCH ALL FLOOR, ROOF, & WALL PENETRATIONS TO MATCH EXISTING CONSTRUCTION. COORDINATE DEMOLITION WITH NEW WORK.

**MECHANICAL DEMOLITION
CODED NOTES:** ○

1. REMOVE GAS-FIRED FURNACE & ALL ASSOCIATED CONTROLS, DUCTWORK, GAS PIPING, AIR DISTRIBUTION, FLUE PIPING, ETC. ENTIRELY. COORDINATE REMOVAL WITH REPLACEMENT UNIT.






2. REMOVE CONDENSING UNIT & ALL ASSOCIATED REFRIGERANT PIPING. COORDINATE REMOVAL WITH REPLACEMENT UNIT.

3. REMOVE SIDEWALL EXHAUST FAN & ALL ASSOCIATED DUCTWORK, CONTROLS, ETC. ENTIRELY. PATCH WALL TO MATCH EXISTING CONSTRUCTION.



PETER J. KAMIS, PE
LICENSE #68077
EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT
3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

MECHANICAL LEGEND	
	NEW OR RELOCATED AIR DEVICE
	EXISTING AIR DEVICE
	MANUAL ADJUSTABLE VOLUME DAMPER (V.D.)
	THERMOSTAT
	SMOKE DETECTOR
(R)	RELOCATE
(E)	EXISTING TO REMAIN
REX	REMOVE EXISTING
CTE	CONNECT TO EXISTING
FD	FIRE DAMPER
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
TA	TRANSFER AIR
UC	1" UNDERCUT DOOR

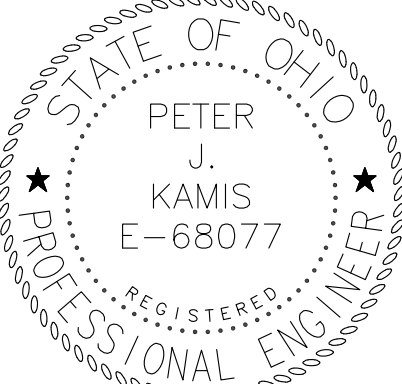
BID/PERMIT OCT 28 2024
REVIEW SET OCT 18 2024
PROJECT #: 2022

**MD
1.0**

MECHANICAL
DEMOLITION PLANS



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EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

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1.0

BASEMENT & FIRST FLOOR
MECHANICAL PLANS

GENERAL
MECHANICAL NOTES:

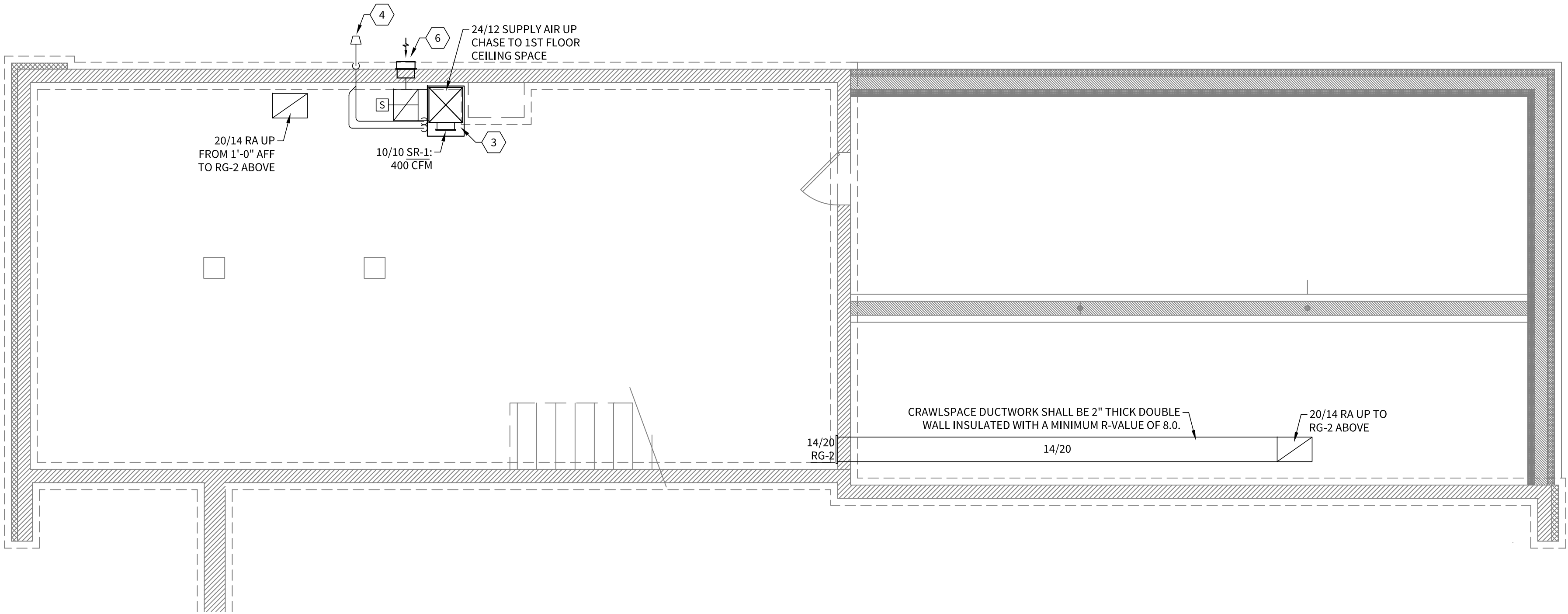
- MOUNT THERMOSTATS AT 4'-0" ABOVE FINISHED FLOOR. COORDINATE EXACT LOCATIONS WITH OCCUPANTS.
- ROUND DUCT FEEDING DIFFUSER/GRILLE TO BE SAME SIZE AS DIFFUSER/GRILLE NECK UNLESS NOTED OTHERWISE.
- DUCTWORK DENOTED "(L)" TO HAVE 1" INTERIOR ACOUSTIC LINING. DUCT SIZE SHOWN IS EXTERIOR & IS SIZED TO ACCOUNT FOR LINING.

MECHANICAL CODED NOTES: ⬡

- TERMINATE Ø6" EXHAUST AT EXTERIOR WALL WITH GREENHECK WC-6 HOODED WALL CAP. MAINTAIN 10'-0" FROM MECHANICAL OUTSIDE AIR INTAKES.
- TERMINATE DRYER VENT AT EXTERIOR WALL WITH MANUFACTURER'S SIDEWALL VENT CAP & BACKDRAFT DAMPER. NO BIRD SCREENS ARE PERMITTED IN DRYER VENT PIPING.
- NEW GAS-FIRED FURNACE & COOLING COIL FURN-1 MOUNTED ON EQUIPMENT PAD. ROUTE CONDENSATE TO EXISTING FLOOR DRAIN & TERMINATE WITH AIR GAP. PROVIDE INLINE CONDENSATE NEUTRALIZER. INSTALL PER MANUFACTURER'S REQUIREMENTS & MAINTAIN ALL RECOMMENDED CLEARANCES.
- TERMINATE PVC COMBUSTION AIR & FLUE PIPING AT EXTERIOR WALL WITH MANUFACTURER'S CONCENTRIC VENTING KIT. FIELD VERIFY EXACT TERMINATION LOCATION TO BE AWAY FROM OPERABLE WINDOWS & OUTSIDE AIR INTAKES. INSTALL PER MANUFACTURER'S REQUIREMENTS.
- NEW 5-TON CONDENSING UNIT CU-1 MOUNTED LEVEL ON 4" HIGH CONCRETE EQUIPMENT PAD WITH VIBRATION ISOLATORS. ROUTE REFRIGERANT PIPING TO ASSOCIATED FURN-1 SIMILAR TO REMOVED PIPING INSTALLATION. COORDINATE ROUTE IN FIELD WITH FINAL LOCATION OF CONDENSING UNIT. COORDINATE REFRIGERANT PIPE SIZE REQUIREMENTS WITH THE MANUFACTURER. INSULATE ALL REFRIGERANT PIPING (ARMACELL 'ARMAFLEX' OR EQUAL), EXTERIOR REFRIGERANT PIPING WITH INSULATION SHALL HAVE UV RESISTANT WEATHER PROOF SHELL (3M 'VENTURECLAD' OR EQUAL). INSTALL PER MANUFACTURER'S REQUIREMENTS.
- Ø10" WALL CAP WITH BIRD SCREEN & GRAVITY BACKDRAFT DAMPER. ROUTE Ø10" OUTSIDE AIR DUCT TO FURNACE RETURN DUCTWORK & SET VOLUME DAMPER TO 300 CFM.
- TYPE-1 KITCHEN EXHAUST HOOD HOOD-1 (2,000 CFM) MOUNTED AT 6'-8" AFF (APPROX. 880 LBS.). VERIFY EXACT REQUIREMENTS WITH MANUFACTURER.
- Ø14" GREASE DUCT ROUTED TO UP-BLAST KITCHEN EXHAUST FAN KEF-1 (2,000 CFM) MOUNTED ON WALL (APPROX. 200 LBS.). PROVIDE TRANSITION DUCTWORK BETWEEN HOOD COLLAR & FAN AS REQUIRED. VERIFY EXACT REQUIREMENTS WITH MANUFACTURER.
- 20/14 MAKEUP AIR DUCT DOWN FROM FLOOR ABOVE. PROVIDE (3) Ø12" DUCT FEEDS TO (3) HOOD SUPPLY PLENUM COLLARS. VERIFY EXACT ROUTING IN FIELD.

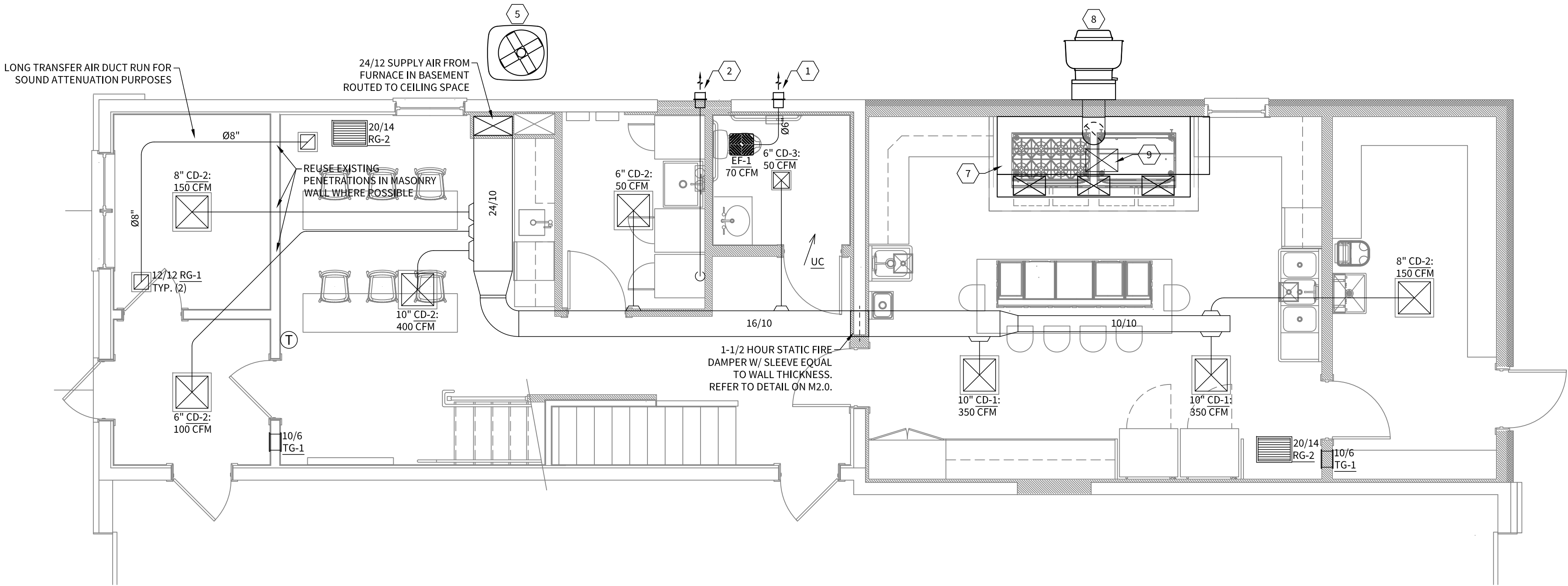
MECHANICAL LEGEND

	NEW OR RELOCATED AIR DEVICE
	EXISTING AIR DEVICE
	MANUAL ADJUSTABLE VOLUME DAMPER (V.D.)
	THERMOSTAT
	SMOKE DETECTOR
	RELOCATE
	EXISTING TO REMAIN
	REMOVE EXISTING
	CONNECT TO EXISTING
	FIRE DAMPER
	SUPPLY AIR
	RETURN AIR
	OUTSIDE AIR
	TRANSFER AIR
	1" UNDERCUT DOOR



BASEMENT
MECHANICAL PLAN

SCALE: 1/4" = 1'-0"



FIRST FLOOR
MECHANICAL PLAN

SCALE: 1/4" = 1'-0"



OUTDOOR AIR VENTILATION SCHEDULE

AREA	OCCUPANCY CATEGORY	(Pz) ZONE POP.	(Rp) OA PER PERSON	(Ra) OA PER SQ. FT.	(Ez) ZONE AIR DIST. EFF.	(Ev) SYS. VENT. EFF.	CFM REQ.	CFM DESIGN	NOTES
710 SF	OFFICE	7	5 CFM	0.06 CFM	1.0	1.0	78	90	1
900 SF	STORAGE	N/A	N/A	0.12 CFM	1.0	1.0	108	120	1
465 SF	KITCHEN	4	7.5 CFM	0.12 CFM	1.0	1.0	79	90	1
1,320 SF	LIVING AREA/BEDROOM	6	5 CFM	0.06 CFM	1.0	0.8	137	160	1
1. OUTSIDE AIR IS INTRODUCED THROUGH A NEW PACKAGED ROOFTOP UNIT, NEW SPLIT-SYSTEM FURNACE, & A NEW DEDICATED OUTSIDE AIR UNIT. OUTSIDE AIR DAMPERS OF EACH PIECE OF EQUIPMENT ARE TO BE ADJUSTED TO THE AIRFLOW QUANTITIES SHOWN ON PLAN.							TOTAL	402	460

DIFFUSER AND GRILLE SCHEDULE

ITEM	SERVICE	MANUFACTURER AND CATALOG NUMBER	NECK SIZE	PANEL SIZE	CORE PATTERN	REMARKS
CD-1	SUPPLY	CAPTIVEAIRE #DI-PSP	AS SHOWN ON DWG.	24x24	PERFORATED	STAINLESS STEEL LAMINAR FLOW SUPPLY AIR DIFFUSER WITH NECK-MOUNTED DAMPER AND SURFACE-MOUNT BORDER.
CD-2	SUPPLY	PRICE #SPD	AS SHOWN ON DWG.	24x24	4 WAY THROW	STEEL HIGH PERFORMANCE PLAQUE FACE SUPPLY AIR DIFFUSER WITH #VCR8 DAMPER, WHITE FINISH AND TYPE-31 SURFACE-MOUNT BORDER.
CD-3	SUPPLY	PRICE #SPD	AS SHOWN ON DWG.	12x12	4 WAY THROW	STEEL HIGH PERFORMANCE PLAQUE FACE SUPPLY AIR DIFFUSER WITH #VCR8 DAMPER, WHITE FINISH AND TYPE-31 SURFACE-MOUNT BORDER.
SR-1	SUPPLY	PRICE #520	AS SHOWN ON DWG.	AS SHOWN ON DWG.	DOUBLE DEFLECTION	STEEL, DOUBLE DEFLECTION SUPPLY REGISTER WITH 3/4" BAR SPACING, SURFACE MOUNT BORDER, AND WHITE FINISH. PROVIDE WITH OPPOSED-BLADE DAMPER.
RG-1	RETURN	PRICE #530	AS SHOWN ON DWG.	AS SHOWN ON DWG.	SINGLE DEFLECTION	STEEL, FIXED LOUVER GRILLE WITH 3/4" BAR SPACING, SURFACE-MOUNT BORDER, AND WHITE FINISH.
RG-2	RETURN	HART & COOLEY #265	AS SHOWN ON DWG.	AS SHOWN ON DWG.	SINGLE DEFLECTION	HEAVY DUTY STEEL FLOOR GRILLE WITH 1/2" BAR SPACING. COORDINATE FINISH WITH FLOOR COLOR.
TG-1	TRANSFER	PRICE #530	-	AS SHOWN ON DWG.	SINGLE DEFLECTION	STEEL SIDEWALL GRILLE WITH 3/4" BAR SPACING. PROVIDE GRILLE FOR EITHER SIDE OF WALL AND PROVIDE RETURN AIR SILENCER #RAS BETWEEN. COORDINATE FINISH WITH WALL COLOR.

EXHAUST FAN SCHEDULE

TAG	MFR.	MODEL NO.	NOMINAL CFM	EXTERNAL STATIC PRESSURE (IN.)	ELECTRICAL		REMARKS
					KW	V/CY/PH	
EF-1	GREENHECK	SP-B90	70	0.25	.03	120/60/1	1, 2, 3
EF-2	GREENHECK	SP-AP0511W-1	110 ASHRAE 62.2	0.25	.02	120/60/1	1, 2, 3
NOTES: 1. INCLUDE WITH HANGER ISOLATION KIT AND BACKDRAFT DAMPER. 2. CONTROL WITH RESTROOM LIGHT SWITCH. 3. INCLUDE WITH FAN MOUNTED SOLID STATE SPEED CONTROLLER AND STANDARD WHITE GRILLE.							

FURNACE AND COOLING COIL SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	
FURN-1	TRANE #59W2C100USPSC INDOOR COOLING COIL: #4TXCC007DS3	VERTICAL UPFLOW, GAS-FIRED, TWO STAGE FURNACE. HEATING INPUT: 100.0 MBH. HEATING OUTPUT: 97.4 MBH. COOLING CAPACITY: 56.4 MBH TOTAL, 44.1 MBH SENSIBLE. AIRFLOW: 2000 CFM @ 0.70" ESP WITH 1 HP MOTOR. INCLUDE WITH CONDENSATE TRAP KIT AND WIRED REMOTE THERMOSTAT. ELECTRICAL: 120V/1PH/60HZ, 15 MOCP. MATCH TO CU-1.

CONDENSING UNIT SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	
CU-1	TRANE 4TTR6060N1	AIR COOLED CONDENSING UNIT. SEER: 15.5, COOLING CAPACITY: NOMINAL 60 MBH, MATCH TO FURN-1. 208V/ 1 PH/ 60 HZ, MCA = 35 A, MOCP = 60 A.

KITCHEN EXHAUST FAN SCHEDULE

TAG	MFR.	MODEL NO.	NOMINAL CFM	EXTERNAL STATIC PRESSURE (IN.)	ELECTRICAL				NOTES
					W	V/CY/PH	MCA	MOCP	
KEF-1	CAPTIVEAIRE	DU180HFA	2,000	1.50	-	208/60/3	-	-	1, 2, 3, 4
NOTES: 1. INCLUDE WITH VENTED THROUGH WALL CURB (10" GREATER THAN WALL THICKNESS) W/ GREASE BOX & HINGE KIT. 2. INCLUDE WITH UNIT-MOUNTED NEMA-3R SAFETY DISCONNECT SWITCH. 3. PROVIDE & INSTALL IN ACCORDANCE WITH OHIO MECHANICAL CODE SECTION 506. 4. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER & KITCHEN EQUIPMENT.									

KITCHEN EXHAUST HOOD SCHEDULE

TAG	MFR.	MODEL NO.	DIMENSIONS			CLASSIFICATION	EXHAUST (CFM)	MAKE UP AIR (CFM)	REMARKS
			LENGTH	WIDTH	HEIGHT				
HOOD-1	ECON-AIR	3650 ELPX-2	120"	36"	24"	TYPE-I	2,000	1,600	1, 2, 3, 4, 5
NOTES: 1. HEAVY-DUTY, BACK-SHELF, 430 STAINLESS STEEL CONSTRUCTION, W/ HIGH TEMPERATURE LIGHT FIXTURE & CAPTRATE SOLO FILTER. 2. PROVIDE WITH 14" AIR CURTAIN SUPPLY PLENUM, 24" HIGH FIELD WRAPPER, BACKSPLASH, AND 1" INSULATED BACK STANDOFF. 3. PROVIDE WITH FIRE SUPPRESSION SYSTEM AND 12" UTILITY CABINET. COORDINATE EXACT CONFIGURATION WITH EQUIPMENT VENDOR AND FLOOR PLAN. 4. PROVIDE & INSTALL IN ACCORDANCE WITH OHIO MECHANICAL CODE SECTION 506. 5. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER & KITCHEN EQUIPMENT.									

DOAS UNIT SCHEDULE

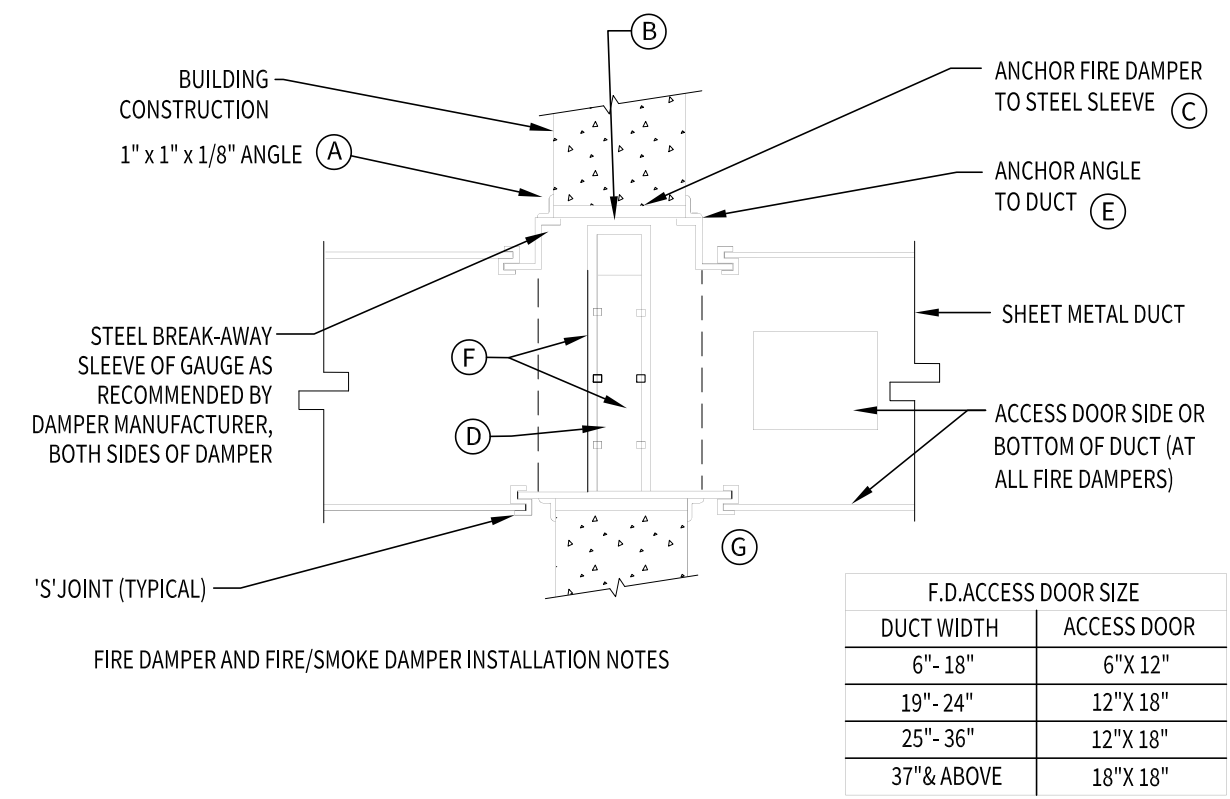
TAG	MFR.	MODEL NO.	COOLING CAPACITY (MBH)		SUPPLY AIR (CFM)	EXTERNAL STATIC PRESSURE (IN.)	HEATING CAPACITY			ELECTRICAL			OPERATING WEIGHT (LBS)	REMARKS
			SENSIBLE	TOTAL			KW	STAGES	MBH	V/CY/PH	MCA	MOCP		
DOAS-1	ECON-AIR	EARTU1-4.150-18-5T-MPU	40.8	64.0	1,600	0.50	-	1	145	208/60/3	25.5	30	1,270	1, 2, 3, 4
NOTES: 1. INCLUDE WITH AVERAGING TEMPERATURE SENSORS, INLET PRESSURE GAUGE, AND MANIFOLD PRESSURE GAUGE. 2. INCLUDE WITH INTAKE HOOD, HAIL GUARD, SIDE DISCHARGE, AND 18" HIGH INSULATED CURB FOR ROOF MOUNTING. 3. PROVIDE & INSTALL IN ACCORDANCE WITH OHIO MECHANICAL CODE SECTION 506. 4. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER & KITCHEN EQUIPMENT.														

ROOFTOP UNIT SCHEDULE

TAG	MFR.	MODEL NO.	COOLING CAPACITY (MBH)		SUPPLY AIR (CFM)	EXTERNAL STATIC PRESSURE (IN.)	HEATING CAPACITY			ELECTRICAL			OPERATING WEIGHT (LBS)	REMARKS
			SENSIBLE	TOTAL			KW	STAGES	MBH	V/CY/PH	MCA	MOCP		
RTU-1	TRANE	"IMPACT" 4YCC4024	19.6	24.6	800	1.0	-	2	60	208/60/1	19.5	30	400	1, 2, 3
NOTES: 1. PROVIDE WITH 14" HIGH (MINIMUM) ROOF CURB. 2. PROVIDE WITH POWERED CONVENIENCE OUTLET, UNIT MOUNTED DISCONNECT, AND PROGRAMMABLE T'STAT. 3. PROVIDE WITH MANUAL OUTSIDE AIR DAMPER.														

KITCHEN AIR BALANCE

TAG	SA CFM	RA CFM	OA CFM	EA CFM
DEDICATED OUTSIDE AIR UNIT #DOAS-1	1,600	0	1,600	0
KITCHEN EXHAUST FAN #KEF-1	0	0	0	2,000
SPLIT-SYSTEM FURNACE #FURN-1	2,000	1,700	300	0
ROOFTOP UNIT #RTU-1	800	640	160	0
TOTALS			2,060 (MAX.)	2,000 (MAX.)

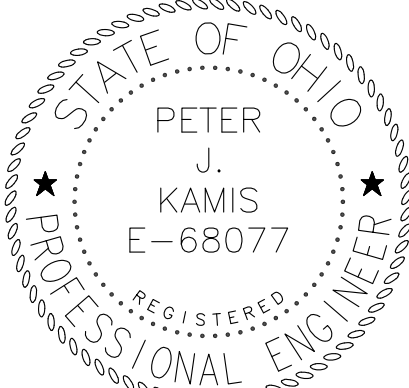


1-1/2 HOUR FIRE DAMPER DETAIL

SCALE: NTS



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PETER J. KAMIS, PE
LICENSE #68077
EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

BID / PERMIT OCT 28 2024
REVIEW SET OCT 18 2024

PROJECT #: 2022

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MECHANICAL SCHEDULES

MECHANICAL DEMOLITION NOTES

- THIS CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS, AND MISCELLANEOUS EXPENSES REQUIRED FOR MECHANICAL DEMOLITION OF THE EXISTING PROJECT AREA BEING RENOVATED. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND BE FAMILIAR WITH ALL DEMOLITION WORK REQUIRED. COORDINATE ALL DEMOLITION WORK WITH ARCHITECTURAL DRAWINGS AND OWNER'S GENERAL REQUIREMENTS.
- MECHANICAL CONTRACTOR SHALL DISCONNECT, DISASSEMBLE, AND REMOVE EXISTING EQUIPMENT, ASSOCIATED DUCTWORK, DIFFUSERS, GRILLES, SUPPORTS, HANGERS, PIPING, CONTROL WIRING, ETC., NOT OTHERWISE INDICATED TO BE REUSED ON DRAWINGS. ALL OPENINGS ON PIPING AND DUCTWORK THAT REMAIN SHALL BE CAPPED AND PROPERLY SECURED. FLOORS, WALLS, AND CEILINGS SHALL BE PATCHED TO MATCH EXISTING OR PREPARED FOR NEW FINISH IN AREA TO BE REMODELED.
- UNUSED SERVICES SHALL BE REMOVED BACK TO DEMISING WALLS OR CAPPED AT RESPECTIVE MAINS. UNUSED MAINS SHALL BE REMOVED IN THEIR ENTIRETY.
- ALL ABANDONED ELECTRICAL DEVICES, WIRING, CONDUIT, ETC., SHALL BE REMOVED. WIRING SHALL BE DISCONNECTED AT CIRCUIT BREAKERS AND REMOVED, AND BREAKERS MARKED "SPARE."
- ANY EQUIPMENT DESIGNATED TO BE SALVAGED SHALL BE PROTECTED AND DELIVERED TO OWNER ON SITE. OTHERWISE, CONTRACTORS SHALL LEGALLY DISPOSE OF DEMOLITION MATERIALS.
- DEMOLITION WORK SHALL BE PERFORMED IN A MANNER SO AS NOT TO DAMAGE ADJACENT WORK AND NOT AFFECT THE OPERATION OF SYSTEMS TO REMAIN IN USE. ANY ITEM TO REMAIN THAT IS DAMAGED BY CONTRACTOR SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- MECHANICAL CONTRACTOR SHALL REMOVE AND RECLAIM ANY REFRIGERANT IN EXISTING SYSTEMS PRIOR TO DEMOLITION OF ANY EQUIPMENT, IN ACCORDANCE WITH EPA REQUIREMENTS.

MECHANICAL HVAC NOTES

- THE PROJECT CONSISTS OF MODIFICATIONS TO THE EXISTING HVAC SYSTEM THROUGHOUT THE EXISTING TENANT SPACE. ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, ETC. MUST BE FIELD VERIFIED FOR EXACT LOCATION.
- ALL SUPPLY (INCLUDING OUTSIDE AIR), RETURN, AND EXHAUST DUCTWORK SHALL BE OF NO. 1 GALVANIZED STEEL CONSTRUCTION AND SHALL BE INSTALLED IN ACCORDANCE WITH THE OHIO MECHANICAL CODE (OMC), SMACNA STANDARDS, AND NFPA 90.
 - SMACNA LOW PRESSURE CONSTRUCTION DUCTWORK SHALL HAVE 2" STATIC PRESSURE RATING WITH SEAL CLASS "A" SEAMS AND JOINTS.
- FLEXIBLE DUCTS SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE AND CONNECTED WITH PLASTIC DRAW BANDS TIGHTENED WITH MANUFACTURER'S TOOL. FLEXIBLE DUCTS SHALL BE LIMITED TO STRAIGHT LENGTHS WITH A MAXIMUM LENGTH OF 5'-0", AND ARE NOT PERMITTED IN ROOMS WITHOUT CEILINGS. FLEXIBLE DUCTS SHALL BE ATCO RUBBER TYPE 070 OR EQUIVALENT WITH 1-1/2" INSULATION, RATED FOR 10" W.C. UP TO 12" DIA., U.L. LISTED AND PLENUM RATED.
- ALL ROUND DUCT ELBOWS SHALL BE LONG SWEEP, 1-1/2 TIMES THE CENTERLINE RADIUS UNLESS CLEARANCE IS NOT AVAILABLE, AT WHICH TIME MITERED ELBOWS WITH TURNING VANES SHALL BE USED.
- ALL RECTANGULAR ELBOWS SHALL BE FURNISHED WITH DOUBLE THICKNESS TURNING VANES. TURNING VANES SHALL BE FASTENED WITH A DOUBLE ROW OF SCREWS.
- CHANGES IN DUCT SIZE SHALL BE MADE BY UNIFORM TAPER SECTION WITH A MAXIMUM INCLUDED ANGLE OF DIVERGENCE OF 15 DEGREES. MITERED OFFSETS GREATER THAN 30" IN ANY DIRECTION ARE NOT PERMITTED.
- ALL BRANCH CONNECTION FITTINGS IN RECTANGULAR DUCTWORK SHALL BE 45° TRANSITION TYPE, CONICAL FITTINGS, OR SPIN-IN FITTINGS WITH INTEGRAL AIR SCOOPS. BUTT FITTINGS ARE NOT ACCEPTABLE.
- MANUAL VOLUME DAMPERS SHALL BE RUSKIN OR EQUIVALENT, INSTALLED PER MANUFACTURER'S AND SMACNA REQUIREMENTS, FOR A U.L. APPROVED INSTALLATION. DAMPERS SHALL BE OF OPPOSED BLADE CONSTRUCTION WITH LOCKING QUADRANTS, AND SHALL BE LOCATED CLOSE TO TAKEOFF FROM MAIN DUCT. PROVIDE REMOTE DAMPER ADJUSTMENT WHERE DAMPERS ARE INACCESSIBLE. COORDINATE WITH GENERAL CONTRACTOR.
- NO EQUIPMENT, DUCTWORK, PIPING, CONTROLS, ETC., SHALL BE INSTALLED OR ROUTED ABOVE ELECTRICAL PANELS AND EQUIPMENT.
- OUTDOOR AIR VENTILATION SHALL BE PROVIDED PER THE OCCUPANCY LOAD AND CLASSIFICATION AS LISTED IN OMC CHAPTER 4. THE OCCUPANCY LOAD SHOWN ON THE TITLE SHEET UNDER CODE INFORMATION AND ACTUAL OCCUPANT LOAD MAY DIFFER. FOR PURPOSES OF DETERMINING REQUIRED VENTILATION AIR, ACTUAL OCCUPANCY LOAD SHALL BE USED.
- AN INDEPENDENT "AABC" OR "NEBB" CERTIFIED AIR BALANCE CONTRACTOR SHALL TEST AND BALANCE THE SYSTEM AND SUBMIT REPORT RESULTS TO THE OWNER AND ARCHITECT FOR APPROVAL. PROVIDE ALL AIR BALANCING DAMPERS, ACCESS DOORS, DIFFUSER AIR BAFFLES, PRESSURE TAPS, AND REPLACEMENT FAN BELTS/SHAIVES WHERE REQUIRED TO COMPLETE THE BALANCE WORK FOR THIS PROJECT, AT NO ADDITIONAL COST TO OWNER. ALL AIR QUANTITIES SHALL BE WITHIN 10% OF THE DESIGN VALUES.
- PROVIDE INSULATION ON MECHANICAL DUCTWORK AND PIPING AS FOLLOWS:
 - ALL UNLINED, CONCEALED SUPPLY AIR DUCTWORK AND BACKS OF CEILING DIFFUSERS SHALL BE INSULATED WITH 1-1/2" THICK FOIL FACED REINFORCED KRAFT JACKET FIBERGLASS DUCT WRAP.
 - DUCTWORK INSTALLED IN UNCONDITIONED SPACES SHALL BE INSULATED WITH "INSTALLED" (25% COMPRESSION) MINIMUM R-VALUE OF 5.0.
 - EXTERIOR DUCTWORK SHALL BE 2" THICK DOUBLE WALL INSULATED WITH A MINIMUM R-VALUE OF 8.0.
 - INSULATE ALL REFRIGERANT SUCTION PIPING FROM CONDENSING UNIT TO INDOOR DX COIL WITH 1/2" ARMAFLEX CLOSED CELL PIPING INSULATION.
 - INSULATE ALL CONDENSATE PIPING INSIDE BUILDING WITH 1" RIGID FIBERGLASS INSULATION.
 - ALL PIPING SHALL BE NEATLY AND CLEARLY LABELED INDICATING SERVICE AND DIRECTION OF FLOW.
 - INSULATION SHALL BE FULLY SECURED TO DUCTWORK AND PIPING. LAP AND TAPE SEAMS AND SECURE TIGHTLY WITH WIRE OR STICK PINS.
 - ALL INSULATION SHALL BE APPLIED IN FULL ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL INSULATION SHALL COMPLY WITH 25/50 FLAME AND SMOKE HAZARD RATINGS PER ASTM E-84, NFPA 255 AND U.L. 723.
- WHERE SHOWN ON PLANS, PROVIDE 1" INTERNAL ACOUSTIC LINING IN SUPPLY AND RETURN AIR DUCTWORK. LINING SHALL BY NON-FLAKING, COATED, AND MEDIUM DENSITY INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. DUCT SIZES SHOWN ON DRAWINGS ARE OUTSIDE DIMENSIONS, AND INCLUDE LINING ALLOWANCE.
- PHOTO ELECTRIC SMOKE DETECTORS SHALL BE FIELD INSTALLED IN THE RETURN AIR DUCTS OF AIR HANDLING UNITS AS SHOWN ON PLANS, WIRED TO SHUT DOWN UNITS UNDER ALARM. MECHANICAL CONTRACTOR SHALL PROVIDE AND WIRE REMOTE TEST STATIONS/ALARMS AT LOCATIONS AS DIRECTED BY AUTHORITY HAVING JURISDICTION. DETECTORS SHALL HAVE AUXILIARY CONTACT FOR WIRING TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR. DETECTORS SHALL COMPLY WITH OMC SECTION 606. VERIFY EXISTENCE AND PROPER OPERATION OF ALL EXISTING SMOKE DETECTORS.
- PROVIDE CURBS FOR ALL ROOF OPENINGS FOR MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT. CURBS SHALL BE FURNISHED AS ACCESSORIES TO EQUIPMENT OR SHALL BE 8" HIGH PATE OR EQUIVALENT, AND SHALL BE FLASHED AND COUNTER-FLASHED INTO ROOFING. ROOF CURBS SHALL BE COMPATIBLE WITH ROOFING SYSTEM AND SHALL MATCH ROOF SLOPE SUCH THAT EQUIPMENT SITS DEAD LEVEL.
- EQUIPMENT AND APPLIANCE LOCATION SHALL BE IN COMPLIANCE WITH OMC SECTION 304. GUARDS SHALL BE PROVIDED WHERE APPLIANCES, EQUIPMENT, FANS OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE LOCATED WITHIN 10'-0" OF A ROOF EDGE OR OPEN SIDE OF A WALKING SURFACE AND IS LOCATED MORE THAN 30" ABOVE THE FLOOR, ROOF OR GRADE BELOW.
- REFRIGERANT CHARGE ON EQUIPMENT THAT IS MODIFIED OR REMOVED SHALL BE PROPERLY EVACUATED FROM SYSTEMS PRIOR TO REMOVAL OF EQUIPMENT, REFRIGERANT PIPING OR SPECIALTIES.
- REFRIGERANT PIPING SHALL BE REFRIGERANT GRADE TYPE "L" COPPER WITH SILVER SOLDERED JOINTS. INSTALL PER MANUFACTURER'S PIPING DIAGRAMS AND RECOMMENDATIONS. ISOLATE PIPING FROM STRUCTURE WITH 1/2" INSULATION BETWEEN PIPING AND SUPPORT POINTS. AFTER COMPLETION, PRESSURE TEST PIPING, PURGE AND EVACUATE SYSTEM TWICE, AND CHARGE SYSTEM WITH REFRIGERANT AND OIL. ALLOWANCE FOR EXPANSION, SUPPORTS, VALVES, AND TESTING, SHALL BE IN COMPLIANCE WITH OMC CHAPTER 11.

MECHANICAL CODE REQUIREMENTS

- DUCT CONSTRUCTION AND INSTALLATION: METALLIC DUCTS SHALL MEET AND CONFORM TO "OMC", SECTION 603.4, CONSTRUCTED AS PER SMNVA HVAC DUCT CONSTRUCTION STANDARD.
- FLEXIBLE AIR DUCTS AND CONNECTORS: SHALL MEET AND CONFORM TO "OMC", SECTIONS 603.6 THRU 603.6.4 FOR CONNECTORS, LENGTH, PENETRATION AND TEMPERATURE LIMITATIONS.
- REGISTERS, GRILLES AND DIFFUSERS: SHALL MEET AND CONFORM WITH "OMC", SECTION 603.18, INSTALLED PER MFR'S INSTALLATION INSTRUCTIONS, AND HAVE VOLUME ADJUSTMENT IN BRANCH DUCTS OR AT EACH INDIVIDUAL REGISTER, GRILLE OR DIFFUSER.
- SMOKE DETECTION SYSTEMS CONTROL: SMOKE DETECTORS SHALL MEET AND CONFORM WITH "OMC", SECTION 606. INSTALL IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2,000 CFM, UPSTREAM OF FILTERS, EXHAUST AIR, OUTSIDE AIR OR DECONTAMINATION EQUIPMENT CONNECTIONS. MECHANICAL CONTRACTOR SHALL VERIFY IF EXISTING SYSTEM CONFORMS TO CODE.
- DUCTS AND AIR TRANSFER OPENINGS: SHALL MEET AND CONFORM WITH "OMC", SECTIONS 607.1 THRU 607.7. FIRE DAMPERS SHALL BE INSTALLED AT ALL PENETRATIONS OF DUCTS THRU FIRE RATED WALLS AND CEILINGS AS REQUIRED BY "OMC", SECTION 607. FIRE DAMPER PROTECTION RATING SHALL BE IN ACCORDANCE WITH TABLE 607.3.1.
- VENTILATION OF HVAC SYSTEM: SHALL MEET AND CONFORM TO "OMC", CHAPTER 4, WITH MINIMUM VENTILATION RATE DETERMINED IN ACCORDANCE WITH SECTION 403.3. ASHRAE STANDARD 62.1-2010 MAY BE USED AS AN ALTERNATIVE ENGINEERED VENTILATION DESIGN PROVIDED THAT THE SYSTEM DEMONSTRATES EQUIVALENCY TO THE PRESCRIPTIVE REQUIREMENTS OF "OMC"
- PROTECTION OF STRUCTURE: MOUNTING OF ALL EQUIPMENT, ROUTING OF ALL PIPING AND DUCTWORK AND PENETRATIONS OF FLOOR/CEILING ASSEMBLIES SHALL MEET AND CONFORM TO "OMC", SECTION 302.
- CLEARANCES FOR MAINTENANCE AND REPLACEMENT OF MECHANICAL EQUIPMENT SHALL MEET AND CONFORM WITH "OMC", SECTION 306.

MECHANICAL SPECIFICATIONS

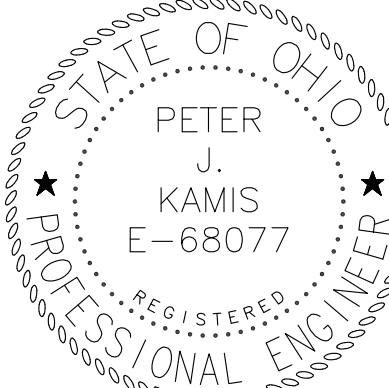
- THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLING, CONNECTING, AND START-UP OF ALL EQUIPMENT AND APPURTENANCES WHICH ARE A PART OF THE SYSTEMS AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE THE OWNER COMPLETE AND WORKABLE, CODE APPROVED, AND OPERATIONAL SYSTEMS.
- GENERAL CONDITIONS OF THE CONTRACT FOUND IN THE ARCHITECTURAL DRAWINGS, GENERAL AND SPECIAL CONDITIONS OF THE AMERICAN INSTITUTE OF ARCHITECTS (AIA), AND ANY OF THE OWNER'S GENERAL REQUIREMENTS SHALL APPLY UNLESS NOTED OTHERWISE. CHECK OTHER PLANS AND SPECIFICATIONS AND FULLY COORDINATE WITH OTHER TRADES AND ARCHITECT'S REQUIREMENTS.
- THE SYSTEMS AS SHOWN ON THE CONTRACT DRAWINGS ARE DIAGRAMMATIC. THE PROJECT SCOPE IS TO INSTALL COMPLETE AND WORKABLE SYSTEMS. VERIFY ALL DIMENSIONS, CLEARANCES, AND POINTS OF CONNECTION BY FIELD MEASUREMENT, AND CHECK FOR INTERFERENCES PRIOR TO STARTING WORK. CHANGES RESULTING FROM EXISTING CONDITIONS OR COORDINATION ISSUES SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER.
- ANY INCIDENTAL ITEMS OR LABOR, ETC. NOT INCLUDED IN THE SPECIFICATIONS OR DRAWINGS BUT REASONABLY IMPLIED AS NECESSARY FOR THE COMPLETE INSTALLATION OF ALL APPARATUS ARE TO BE FURNISHED WITHOUT ADDITIONAL COST. THE QUESTION AS TO WHETHER THE ITEM OR ITEMS ARE INCIDENTAL SHALL IN ALL CASES BE LEFT TO THE JUDGMENT OF THE ARCHITECT.
- ALL WORK SHALL BE IN CONFORMANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES INCLUDING THE OHIO BUILDING CODE, NATIONAL ELECTRIC CODE, UTILITY COMPANY REQUIREMENTS, AND ANY SPECIAL OWNER REQUIREMENTS IN ADDITION TO THOSE SPECIFIED. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES OF CONSTRUCTION AND THE SAFETY OF WORKMEN. COMPLY WITH ALL OSHA REGULATIONS.
- OBTAIN AND PAY FOR ALL NECESSARY LICENSES, PERMITS, APPROVALS, AND INSPECTIONS REQUIRED TO PROCEED WITH THE WORK.
- CONTRACTORS BIDDING THIS PROJECT SHALL HAVE PRIOR EXPERIENCE WORKING IN THIS JURISDICTION AND MUST LIST ON BID FORM ANY LOCAL REQUIREMENTS THAT ARE NOT SHOWN ON THE DRAWINGS. SUBMISSION OF A BID SHALL BE EVIDENCE THAT THE CONTRACTOR'S BID MEETS ALL JURISDICTIONAL REQUIREMENTS.
- EACH CONTRACTOR SHALL PROVIDE FOR HIS OWN CLEAN-UP, REMOVAL, AND LEGAL DISPOSAL OF ALL RUBBISH DAILY.
- ARRANGE FOR AND OBTAIN OWNER'S AND INSURANCE REPRESENTATIVE'S PERMISSION FOR ANY SERVICE SHUTDOWNS. SHUTDOWNS MUST BE PERFORMED WITHOUT DISRUPTION TO FACILITY OPERATIONS, AS SCHEDULE WITH THE OWNER. INCLUDE ANY PREMIUM TIME REQUIRED IN BID.
- INSTALLATION OF ALL EQUIPMENT SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION INFORMATION AND INSTRUCTIONS, REQUIREMENTS AND ANY ADDITIONAL GUIDELINES. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL REQUIRED BASES, ISOLATORS, SUPPORTS, AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- SHOP DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT OF ALL EQUIPMENT AND ACCESSORIES TO BE PROVIDED FOR THE PROJECT. REVIEW OF THE SHOP DRAWINGS SHALL BE FOR GENERAL DESIGN CONCEPT AND ADHERENCE WITH SPECIFICATIONS. QUANTITY OF SHOP DRAWINGS SUBMITTED SHALL BE AS SPECIFIED BY THE ARCHITECT.
- INCLUDE IN BASE BID THE EQUIPMENT AND MATERIALS EXACTLY AS SPECIFIED ON DRAWINGS, INCLUDING ANY ALTERNATE MANUFACTURERS LISTED ON DRAWINGS. ANY ANOTHER MANUFACTURER OR MODEL IS A SUBSTITUTION, MUST BE LISTED ON BID FORM, AND IS SUBJECT TO OWNER AND ARCHITECT APPROVAL. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO EVALUATE ANY SUBSTITUTION AND CERTIFY IT IS EQUIVALENT IN ALL ASPECTS TO THE BASE SPECIFICATIONS. NOTIFY ALL OTHER TRADES AFFECTED BY AN APPROVED SUBSTITUTION AND FULLY COORDINATE. ANY COSTS RESULTING FROM A SUBSTITUTION, WHETHER BY THIS CONTRACTOR OR ANOTHER, SHALL BE THE RESPONSIBILITY OF AND PAID FOR BY SUBSTITUTING CONTRACTOR.
- ALL EQUIPMENT AND MATERIALS SHALL BE NEW, FREE OF DEFECTS, AND U.L. LABELED. ALL MATERIALS AND METHODS SPECIFIED ON DRAWINGS SHALL BE THE MINIMUM ALLOWED. IF A CONFLICT OCCURS, THE OWNER SHALL RESOLVE SUCH CONFLICT WITH CONTRACTOR CONFORMING TO THE OWNER'S DECISION.
- THIS CONTRACT SHALL INCLUDE A VISIT TO THE JOB SITE AND TAKE INTO CONSIDERATION MECHANICAL, ELECTRICAL AND GENERAL TRADE WORK CURRENTLY EXISTING AND WORK WHICH MAY BE INSTALLED PRIOR TO CONTRACT AWARD. RELOCATION OF DUCTWORK, PIPING AND EQUIPMENT, AS REQUIRED TO ACCOMMODATE THIS WORK SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- EQUIPMENT, PIPING, DUCTWORK, ETC. SHALL NOT BE SUPPORTED FROM ANY CEILINGS, OTHER PIPING, CONDUIT, DUCTWORK, ROOF DECK, OR JOIST BRIDGING. ITEMS SHALL BE SUPPORTED FROM ACCEPTABLE STRUCTURAL BUILDING COMPONENTS AS DETERMINED BY ARCHITECT OR STRUCTURAL ENGINEER.
- ALL MECHANICAL SYSTEM COMPONENTS SHALL BE ROUTED TIGHT TO UNDERSIDE OF STRUCTURE AND THROUGH JOISTS OR TRUSSES WHERE POSSIBLE. COORDINATE INSTALLATION AND PROVIDE OFFSETS TO PRESERVE HEADROOM, EQUIPMENT SERVICE ACCESS, AND ARCHITECTURAL CLEARANCES FOR FINISHES, INCLUDING CEILING HEIGHTS. COORDINATE WITH OTHER TRADES AND DO NOT CONFLICT WITH THE ARCHITECTURAL REQUIREMENTS FOR THE FINISHED CONSTRUCTION.
- REFER TO THE GENERAL CONDITIONS OF THE ARCHITECTURAL DOCUMENTS AND THE AIA GENERAL AND SPECIAL CONDITIONS, FOR ADDITIONAL REQUIREMENTS REGARDING SAFETY, COORDINATION AND COOPERATION, WORKMANSHIP, PROTECTION, CUTTING AND PATCHING, DAMAGE TO OTHER WORK, PRELIMINARY OPERATIONS, STORAGE, ADJUSTMENTS, ETC.
- COORDINATE ELECTRICAL CHARACTERISTICS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING OF EQUIPMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR LACK OF CONTRACTOR COORDINATION OF ELECTRICAL CHARACTERISTICS.
- EXACT LOCATIONS OF ROOFTOP MECHANICAL EQUIPMENT SHALL BE APPROVED BY ARCHITECT OR STRUCTURAL ENGINEER. PROVIDE ALL SUPPLEMENTAL SUPPORT STEEL AND ROOF OPENINGS FOR EQUIPMENT. PROVIDE 2-1/2" HIGH PERMANENT LETTERING INDICATING SPACE SERVED.
- ALL ROOF PENETRATIONS, FLASHINGS AND COUNTER-FLASHINGS, PATCHING, ETC. SHALL BE PERFORMED BY OWNER'S CERTIFIED ROOFING CONTRACTOR, AND PAID FOR BY THIS CONTRACTOR.
- ALL OTHER CUTTING AND CHASING OF THE BUILDING CONSTRUCTION REQUIRED FOR THIS WORK SHALL BE BY THIS CONTRACTOR, UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS. CONFIRM SIZES AND AND LOCATIONS PRIOR TO PERFORMING ANY WORK. ALL CUTTING SHALL BE IN A NEAT AND WORKMANLIKE MANNER.
 - NEATLY SAW CUT ALL RECTANGULAR OPENINGS, SET SLEEVE THROUGH OPENING, AND FINISH PATCH OR PROVIDE TRIM FLANGE AROUND OPENING.
 - NEATLY SAW CUT AND PATCH FLOORS TO MATCH EXISTING, INCLUDING FLOOR COVERING.
 - CORE DRILL AND SLEEVE ALL ROUND OPENINGS.
 - CUT AND PATCH EXISTING BUILDING WALLS AS REQUIRED FOR DUCT INSTALLATION. PROVIDE STEEL LINTEL ABOVE OPENINGS WIDER THAN 10". REFER TO ARCHITECTURAL OR STRUCTURAL DRAWINGS FOR SIZES. PROVIDE ESCUTCHEONS OR 2" WIDE SHEET METAL FLANGES AROUND ALL EXPOSED PENETRATIONS.
 - DO NOT CUT ANY STRUCTURAL COMPONENT WITHOUT APPROVAL OF ARCHITECT OR STRUCTURAL ENGINEER.
 - PATCH AND FINISH TO MATCH ADJACENT AREAS THAT HAVE BEEN CUT, DAMAGED, OR MODIFIED TO INSTALL EQUIPMENT FOR THIS PROJECT.
 - FIRE STOP ALL PENETRATIONS OF FIRE RATED CONSTRUCTION IN A CODE APPROVED MANNER USING U.L. LISTED FIRE RATED MATERIALS. PATCH ALL STRUCTURAL FIREPROOFING REQUIRED TO INSTALL MECHANICAL SYSTEMS.
 - ALL CONTRACTORS SHALL CONFIRM WITH OWNER PRIOR TO BID, TIMES AVAILABLE FOR NOISE PRODUCING WORK SUCH AS CUTTING AND CORE DRILLING OF FLOORS, WALLS, ETC. AS WELL AS TIMES FOR WORK WHICH REQUIRES ACCESS INTO ADJOINING AREAS. INCLUDE ANY PREMIUM TIME REQUIRED IN BID.
- AFTER INSTALLATION, CHECK ALL EQUIPMENT AND PERFORM START-UP IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL DUCTWORK AND PIPING SHALL BE TESTED AND FREE OF LEAKS. BALANCE ALL SYSTEMS, CALIBRATE CONTROLS, CHECK FOR PROPER OPERATING SEQUENCE UNDER ALL CONDITIONS, AND MAKE ALL NECESSARY ADJUSTMENTS. TAG ALL SWITCHES AND CONTROLS WITH PERMANENT LABELS. INSTRUCT OWNER IN OPERATION AND MAINTENANCE OF ALL SYSTEMS. SUBMIT OPERATION AND MAINTENANCE MANUAL FOR ALL EQUIPMENT AND SYSTEMS.
- FULLY WARRANT ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE. EXTEND ALL MANUFACTURER'S WARRANTIES TO OWNER. REPAIR OR REPLACE WITHOUT CHARGE TO OWNER, ALL ITEMS FOUND DEFECTIVE DURING THE WARRANTY PERIOD.

MECHANICAL TEMPERATURE CONTROLS

- CONTROLS SHALL BE ELECTRONIC AND BE COMPLETELY AUTOMATIC WITH NO MANUAL INTERVENTION REQUIRED. PROVIDE ALL CONTROL (LOW VOLTAGE) AND POWER WIRING, RELAYS, ELECTRICAL INTERLOCK, AND ANY OTHER APPURTENANCES REQUIRED FOR COMPLETE OPERATION OF MECHANICAL EQUIPMENT, WHERE NOT SPECIFICALLY SHOWN ON ELECTRICAL DRAWINGS. ALL POWER WIRING AND EXPOSED CONTROL WIRING SHALL BE IN EMT CONDUIT. CONCEALED CONTROL WIRING IN CEILING PLENUMS MAY BE U.L. LISTED PLENUM RATED CABLE NEATLY SUPPORTED IN WIRE RINGS. INSTALL ALL WIRING PER THE N.E.C., STATE AND LOCAL CODES, AND ELECTRICAL SPECIFICATIONS.



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EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

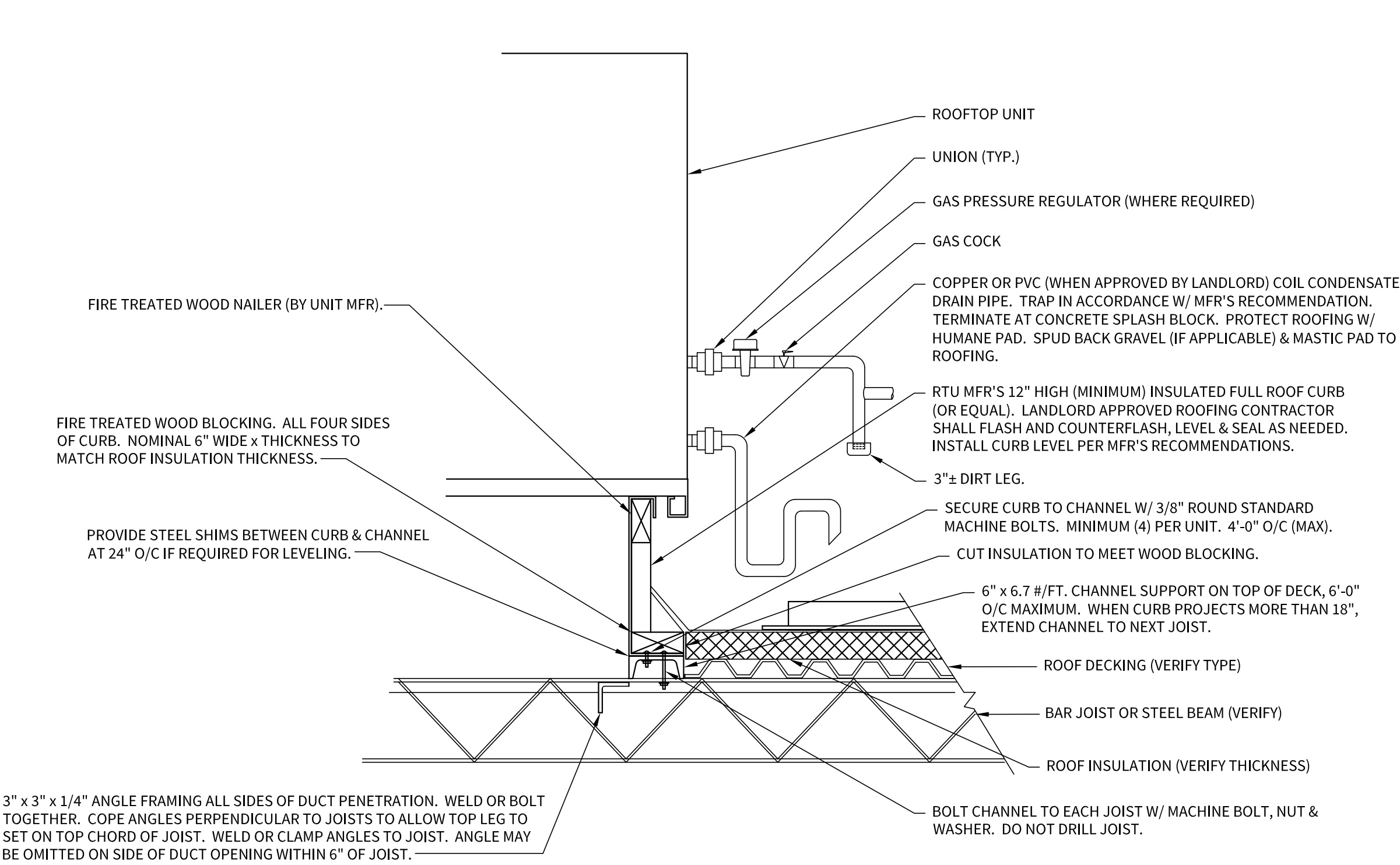
3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

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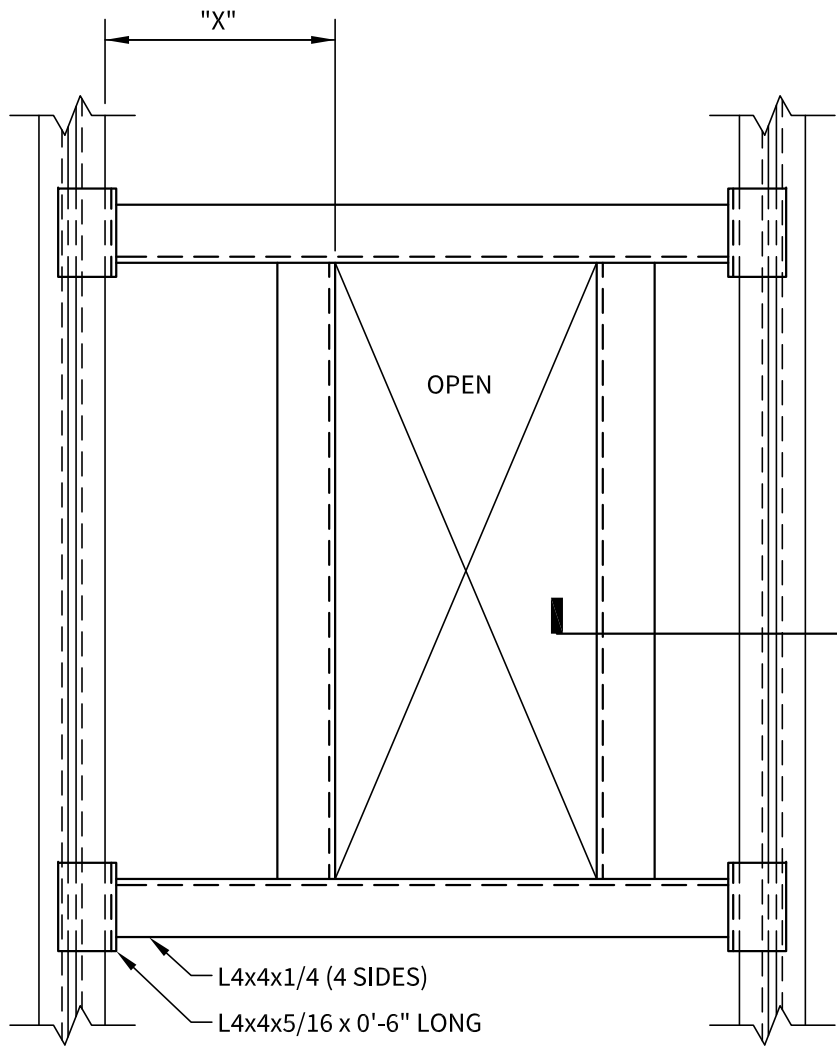
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MECHANICAL
SPECIFICATIONS



ROFTOP UNIT
INSTALLATION DETAIL

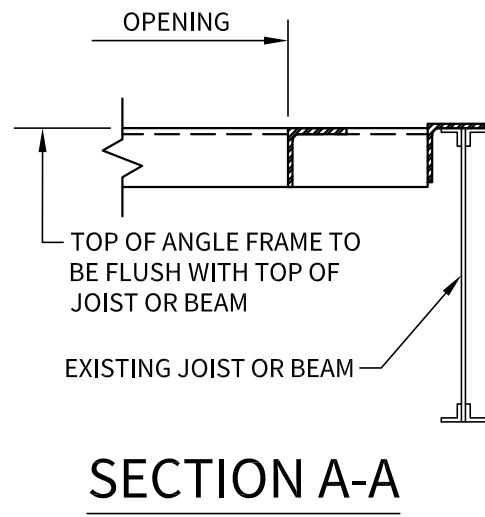
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PLAN

ROFTOP EQUIPMENT
DECK OPENING DETAIL

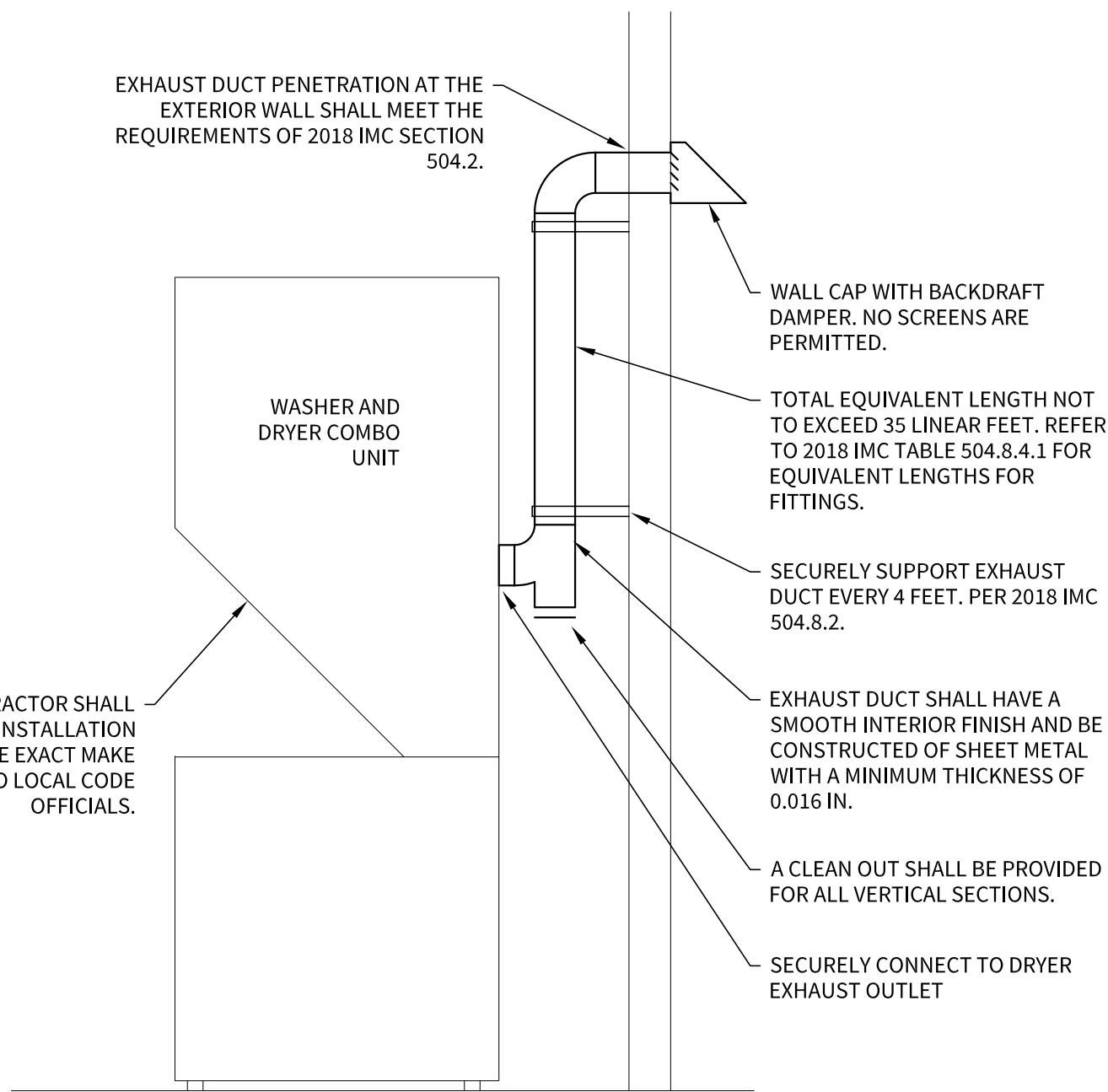
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SECTION A-A

- NOTES:
1. IF "x" IS 4" OR LESS, ELIMINATE ANGLE PARALLEL TO JOIST OR BEAM.
 2. PROVIDE ANGLE FRAME FOR ALL OPENINGS GREATER THAN 10" DIAMETER OR 10" SQUARE.
 3. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL OPENINGS. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.

MECHANICAL CONTRACTOR SHALL PROVIDE A COPY OF INSTALLATION INSTRUCTIONS FOR THE EXACT MAKE AND MODEL OF DYER TO LOCAL CODE OFFICIALS.



NOTE:
DRYER EXHAUST DUCT INSTALLATION SHALL CONFORM WITH ALL APPLICABLE PARTS OF THE 2018 IMC SECTION 504.

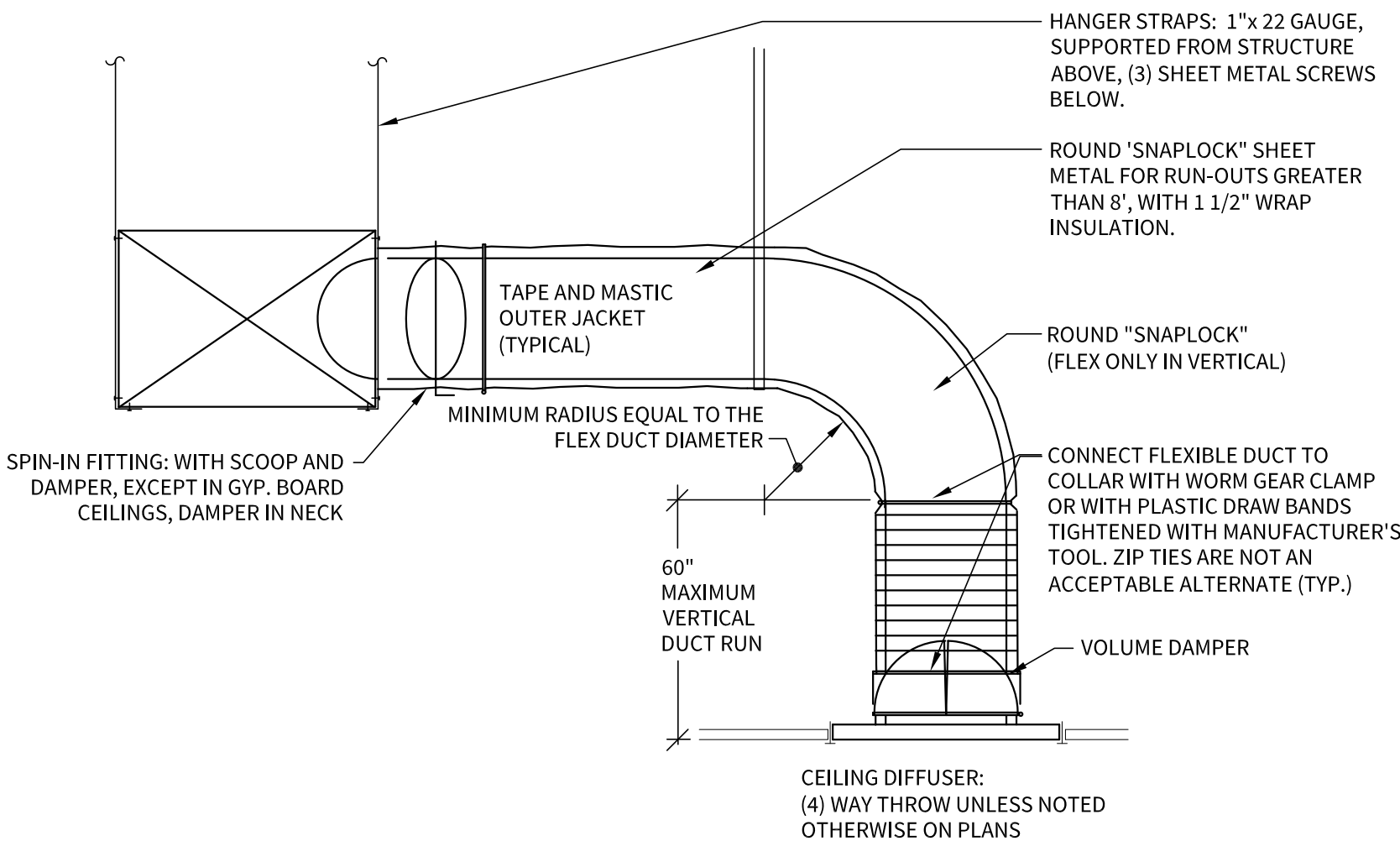
DRYER VENT
INSTALLATION DETAIL

SCALE: NTS

ELBOW WITH AIRFOIL TURNING VANES			
BRANCH TAKE-OFF RECTANGULAR TO RECTANGULAR		BRANCH TAKE-OFF RECTANGULAR TO ROUND	
BRANCH TAKE-OFF ROUND TO ROUND		SQUARE TO ROUND TRANSITION FITTING	
PROPORTIONAL SPLIT		ACOUSTIC LINED DUCT (SEE NOTE)	
MANUAL VOLUME DAMPER (MVD)		NOTE: DASHED LINE INDICATES 1" INTERIOR ACOUSTIC LINING UNLESS OTHERWISE NOTED. DUCT SIZE IS EXTERIOR AND INCLUDES LINING.	

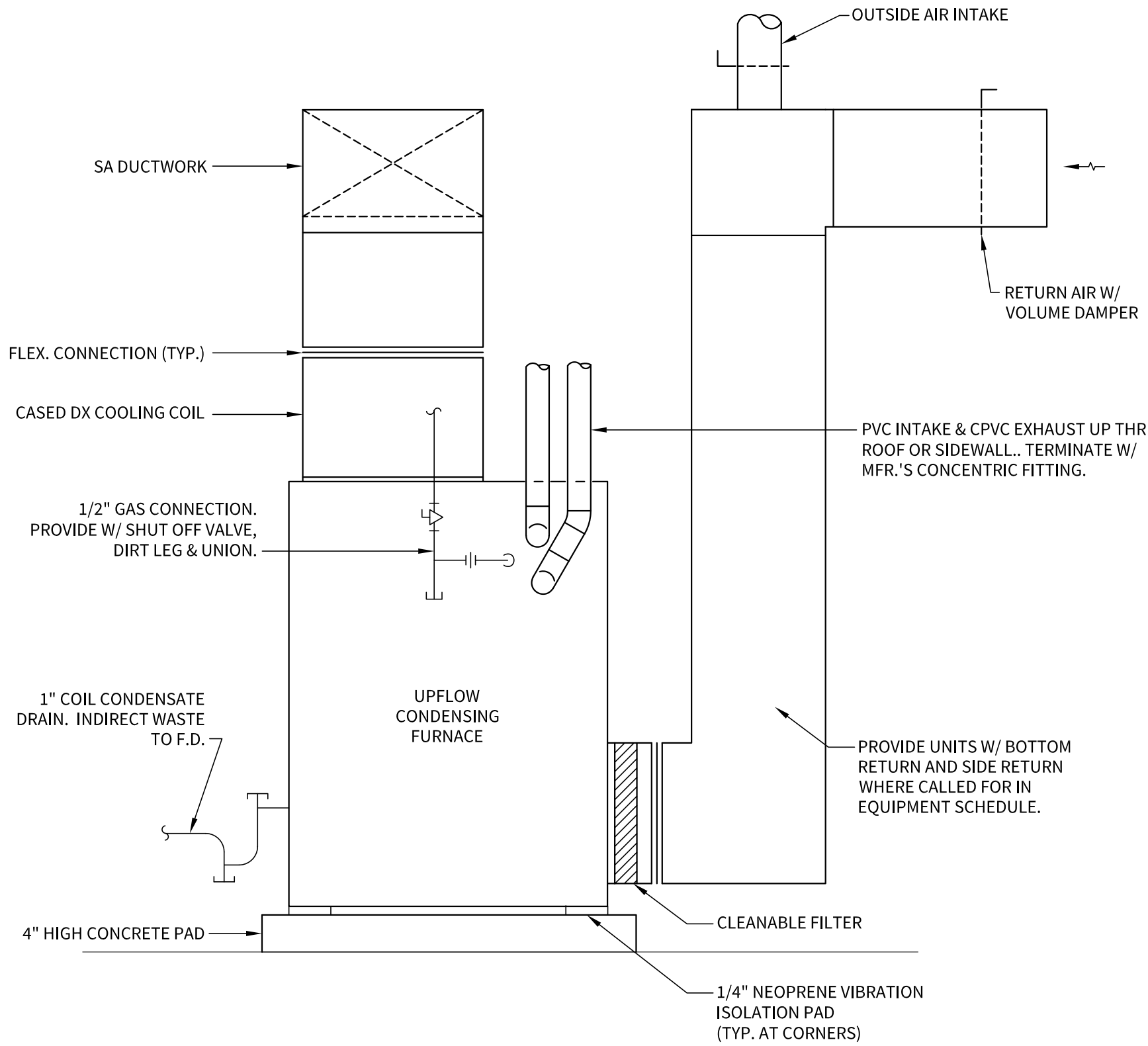
TYPICAL
DUCT TAKEOFF DETAILS

SCALE: NTS



CEILING DIFFUSER
CONNECTION DETAIL

SCALE: NTS

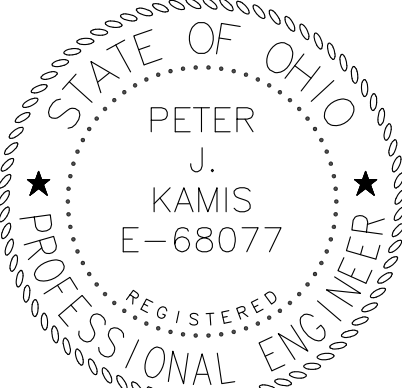


UPFLOW FURNACE DETAIL

SCALE: NTS



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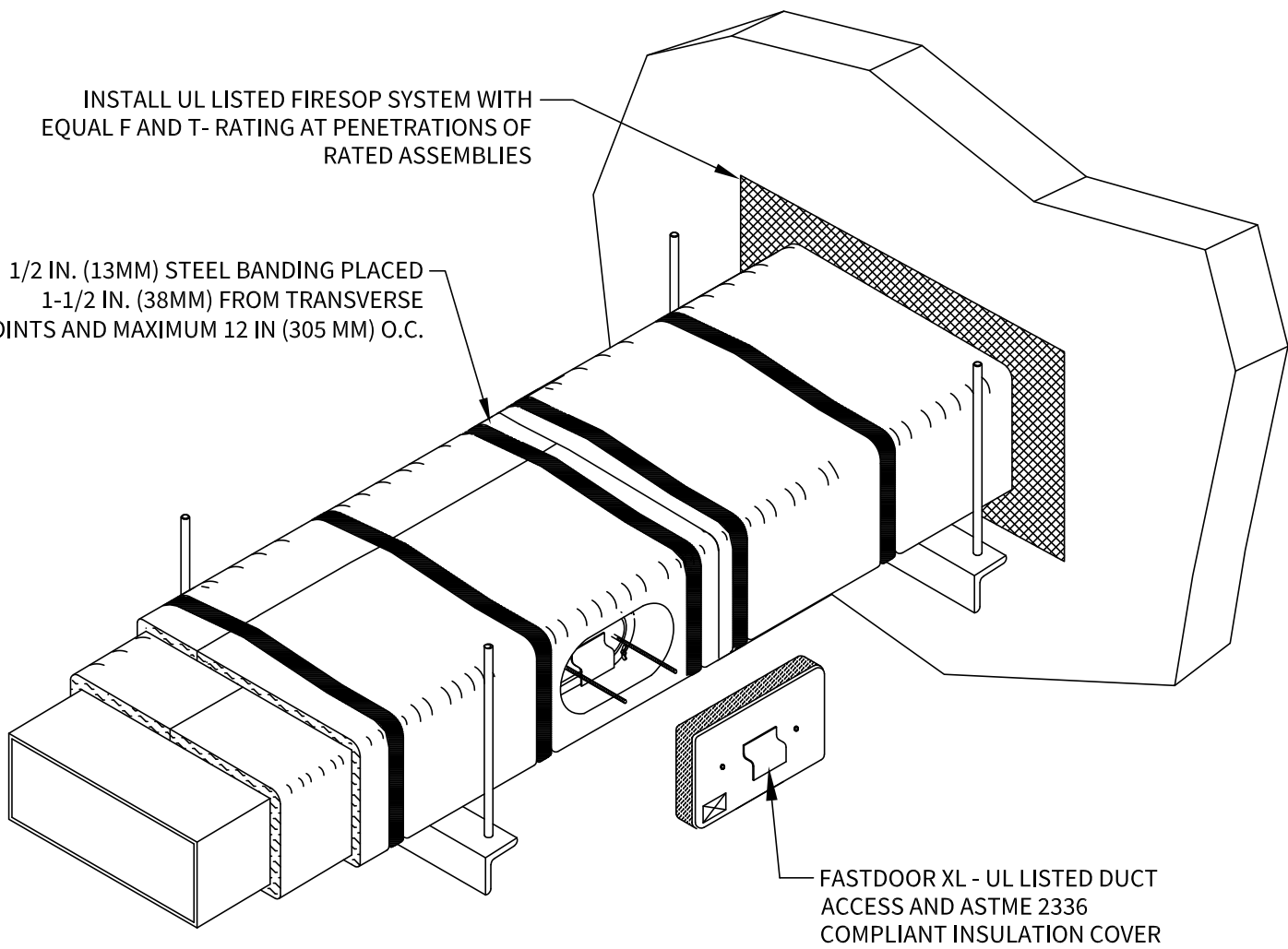
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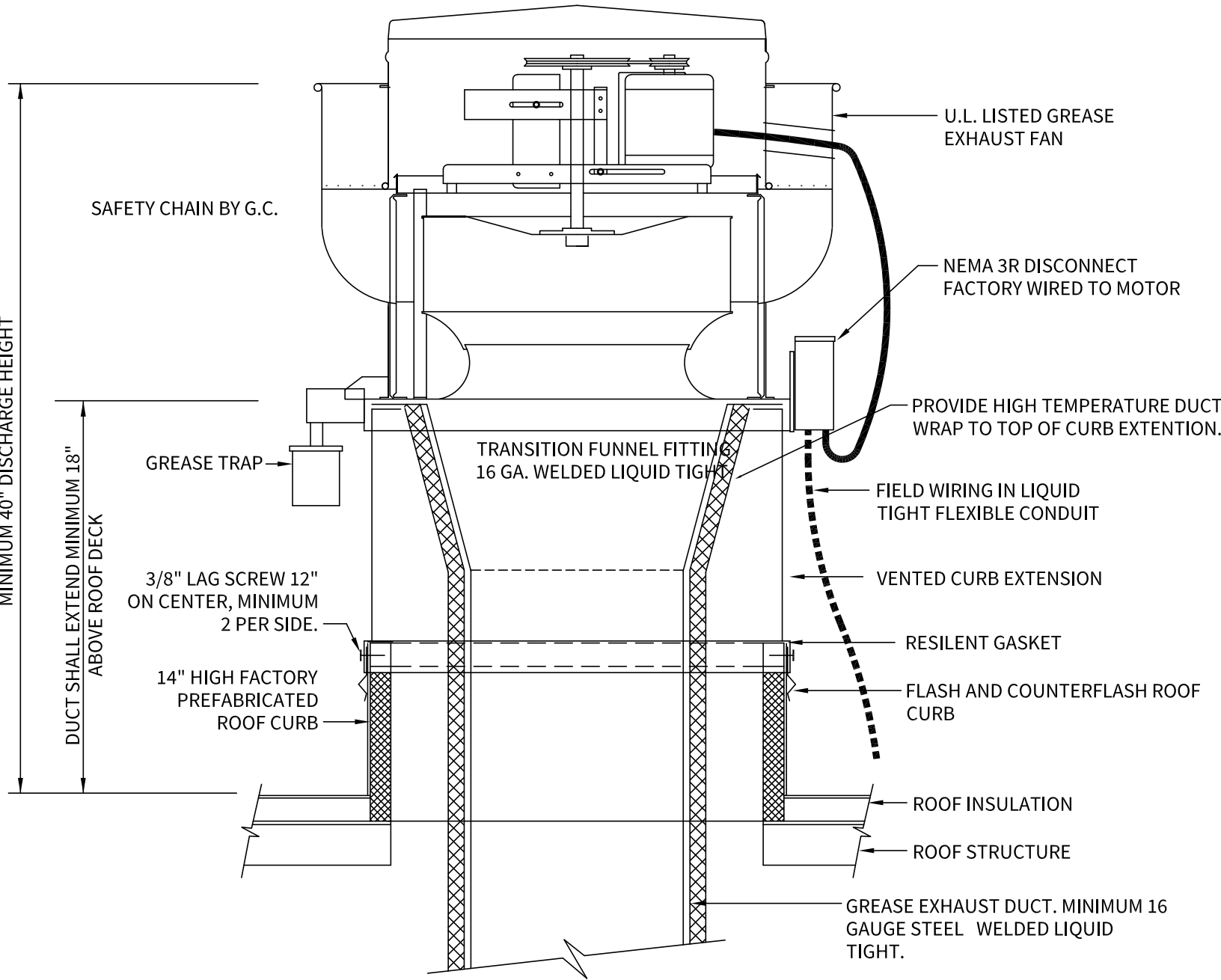
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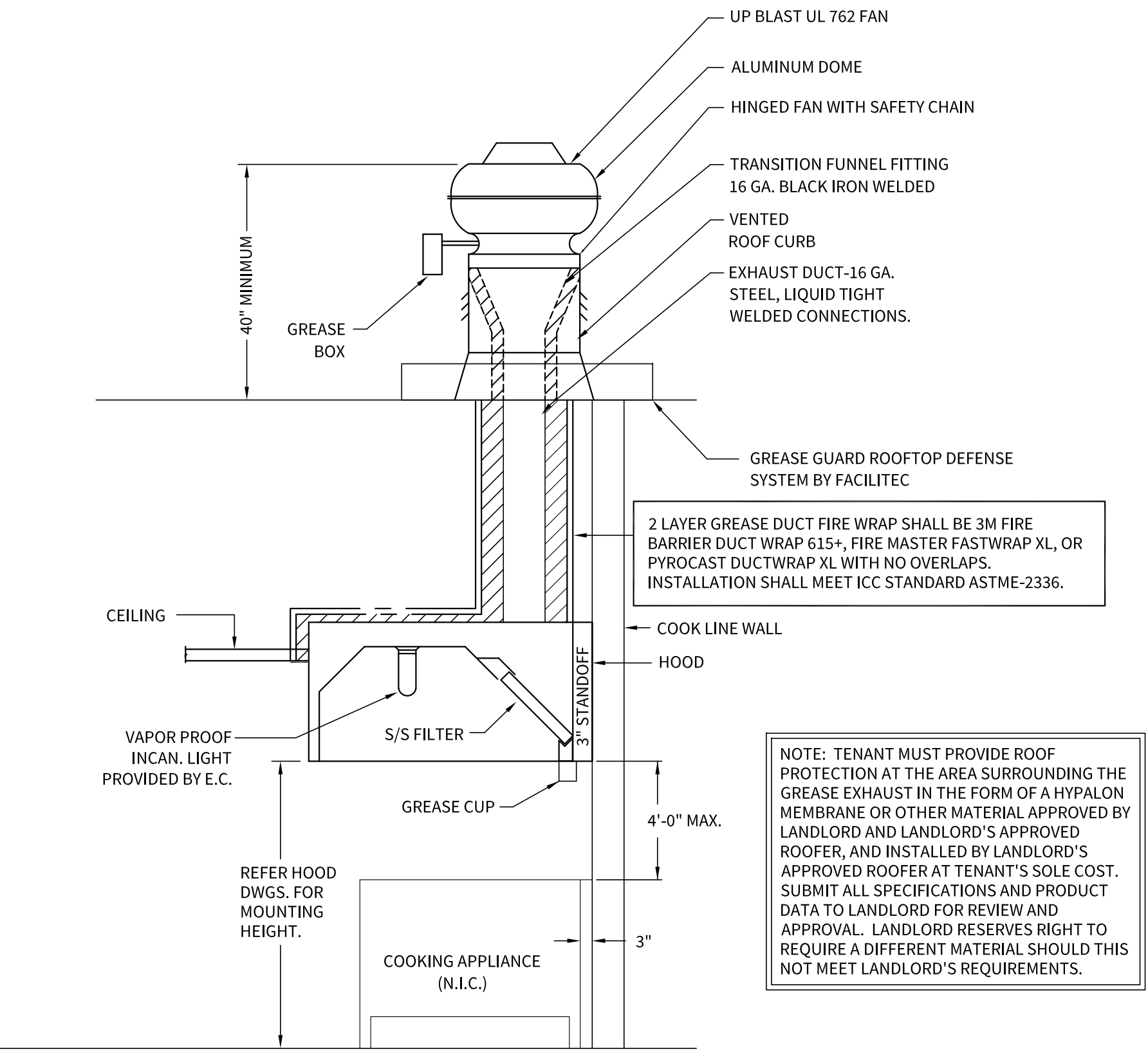
GREASE DUCT WRAP DETAIL

SCALE: NTS



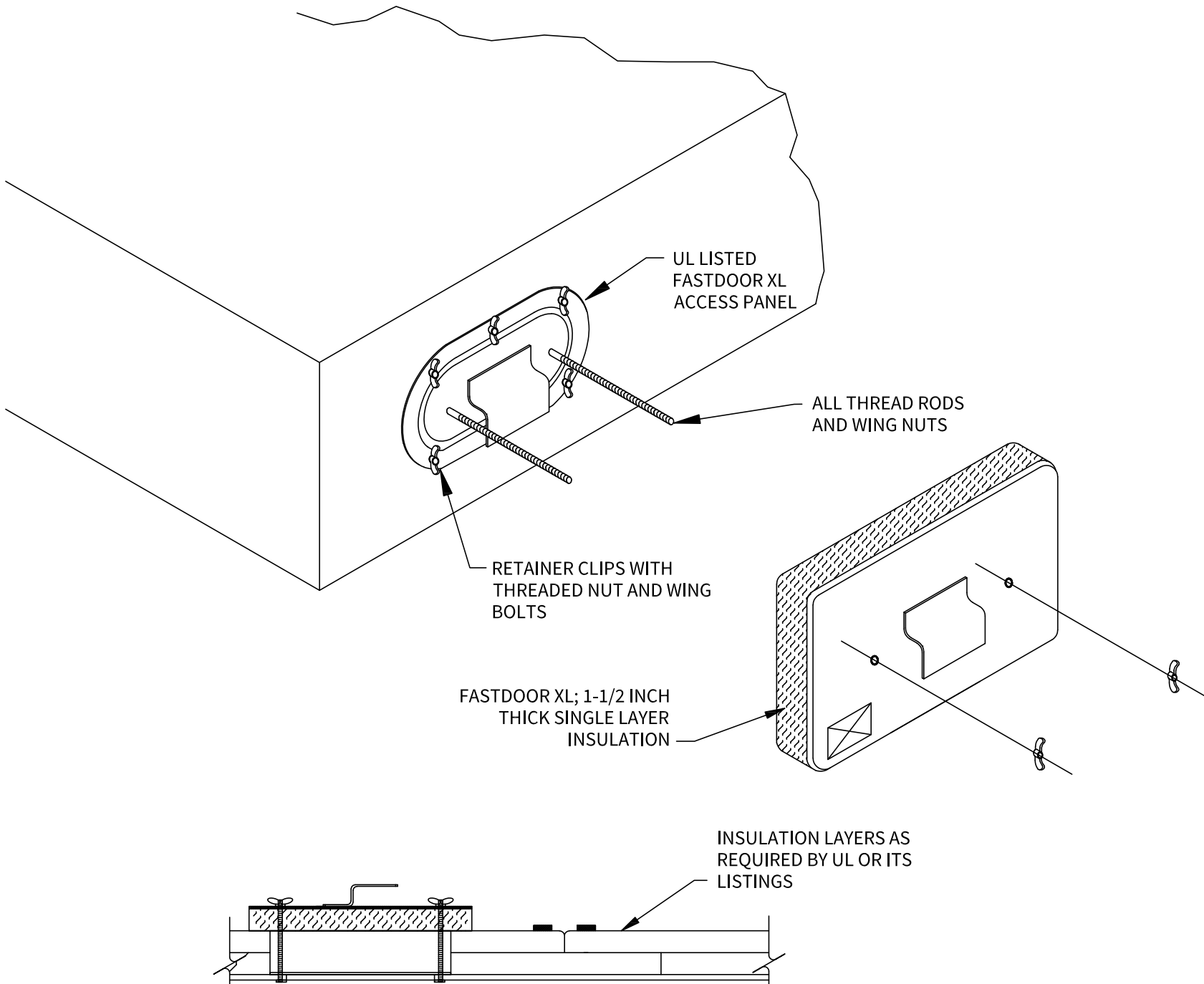
KITCHEN
EXHAUST FAN DETAIL

SCALE: NTS



FIRE RATED CHASE DETAIL

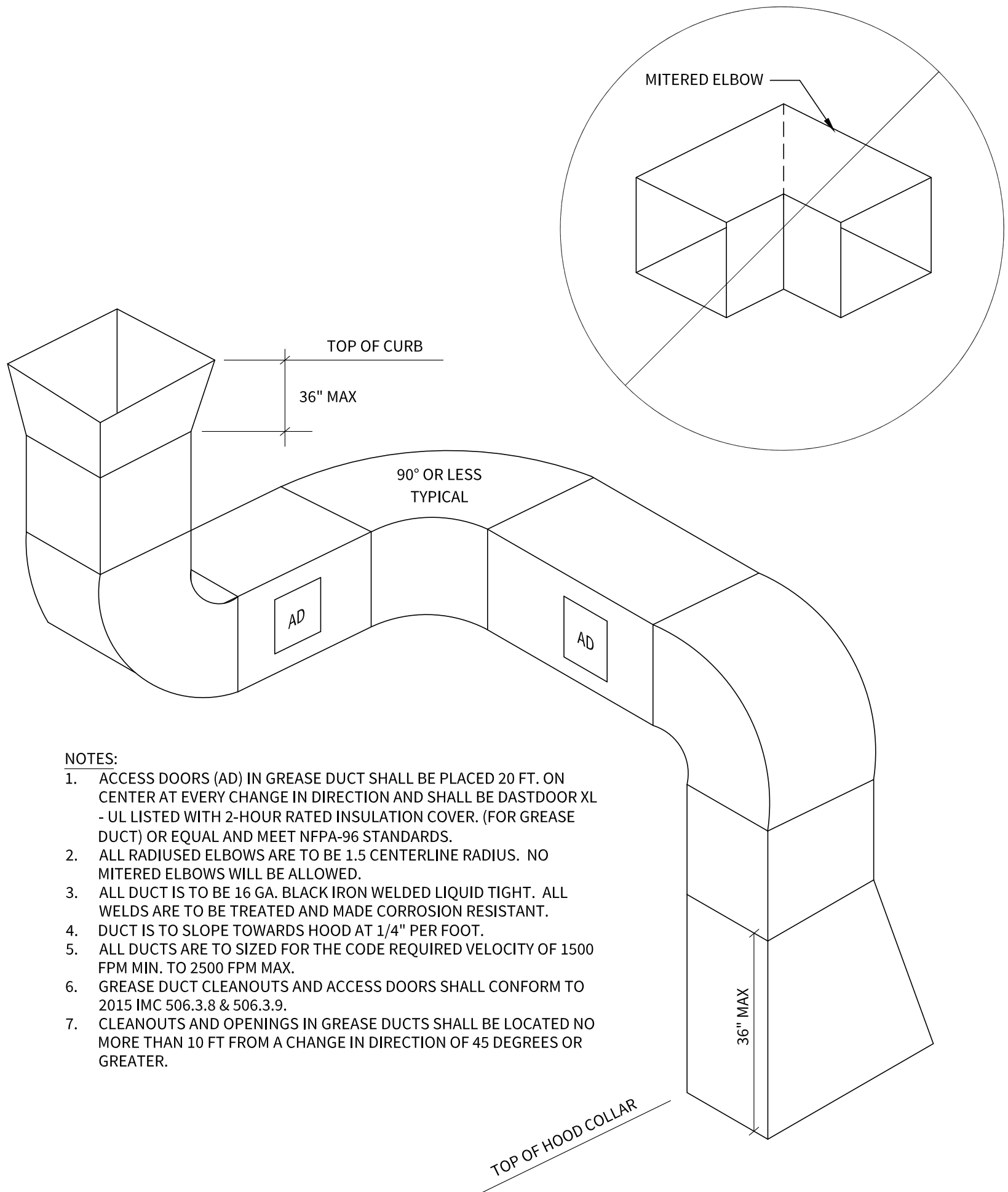
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- NOTES:
1. ACCESS DOOR IS TO BE FASTDOOR XL OR EQUAL.
 2. ACCESS DOOR IS TO BE U.L. LISTED, INSTALLED LIQUID TIGHT AND SHALL BE NOT LESS 12 INCHES ON ONE (1) SIDE.
 3. ACCESS DOOR IS TO MEET OR EXCEED THE REQUIREMENTS OF NFPA 96, 2008 EDITION
 4. PROVIDE AND INSTALL ACCESS DOOR AT 20 FT. ON CENTER, EACH CHANGE OF DIRECTION OF DUCT AND AT ALL LOCATIONS REQUIRED BY LOCAL CODE.

GREASE DUCT
ACCESS DOOR DETAIL

SCALE: NTS



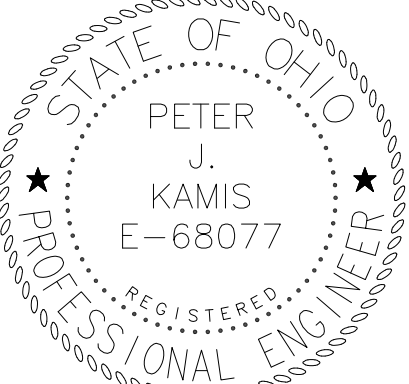
- NOTES:
1. ACCESS DOORS (AD) IN GREASE DUCT SHALL BE PLACED 20 FT. ON CENTER AT EVERY CHANGE IN DIRECTION AND SHALL BE DASTDOOR XL - UL LISTED WITH 2-HOUR RATED INSULATION COVER. (FOR GREASE DUCT) OR EQUAL AND MEET NFPA-96 STANDARDS.
 2. ALL RADIUSSED ELBOWS ARE TO BE 1.5 CENTERLINE RADIUS. NO MITERED ELBOWS WILL BE ALLOWED.
 3. ALL DUCT IS TO BE 16 GA. BLACK IRON WELDED LIQUID TIGHT. ALL WELDS ARE TO BE TREATED AND MADE CORROSION RESISTANT.
 4. DUCT IS TO SLOPE TOWARDS HOOD AT 1/4" PER FOOT.
 5. ALL DUCTS ARE TO SIZED FOR THE CODE REQUIRED VELOCITY OF 1500 FPM MIN. TO 2500 FPM MAX.
 6. GREASE DUCT CLEANOUTS AND ACCESS DOORS SHALL CONFORM TO 2015 IMC 506.3.8 & 506.3.9.
 7. CLEANOUTS AND OPENINGS IN GREASE DUCTS SHALL BE LOCATED NO MORE THAN 10 FT FROM A CHANGE IN DIRECTION OF 45 DEGREES OR GREATER.

TYPICAL
GREASE DUCT DETAIL

SCALE: NTS



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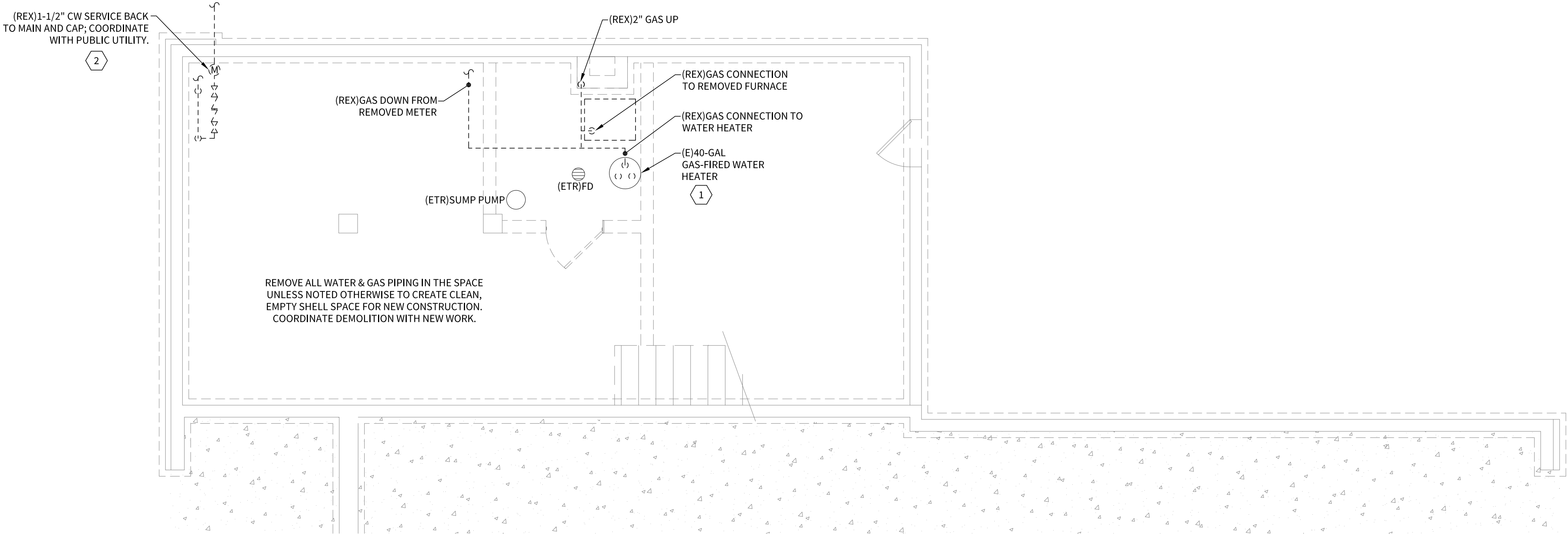
PLUMBING
DEMOLITION PLANS

PLUMBING DEMOLITION
CODED NOTES: ⬡

1. REMOVE ALL COLD WATER, HOT WATER, AND GAS PIPING ASSOCIATED WITH EXISTING 40-GAL GAS-FIRED WATER HEATER; TO BE REPLACED WITH ALL NEW PIPING. REFER TO NEW BASEMENT PLUMBING PLAN ON SHEET P1.0. WATER HEATER TO REMAIN AS-IS; THOROUGHLY INSPECT, MAINTAIN, AND VERIFY PROPER OPERATION.
2. REMOVE EXISTING 1-1/2" DOMESTIC COLD WATER SERVICE AND REMOVE ALL EXISTING COLD WATER PIPING WITHIN THE SPACE - TO BE REPLACED WITH NEW 2" DOMESTIC COLD WATER SERVICE AND PIPING. REFER TO NEW DOMESTIC WATER & GAS PLUMBING PLANS ON SHEETS P1.0 AND P1.1.
3. MAINTAIN EXISTING 2" GAS LINE RUNNING ALONG FIRST FLOOR CEILING SERVING THE ADJACENT GARAGE AREA. PROVIDE CONNECTION TO NEW GAS SERVICE UP FROM BASEMENT; REFER TO NEW DOMESTIC WATER & GAS PLUMBING PLANS ON SHEET P1.0.

PLUMBING LEGEND

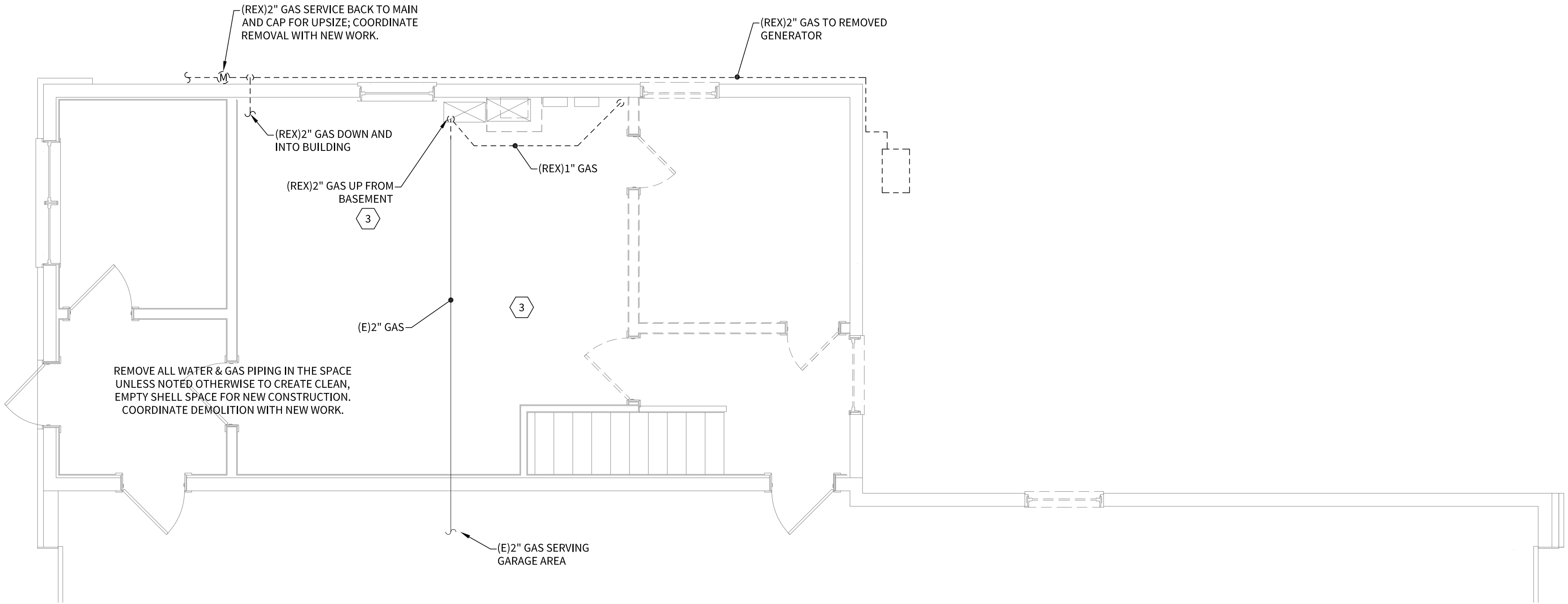
----- CW -----	COLD WATER
----- HW -----	HOT WATER
----- V -----	VENT
----- SAN -----	SANITARY SEWER
----- SAN -----	SANITARY SEWER (BELOW FLOOR)
----- G -----	GAS
----- ⌵ -----	VALVE
(M)	WATER METER
FD	FLOOR DRAIN
WC	WATER CLOSET
LAV	LAVATORY
MS	MOP SINK
CO	CLEANOUT
WH	WATER HEATER
VTR	VENT THROUGH ROOF
AFF	ABOVE FINISHED FLOOR
(E)	EXISTING TO REMAIN
(R)	RELOCATE
REX	REMOVE EXISTING
CTE	CONNECT TO EXISTING



BASEMENT
PLUMBING DEMOLITION PLAN 1

SCALE: 1/4" = 1'-0"

PD1.0



FIRST FLOOR
PLUMBING DEMOLITION PLAN 2

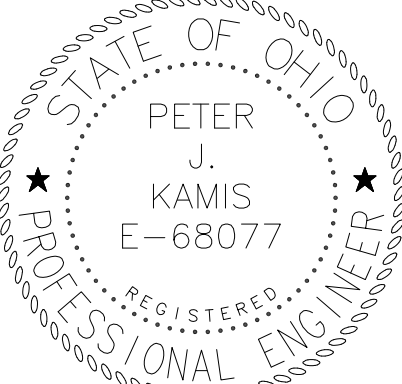
SCALE: 1/4" = 1'-0"

PD1.0





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BASEMENT & FIRST FLOOR
DOMESTIC WATER & GAS PLANS

GENERAL PLUMBING NOTES:

- REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON SHEET P2.0 FOR COLD WATER, HOT WATER, SANITARY, AND VENT CONNECTIONS SIZES FOR ALL NEW PLUMBING FIXTURES/EQUIPMENT.
- PROVIDE ALL NEW LAVATORIES LAV-1 WITH THERMOSTATIC MIXING VALVE TMV-1.

BASEMENT AND FIRST FLOOR
DOMESTIC WATER & GAS
CODED NOTES:○

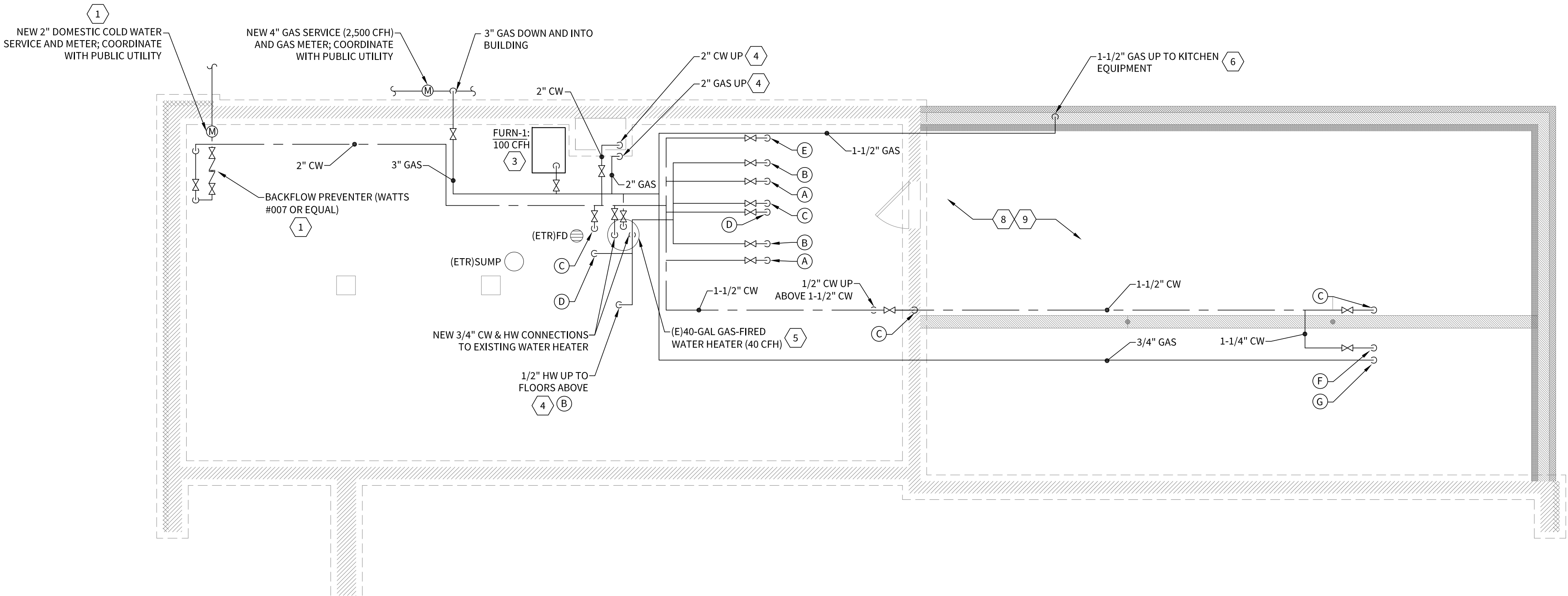
- REFER TO DOMESTIC WATER SERVICE DIAGRAM ON SHEET P3.0. INSTALL IN SIMILAR FASHION TO PREVIOUS WATER SERVICE.
- PROVIDE 1/2" HOT WATER LINE FOR UNDERCOUNTER DISHWASHER. PROVIDE WITH DISHWASHER AIR GAP 'PROFLO' #PFGAPCP.
- PROVIDE 1/2" GAS LINE WITH SHUT-OFF VALVE FOR NEW FURNACE FURN-1; REFER TO MECHANICAL PLANS FOR FURNACE INFORMATION AND SCHEDULE.
- COORDINATE EXACT ROUTE AND LOCATIONS OF FLOOR PENETRATIONS FOR COLD WATER, HOT WATER, OR GAS UP FROM BASEMENT (AND/OR UP TO SECOND FLOOR IF APPLICABLE) WITH STRUCTURE AND NEW WALL LOCATIONS - TYPICAL.
- PROVIDE NEW 3/4" COLD WATER & HOT WATER CONNECTIONS AND NEW 1/2" GAS CONNECTION TO EXISTING 40-GALLON WATER HEATER. MAINTAIN EXISTING VENT PIPING AND REWORK AS REQUIRED.
- COORDINATE EXACT GAS PIPING ROUTE UP THROUGH FLOOR TO KITCHEN EQUIPMENT WITH EQUIPMENT LOCATION AND STRUCTURE PRIOR TO ROUGH-IN.
- PROVIDE EMERGENCY GAS SHUT-OFF VALVE INTERLOCKED WITH HOOD FIRE SUPPRESSION SYSTEM. COORDINATE REQUIREMENTS WITH HOOD MANUFACTURER - REFER TO MECHANICAL PLANS FOR KITCHEN HOOD SCHEDULE.
- VERIFY EXACT LOCATIONS OF ALL FLOOR PENETRATIONS FOR COLD & HOT WATER SERVING FIXTURES ON FLOORS ABOVE; COORDINATE WITH EXACT FIXTURE LOCATIONS - TYPICAL.
- PROVIDE HEAT TRACE ON ALL DOMESTIC COLD, DOMESTIC HOT, GAS, AND SANITARY PIPING LOCATED WITHIN THE UNCONDITIONED CRAWL SPACE TO PREVENT FREEZING. REFER TO NOTES 17, 18, 19, AND 20 IN THE 'PLUMBING SPECIFICATIONS' ON P2.0 FOR ADDITIONAL INFORMATION, MODEL NUMBERS, ASSUMED LENGTHS, AND ELECTRICAL REQUIREMENTS.
- REFER TO ELECTRICAL PLANS FOR GENERATOR INFORMATION. COORDINATE EXACT GAS REQUIREMENTS WITH EQUIPMENT VENDOR.

PLUMBING PIPE NOTES:○

- 1/2" COLD WATER UP TO WASHER BOX
- 1/2" HOT WATER UP TO WASHER BOX
- 1/2" COLD WATER UP TO SINK(S)/LAVATORY(S)/MOP SINK
- 1/2" HOT WATER UP TO SINK(S)/LAVATORY(S)/MOP SINK
- 1/2" COLD WATER UP TO WATER CLOSET
- 1-1/4" COLD WATER UP TO WATER HEATER
- 3/4" GAS UP TO WATER HEATER

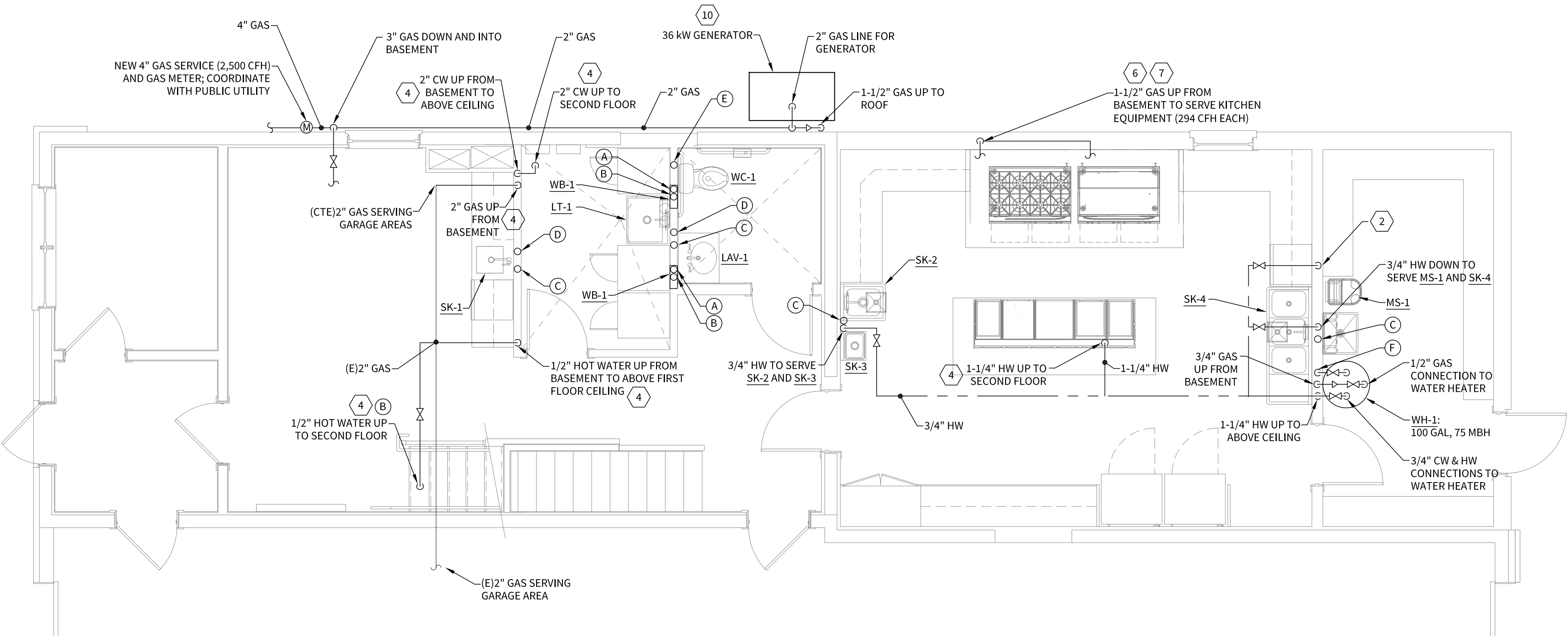
PLUMBING LEGEND

---	CW	COLD WATER
---	HW	HOT WATER
- - - - -	V	VENT
---	SAN	SANITARY SEWER
- - - - -	SAN	SANITARY SEWER (BELOW FLOOR)
---	G	GAS
⋈		VALVE
(M)		WATER METER
FD		FLOOR DRAIN
WC		WATER CLOSET
LAV		LAVATORY
MS		MOP SINK
CO		CLEANOUT
WH		WATER HEATER
VTR		VENT THROUGH ROOF
AFF		ABOVE FINISHED FLOOR
(E)		EXISTING TO REMAIN
(R)		RELOCATE
REX		REMOVE EXISTING
CTE		CONNECT TO EXISTING



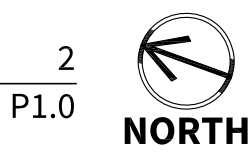
BASEMENT
DOMESTIC WATER & GAS PLAN 1

SCALE: 1/4" = 1'-0"



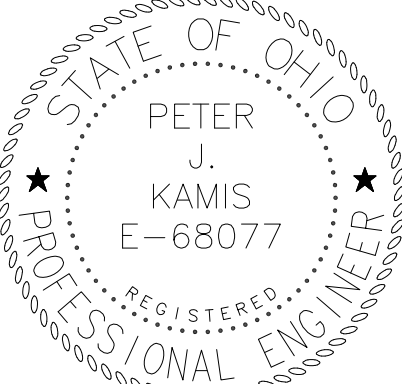
FIRST FLOOR
DOMESTIC WATER & GAS PLAN 2

SCALE: 1/4" = 1'-0"





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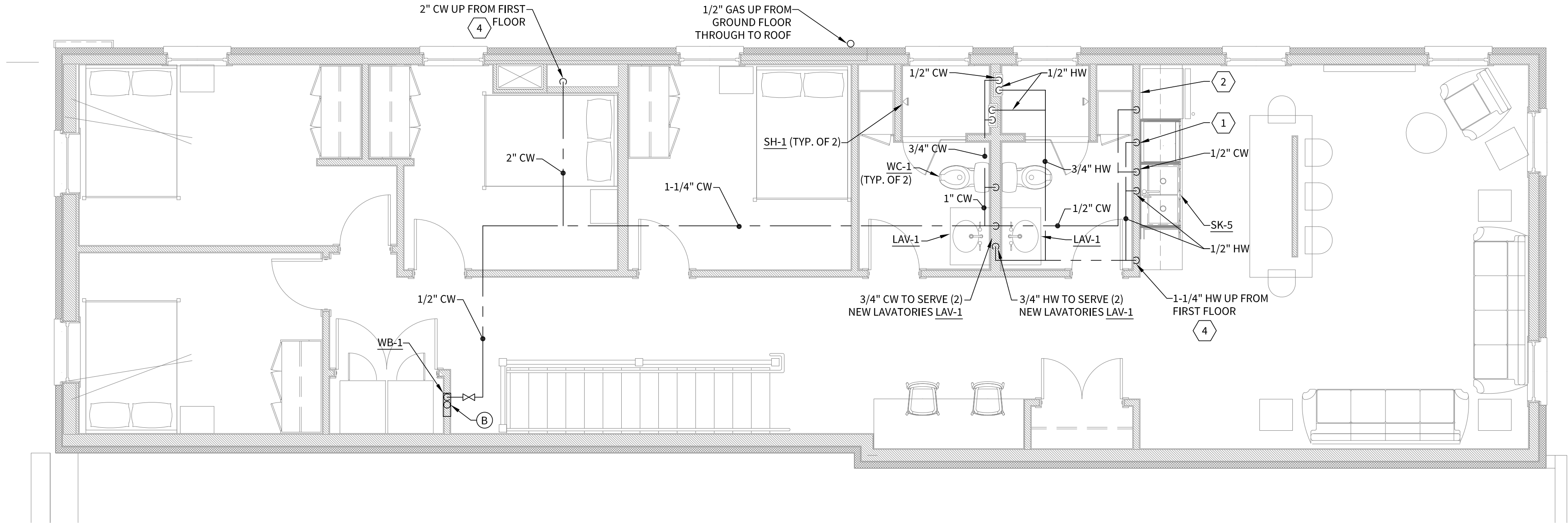
KINGSVILLE FIRE DEPARTMENT

3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

BID/PERMIT OCT 28 2024
REVIEW SET OCT 18 2024
PROJECT #: 2022

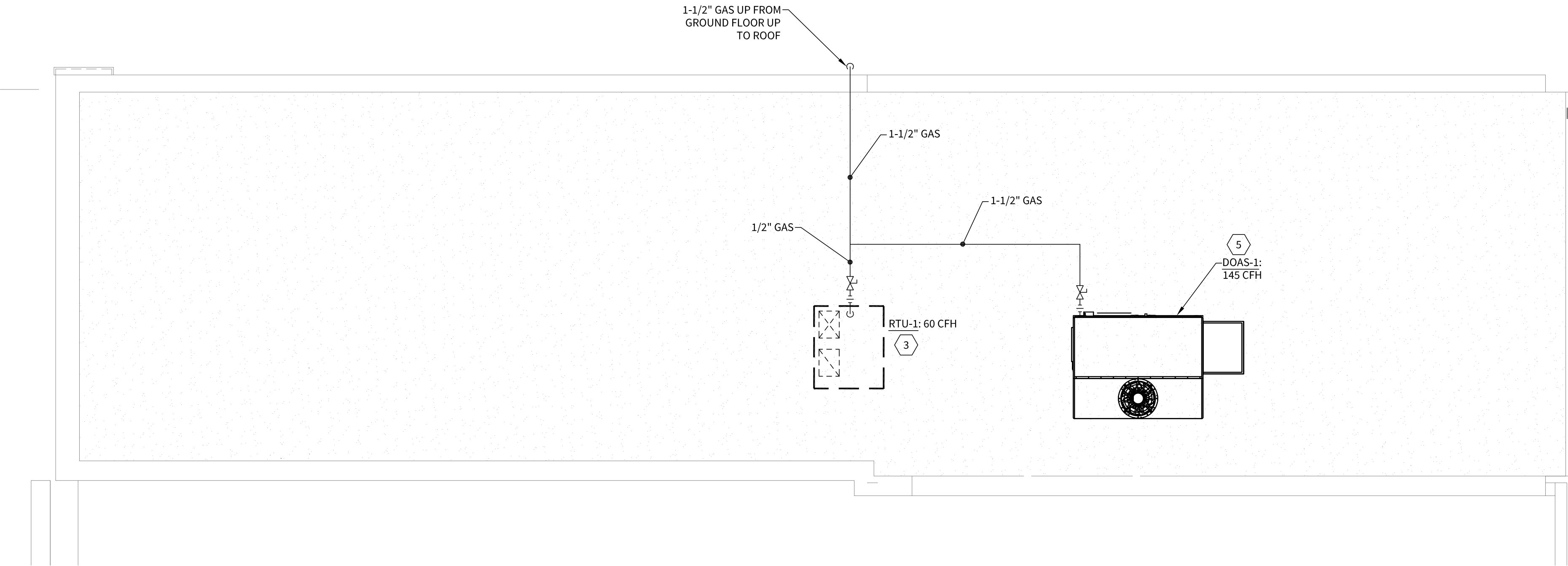
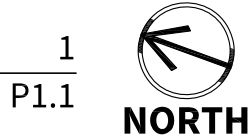
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SECOND FLOOR & ROOF
DOMESTIC WATER & GAS PLANS



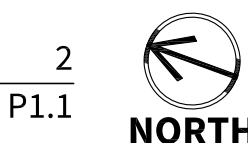
SECOND FLOOR
DOMESTIC WATER & GAS PLAN 1

SCALE: 1/4" = 1'-0"



ROOF
DOMESTIC WATER & GAS PLAN 2

SCALE: 1/4" = 1'-0"



GENERAL PLUMBING NOTES:

- REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON SHEET P2.0 FOR COLD WATER, HOT WATER, SANITARY, AND VENT CONNECTIONS SIZES FOR ALL NEW PLUMBING FIXTURES/EQUIPMENT.
- PROVIDE ALL NEW LAVATORIES LAV-1 WITH THERMOSTATIC MIXING VALVE TMV-1.

SECOND FLOOR AND ROOF
DOMESTIC WATER & GAS
CODED NOTES:⬡

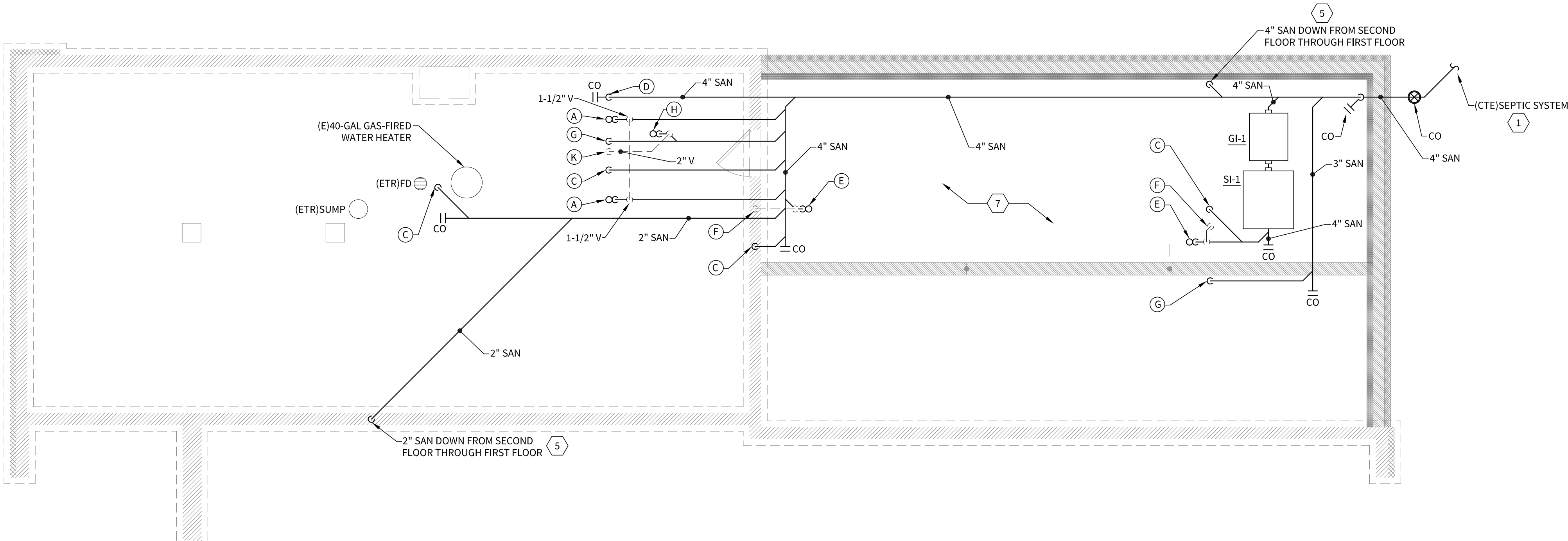
- PROVIDE 1/2" HOT WATER LINE AND 1" DRAIN CONNECTION AT TAILPIECE OF SINK SK-5 FOR UNDER-COUNTER DISHWASHER. PROVIDE WITH DISHWASHER AIR GAP 'PROFLO' #PFGAPCP OR EQUAL IN COUNTER.
- PROVIDE 3/8" DOMESTIC COLD WATER WITH SHUT-OFF VALVE AND POINT-OF-USE BACKFLOW PREVENTER (WATTS #SD-3 OR EQUAL) FOR REFRIGERATOR AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT VENDOR.
- PROVIDE 1/2" GAS CONNECTION TO ROOFTOP UNIT RTU-1. REFER TO MECHANICAL PLANS FOR ROOFTOP UNIT INFORMATION AND SCHEDULE.
- COORDINATE EXACT ROUTE AND LOCATIONS OF FLOOR PENETRATIONS FOR COLD WATER OR HOT WATER UP FROM BASEMENT (AND UP TO SECOND FLOOR IF APPLICABLE) WITH STRUCTURE AND WALL LOCATIONS - TYPICAL.
- REFER TO MECHANICAL PLANS FOR DEDICATED OUTDOOR AIR SYSTEM DOAS-1 SCHEDULE AND NOTES.

PLUMBING PIPE NOTES:⬡

- 1/2" COLD WATER UP TO WASHER BOX
- 1/2" HOT WATER UP TO WASHER BOX
- 1/2" COLD WATER UP TO SINK(S)/LAVATORY(S)/MOP SINK
- 1/2" HOT WATER UP TO SINK(S)/LAVATORY(S)/MOP SINK
- 1/2" COLD WATER UP TO WATER CLOSET
- 1-1/4" COLD WATER UP TO WATER HEATER
- 3/4" GAS UP TO WATER HEATER

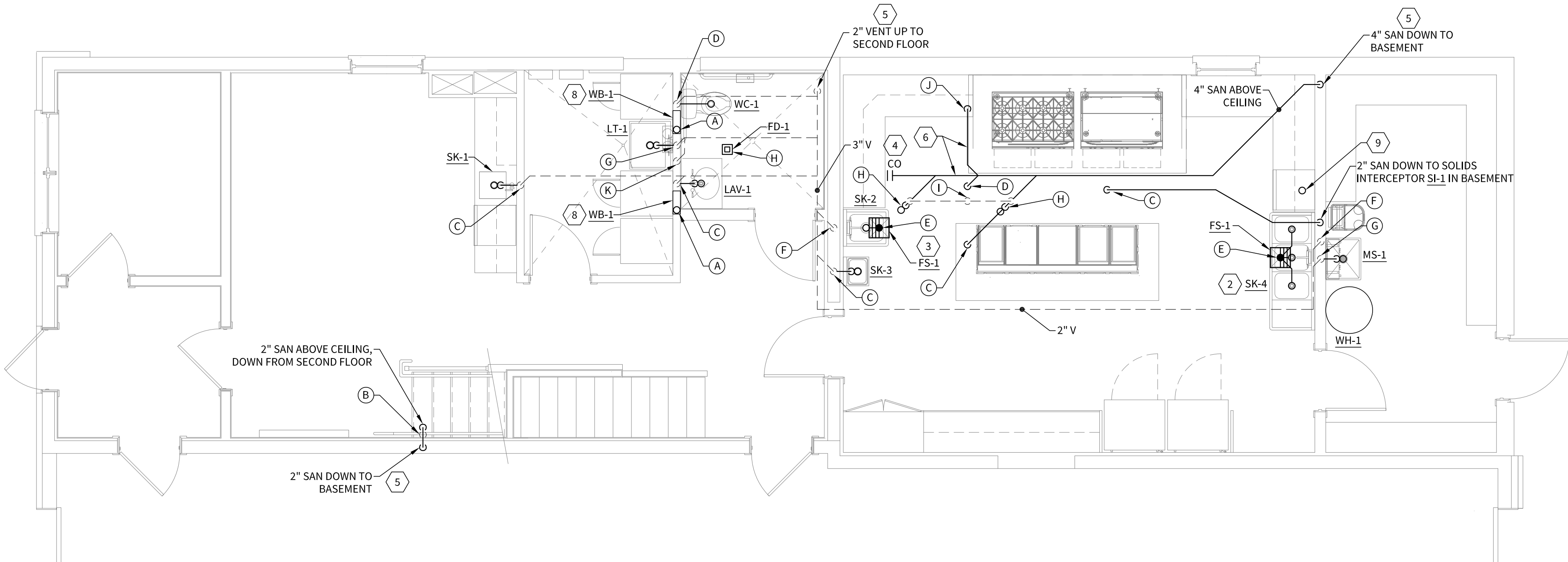
PLUMBING LEGEND

---	CW	COLD WATER
---	HW	HOT WATER
---	V	VENT
---	SAN	SANITARY SEWER
---	SAN	SANITARY SEWER (BELOW FLOOR)
---	G	GAS
---	VALVE	VALVE
---	WATER METER	WATER METER
---	FLOOR DRAIN	FLOOR DRAIN
---	WC	WATER CLOSET
---	LAV	LAVATORY
---	MS	MOP SINK
---	CO	CLEANOUT
---	WH	WATER HEATER
---	VTR	VENT THROUGH ROOF
---	AFF	ABOVE FINISHED FLOOR
---	(E)	EXISTING TO REMAIN
---	(R)	RELOCATE
---	REX	REMOVE EXISTING
---	CTE	CONNECT TO EXISTING



**BASEMENT
SANITARY & VENT PLAN**
SCALE: 1/4" = 1'-0"

1
P1.2
NORTH



**FIRST FLOOR
SANITARY & VENT PLAN**
SCALE: 1/4" = 1'-0"

2
P1.2
NORTH

GENERAL PLUMBING NOTES:

- REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON SHEET P2.0 FOR COLD WATER, HOT WATER, SANITARY, AND VENT CONNECTIONS SIZES FOR ALL NEW PLUMBING FIXTURES/EQUIPMENT.
- PROVIDE ALL NEW LAVATORIES LAV-1 WITH THERMOSTATIC MIXING VALVE TMV-1.

**BASEMENT AND FIRST FLOOR
SANITARY & VENT CODED NOTES:**

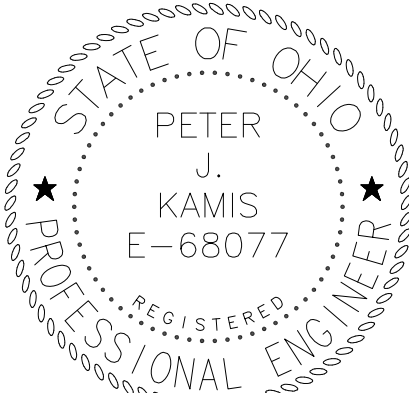
- CONNECT NEW 4" SANITARY LINE TO EXISTING SEPTIC SYSTEM. FIELD VERIFY EXACT LOCATION, ELEVATION, AND POINT OF CONNECTION PRIOR TO ROUGH-IN.
- INDIRECT WASTE FROM EACH COMPARTMENT OF 3-COMPARTMENT SINK SK-4 SHALL BE SEPARATELY INDIRECT WASTED TO FLOOR SINK FS-1 WITH 1" AIR GAP - REFER TO DETAIL ON SHEET P4.0.
- SK-2 SHALL INDIRECT WASTE TO FLOOR SINK FS-1 NEARBY WITH AIR GAP TWO TIMES THE PIPE DIAMETER - REFER TO DETAIL ON SHEET P4.0.
- PROVIDE ACCESS PANEL IN CEILING AT LOCATION OF THIS CLEANOUT. PAINT TO MATCH CEILING.
- COORDINATE EXACT ROUTE AND LOCATION OF CEILING/FLOOR PENETRATIONS FOR SANITARY OR VENT LINES WITH STRUCTURE AND WALL LOCATIONS.
- SANITARY AND VENT PIPING IN THIS AREA TO BE LOCATED ABOVE CEILING ON FIRST FLOOR (DROPPING DOWN FROM SECOND FLOOR PLUMBING FIXTURES).
- PROVIDE HEAT TRACE ON ALL DOMESTIC COLD, DOMESTIC HOT, AND SANITARY PIPING LOCATED WITHIN THE UNCONDITIONED CRAWL SPACE TO PREVENT FREEZING. REFER TO NOTES 17, 18, AND 19 IN THE 'PLUMBING SPECIFICATIONS' ON P2.0 FOR ADDITIONAL INFORMATION, MODEL NUMBERS, ASSUMED LENGTHS, AND ELECTRICAL REQUIREMENTS.
- WASHER BOX WB-1 FOR CLOTHES WASHER. COORDINATE EXACT LOCATION WITH EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE FLEX HOSE FOR FINAL CONNECTION TO COLD & HOT WATER AND MESH LINT TRAP AT END OF WASHER DRAIN HOSE.
- INDIRECT WASTE FROM DISHWASHER SHALL BE ROUTED TO NEARBY FLOOR SINK FS-1.

**SANITARY & VENT
PLUMBING PIPE NOTES:**

- 2" SANITARY DOWN FROM WASHER BOX
- 1-1/2" VENT UP FROM WASHER BOX
- 2" SANITARY DOWN FROM SINK(S)/LAVATORY(S)
- 4" SANITARY DOWN FROM WATER CLOSET(S)
- 3" SANITARY DOWN FROM FLOOR SINK
- 1-1/2" VENT UP FROM FLOOR SINK
- 3" SANITARY DOWN FROM MOP SINK/LAUNDRY TUB
- 2" SANITARY DOWN FROM FLOOR DRAIN
- 1-1/2" VENT UP FROM FLOOR DRAIN(S)
- 2" SANITARY DOWN FROM SHOWERS
- 2" VENT UP FROM FLOOR DRAIN & WASHER BOXES

PLUMBING LEGEND

----	CW	COLD WATER
----	HW	HOT WATER
----	V	VENT
----	SAN	SANITARY SEWER
----	SAN	SANITARY SEWER (BELOW FLOOR)
----	G	GAS
---	VALVE	
(M)	WATER METER	
FD	FLOOR DRAIN	
WC	WATER CLOSET	
LAV	LAVATORY	
MS	MOP SINK	
CO	CLEANOUT	
WH	WATER HEATER	
VTR	VENT THROUGH ROOF	
AFF	ABOVE FINISHED FLOOR	
(E)	EXISTING TO REMAIN	
(R)	RELOCATE	
REX	REMOVE EXISTING	
CTE	CONNECT TO EXISTING	



PETER J. KAMIS, PE
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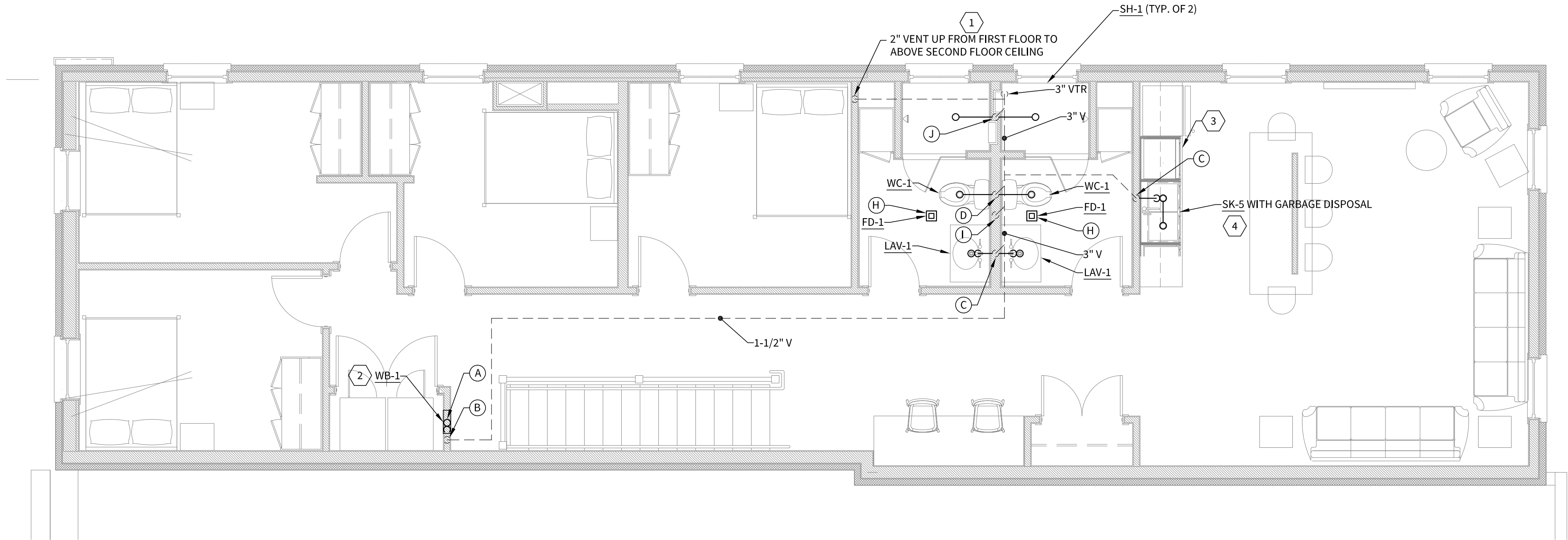
KINGSVILLE FIRE DEPARTMENT

3130 EAST MAIN STREET
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BID/PERMIT OCT 28 2024
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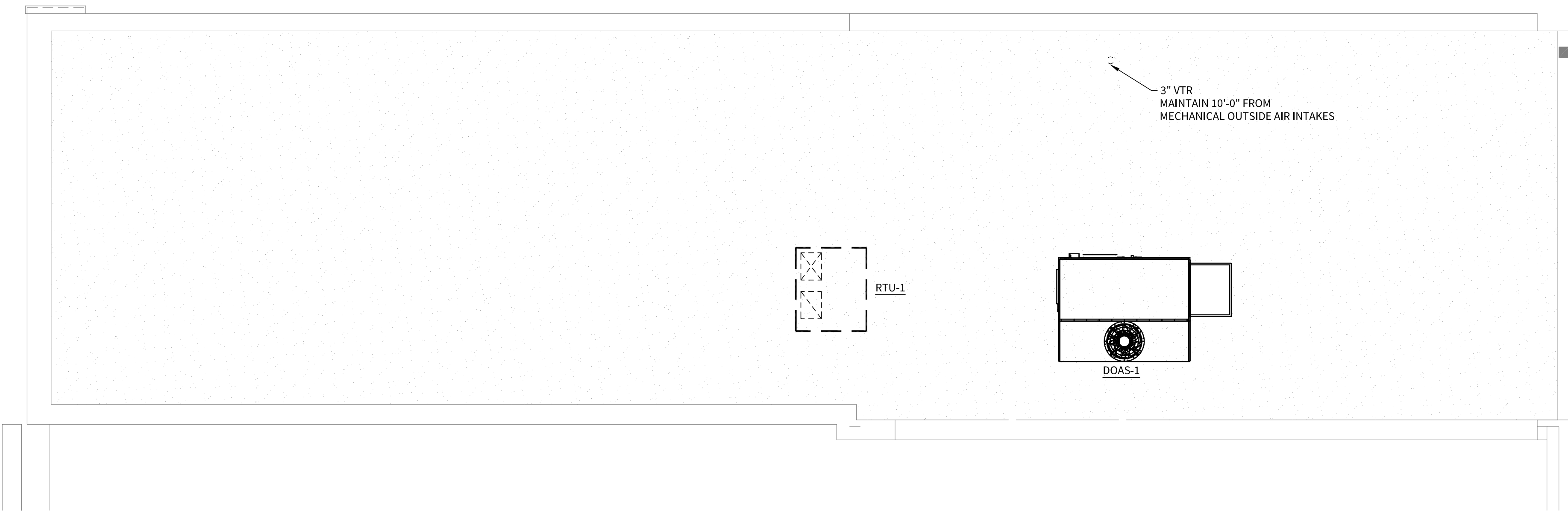
BASEMENT & FIRST FLOOR
SANITARY & VENT PLANS



SECOND FLOOR
SANITARY & VENT PLAN

SCALE: 1/4" = 1'-0"

1
P1.3



ROOF
SANITARY & VENT PLAN

SCALE: 1/4" = 1'-0"

2
P1.3



GENERAL PLUMBING NOTES:

- REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON SHEET P2.0 FOR COLD WATER, HOT WATER, SANITARY, AND VENT CONNECTIONS SIZES FOR ALL NEW PLUMBING FIXTURES/EQUIPMENT.
- PROVIDE ALL NEW LAVATORIES LAV-1 WITH THERMOSTATIC MIXING VALVE TMV-1.

SECOND FLOOR AND ROOF
SANITARY & VENT CODED NOTES:○

- COORDINATE EXACT ROUTE AND LOCATION OF CEILING/FLOOR PENETRATIONS FOR 3" VENT UP TO SECOND FLOOR - REFER TO SECOND FLOOR PLUMBING PLANS ON SHEET P1.1.
- WASHER BOX WB-1 FOR CLOTHES WASHER. COORDINATE EXACT LOCATION WITH EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE FLEX HOSE FOR FINAL CONNECTION TO COLD & HOT WATER AND MESH LINT TRAP AT END OF WASHER DRAIN HOSE.
- PROVIDE 1/2" HOT WATER LINE AND DRAIN 1" CONNECTION AT TAILPIECE OF SINK SK-5 FOR UNDER-COUNTER DISHWASHER. PROVIDE WITH DISHWASHER AIR GAP PROFLO 'PFGAPCP' OR EQUAL IN COUNTER.
- PROVIDE GARBAGE DISPOSAL UNDER COUNTER FOR SINK SK-5. ROUTE WASTE PIPING DOWN TO BASEMENT THROUGH SOLIDS INTERCEPTOR AND GREASE INTERCEPTOR AS INDICATED. REFER TO BASEMENT AND FIRST FLOOR SANITARY & VENT PLANS ON SHEET P1.2.

SANITARY & VENT
PLUMBING PIPE NOTES:○

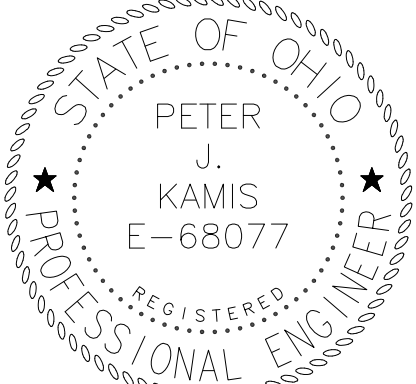
- 2" SANITARY DOWN FROM WASHER BOX
- 1-1/2" VENT UP FROM WASHER BOX
- 2" SANITARY DOWN FROM SINK(S)/LAVATORY(S)
- 4" SANITARY DOWN FROM WATER CLOSET(S)
- 3" SANITARY DOWN FROM FLOOR SINK
- 1-1/2" VENT UP FROM FLOOR SINK
- 3" SANITARY DOWN FROM MOP-SINK/LAUNDRY TUB
- 2" SANITARY DOWN FROM FLOOR DRAIN
- 1-1/2" VENT UP FROM FLOOR DRAIN(S)
- 2" SANITARY DOWN FROM SHOWERS
- 2" VENT UP FROM FLOOR DRAIN & WASHER BOXES

PLUMBING LEGEND

---	CW	COLD WATER
---	HW	HOT WATER
---	V	VENT
---	SAN	SANITARY SEWER
---	SAN	SANITARY SEWER (BELOW FLOOR)
---	G	GAS
---		VALVE
(M)		WATER METER
FD		FLOOR DRAIN
WC		WATER CLOSET
LAV		LAVATORY
MS		MOP SINK
CO		CLEANOUT
WH		WATER HEATER
VTR		VENT THROUGH ROOF
AFF		ABOVE FINISHED FLOOR
(E)		EXISTING TO REMAIN
(R)		RELOCATE
REX		REMOVE EXISTING
CTE		CONNECT TO EXISTING



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EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

BID/PERMIT OCT 28 2024
REVIEW SET OCT 18 2024
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SECOND FLOOR AND ROOF
SANITARY & VENT PLANS

PLUMBING FIXTURE SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION
SK-1	ELKAY ELUHAD-211555 S.S. SINK	SINGLE BOWL 18 GA STAINLESS STEEL SINK UNDERMOUNT WITH 5-1/2" DEEP BOWL, BACK OFFSET 3-1/2" DRAIN OPENING. INSIDE COMPARTMENT: 21"L x 15-3/4"W. TRIM: SINGLE LEVER DECK MOUNT FAUCET KOHLER #K-28268-VS, INCLUDE WITH 1.5 GPM AERATOR, STRAINER, AND STOP VALVES.
SK-2	FALCON E1C16x20-0	SINGLE BOWL 18 GA 304 STAINLESS STEEL PREP SINK WITH 14" DEEP BOWL, 18" DRAIN BOARD, AND REMOVABLE 1-5/8" GALVANIZED STEEL TUBING LEGS. INSIDE COMPARTMENT: 16"W x 20"D, PROVIDE WITH WALL MOUNT FAUCET KROWNE #14-812L, 1.5 GPM AERATOR, STRAINER, AND STOP VALVES.
SK-3	FALCON HS-12SS	20 GA 304 STAINLESS STEEL WALL-MOUNTED HAND SINK WITH 4" DEEP BOWL, 12"x12" OVERALL SIZE, AND 8" GOOSENECK FAUCET. INSIDE COMPARTMENT: 8" x 10".
SK-4	FALCON E3C-16x20-R-18	3-COMPARTMENT 18 GA 304 STAINLESS STEEL SINK WITH 18" RIGHT DRAINBOARD, REMOVABLE 1-5/8" GALVANIZED STEEL TUBING LEGS, 10-1/2" HIGH BACKSPLASH, AND (3) 16" x 20" x 14" DEEP BOWLS. PROVIDE WITH CENTER WALL MOUNT PRE-RINSE WITH ADD-ON FAUCET KROWNE #17-109WL, 1.8 GPM AERATOR, STRAINER, AND STOP VALVES.
SK-5	ELKAY ELUHAD-321655 S.S. SINK	DOUBLE BOWL 18 GA STAINLESS STEEL SINK UNDERMOUNT WITH 5-3/8" DEEP BOWL, 3-1/2" DRAIN OPENING. 31-3/4" OVERALL W/ (2) 14" x 14" BOWLS, TRIM: SINGLE LEVER DECK MOUNT FAUCET KOHLER #K-28268-VS, INCLUDE WITH 1.5 GPM AERATOR, STRAINER, AND STOP VALVES.
LT-1	ZURN MS2620	26" x 22-3/8" POLY-ONE, WHITE POLYPROPYLENE 20 GALLON LAUNDRY TUB 1-1/2" DIAM. DRAIN WITH PLASTIC STOPPER AND WHITE COATED STEEL LEGS. INCLUDE WITH #DF1 FAUCET.
MS-1	FALCON FMS-252110	25"x21"x10" HEIGHT OVERALL STAINLESS STEEL MOP SINK. COMPLETE WITH 3" DIAM. STAINLESS STEEL DRAIN BODY WITH COMBINATION DOME STRAINER AND LINT BASKET. INCLUDE WITH WALL MOUNTED SERVICE FAUCET WITH VACUUM BREAKER AND INTEGRAL STOPS. ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT.
LAV-1	AMER. STD. "OVALYN" 0497.221	VITREOUS CHINA, WALL HUNG, WHITE LAVATORY WITH OVERFLOW. TRIM: KOHLER #K-46028-4-CP, FURNISH WITH 0.5 GPM AERATOR, CONCEALED ARM SUPPORTS AND OFFSET DRAIN FOR BARRIER FREE INSTALLATION. REFER TO ARCHITECTURAL PLANS FOR CHILd/ADA MOUNTING HEIGHT.
WC-1	AMER. STD. "CHAMPION 4" 731AA001S	VITREOUS CHINA, LOW CONSUMPTION, 16-1/2" HIGH, ELONGATED SIPHON JET ACTION BOWL, WHITE, ADA-COMPLIANT, TANK TYPE WATER CLOSET. INCLUDE WITH CHURCH #9500CT EXTRA HEAVY DUTY WHITE OPEN FRONT SEAT. PROVIDE TRIP LEVER PER ADA.

SINK AND DRAINAGE ACCESSORIES

ITEM	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION
FD-1	ZURN FLOOR DRAIN #Z-415S	DURA-COATED CAST IRON SQUARE FLOOR DRAIN WITH BOTTOM OUTLET, MEMBRANE CLAMP, ADJUSTABLE COLLAR, AND POLISHED NICKLE BRONZE STRAINER.
TMV-1	LEONARD #170A-LF THERMOSTATIC MIXING VALVE	EXPOSED POINT OF USE MIXING VALVE TO LIMIT WATER TEMPERATURE WITH 0.25 GPM MINIMUM TO 5.0 GPM MAXIMUM FLOW. 3/8" INLET AND OUTLET PIPING CONNECTIONS. THIS DEVICE SHALL CONFORM WITH ASSE 1070 OR CSA B125.3.
WB-1	IPS 'GUY GRAY' MODEL #WB200HA	20 GAUGE GALVANIZED STEEL RECESSED BOX, 18 GAUGE FACE PLATE, SPACE SAVER WASHER SUPPLY AND DRAIN. INCLUDES 1/2" CW, 1/2" HW WITH SINGLE SHUT-OFF VALVES, WATER HAMMER ARRESTORS AND 2" DRAIN, BOTTOM OUTLET.
FS-1	ZURN FLOOR SINK Z1900	12"x12"x6" DEEP FLOOR RECEPTOR, CAST IRON BODY AND SQUARE, LIGHT-DUTY HALF-GRATE WITH 1/2" SLOTTED OPENINGS

GREASE INTERCEPTOR SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION
GI-1	SCHIER GREASE INTERCEPTOR #GB-50	STEEL HYDROMECHANICAL GREASE INTECEPTOR WITH INTERNAL FLOW CONTROL AND AIR RELIEF. PROVIDE FLOW RESTRICTION CAP FOR DRAIN PIPING. INSTALL INTERCEPTOR AND PIPING PER MANUFACTURER'S RECOMMENDATIONS. 50 GPM FLOW RATE & 439 LBS. GREASE CAPACITY.

SOLIDS INTERCEPTOR SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION
SI-1	SCHIER SOLIDS INTERCEPTOR #SI-50	STEEL SOLIDS INTECEPTOR. PROVIDE FLOW RESTRICTION CAP FOR DRAIN PIPING. INSTALL INTERCEPTOR AND PIPING PER MANUFACTURER'S RECOMMENDATIONS. 125 GPM FLOW RATE, 53 GAL. SOLIDS CAPACITY, AND 65 GAL LIQUID CAPACITY WEIGHT: 148 LBS.

WATER HEATER SCHEDULE

ITEM	MANUFACTURER AND CATALOG NUMBER	DESCRIPTION
WH-1	A.O. SMITH "CONSERVATIONIST" BT-100	GLASS LINED 98 GAL., 75.1 MBH INPUT GAS HW HEATER. CAPACITY: 73 GPH RECOVERY AT 100° F TEMP. RISE. INCLUDE WITH TEMPERATURE AND PRESSURE RELIEF VALVE, ELECTRIC PUSH BUTTON PILOT LIGHTER, FOAM INSULATED TANK & A.G.A. CERTIFIED DRAFT HOOD. INCLUDE WITH MANUFACTURER'S CONCENTRIC VENTING KIT.

FIRE PROTECTION & SPRINKLER SYSTEM SPECIFICATIONS

- THE BUILDING CURRENTLY HAS AN EXISTING SPRINKLER SYSTEM. A LANDLORD APPROVED AND STATE OF OHIO LICENSED SPRINKLER CONTRACTOR SHALL DESIGN AND MODIFY THE EXISTING SPRINKLER SYSTEM PIPING AND HEADS TO CONFORM WITH NFPA 13, ALL LOCAL CODES AND ORDINANCES, AND ANY LANDLORD'S INSURANCE COMPANY REQUIREMENTS.
- THIS WORK SHALL INCLUDE ALL PIPING, FITTINGS, HANGERS, EQUIPMENT, ETC. REQUIRED TO COMPLETE THE WORK. THE ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13, THE OHIO BUILDING CODE, AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.
- CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS, EQUIPMENT SUBMITTALS AND HYDRAULIC CALCULATIONS TO THE APPROPRIATE REVIEWING AGENCIES FOR PERMIT APPROVAL PRIOR TO INSTALLATION.
- PIPE HANGERS FOR THE SPRINKLER SYSTEM SHALL BE ADJUSTABLE CLEVES HANGERS WITH APPROPRIATE CLAMP (DEPENDING ON STRUCTURE). ALL PIPING SHALL BE SUPPORTED IN COMPLIANCE WITH NFPA 13 REQUIREMENTS.
- SPRINKLER HEADS ARE TO BE CENTERED IN 2x2 OR 2x4 LAY-IN CEILING TILES. HEADS ARE TO BE SPACED SYMMETRICALLY WITH LIGHTING AND OTHER CEILING FIXTURES.
- SPRINKLER HEADS IN AREAS WITH CEILINGS SHALL BE SIMILAR TO TYCO SPRINKLER CORP. MODELS:
A. "TY-L", 1/2" ORIFICE, PENDANT OR RECESSED PENDANT, POLISHED CHROME, AUTOMATIC SPRINKLER HEAD WITH FACTORY WHITE METAL ESCUTCHEON.
B. "RF-II", 1/2" ORIFICE, CONCEALED PENDANT, POLISHED CHROME, AUTOMATIC SPRINKLER HEAD WITH FACTORY WHITE METAL COVER PLATE.
C. NEW HEADS SHALL MATCH EXISTING. FIELD VERIFY EXISTING BUILDING STANDARD.
- SPRINKLER CONTRACTOR SHALL OBTAIN A COPY OF THE FLOW TEST FOR WATER MAIN. THESE FINDINGS SHALL BE FOR HYDRAULIC SPRINKLER SYSTEM CALCULATIONS.

FIXTURE CONNECTION SCHEDULE					
FIXTURE	TAG	SAN	VENT	C.W.	H.W.
WATER CLOSET	WC	4"	2"	1/2"	-
LAVATORY	LAV	1-1/2"	1-1/2"	1/2"	1/2"
MOP SINK/LAUNDRY TUB	MS	3"	1-1/2"	1/2"	1/2"
3 COMP. SINK	SK	2"	1-1/2"	3/4"	3/4"
COUNTERTOP SINK	SK	1-1/2"	1-1/2"	1/2"	1/2"
FLOOR DRAIN	FD	2"	1-1/2"	-	-
FLOOR SINK	FS	3"	1-1/2"	-	-
WASHER OUTLET BOX	WB	2"	1-1/2"	1/2"	1/2"

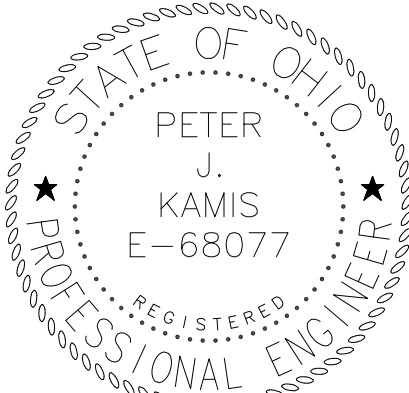
- NOTES:
- ALL FIXTURES TO HAVE CHROME STOPS AND ESCUTCHEONS.
 - PROVIDE WATER HAMMER ARRESTOR AT HIGH POINTS NEAR QUICK-CLOSING VALVES.

PLUMBING SPECIFICATIONS

- THE ENTIRE PLUMBING INSTALLATION, MATERIALS, EQUIPMENT, ETC. SHALL CONFORM TO ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION AND THE OHIO PLUMBING CODE. FURNISH ALL PLUMBING FIXTURES, EQUIPMENT, AND MATERIALS INDICATED AND SHOWN ON DRAWINGS. INSTALL A COMPLETE SYSTEM AND PLACE IN PROPER OPERATION.
- SANITARY, VENT, AND STORM PIPING:
 - ABOVE GRADE PIPING SHALL BE SERVICE WEIGHT CAST IRON NO-HUB PIPE WITH STAINLESS STEEL Banded JOINTS AND HUNG PER C.I.S.P.I. REQUIREMENTS. COMPOSITE PIPING MAY BE AN ALTERNATE IN A RETURN AIR PLENUM AS LONG AS IT MEETS OR EXCEEDS REQUIREMENTS OF SECTION 602 OF THE OHIO MECHANICAL CODE. MATERIALS WITHIN THE RETURN AIR PLENUM MUST BE LISTED AS NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. ANY EXISTING PIPING FOUND IN A RETURN AIR PLENUM THAT DOES NOT CONFORM TO SECTION 602 OF THE OHIO MECHANICAL CODE SHALL BE REPLACED PIPING THAT CONFORMS TO ABOVE STANDARD.
 - BELOW GRADE INSIDE BUILDING PIPING SHALL BE SERVICE WEIGHT CAST IRON BELL & SPIGOT PIPE WITH NEOPRENE COMPRESSION OR LEAD AND OAKUM JOINTS. INSTALL PER C.I.S.P.I. REQUIREMENTS. SCHEDULE 40 PVC MAY BE AN ALTERNATE WHERE APPROVED BY LOCAL CODES AND LANDLORD.
 - BELOW GRADE OUTSIDE BUILDING PIPING UP TO 15" SHALL BE SCH. 40 PVC PLASTIC, WITH FITTINGS PER ASTM D-3034 AND ASTM D-3212 ELASTOMETRIC GASKETED JOINTS.
- DOMESTIC WATER PIPING:
 - ABOVE GRADE PIPING SHALL BE TYPE "L" HARD DRAWN COPPER PIPE WITH WROUGHT COPPER FITTINGS AND 95-5 LEAD FREE SOLDERED JOINTS. COMPOSITE PIPING MAY BE AN ALTERNATE IN A RETURN AIR PLENUM AS LONG AS IT MEETS OR EXCEEDS SECTION 602 OF THE OHIO MECHANICAL CODE. MATERIALS WITHIN THE RETURN AIR PLENUM MUST BE LISTED AS NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723. "PROPRESS" PIPING AND FITTINGS MAY BE USED IF APPROVED BY BUILDING LANDLORD'S FIELD REPRESENTATIVE.
 - BELOW GRADE PIPING SHALL BE TYPE "K" SOFT COPPER WITHOUT JOINTS. COVER PIPING WITH SAND WHEN LOCATED BELOW CONCRETE FLOOR SLAB.
- PERFORM ALL EXCAVATION AND BACKFILL REQUIRED FOR INSTALLATION OF BELOW GRADE PIPING. EXCAVATE TO DEPTH REQUIRED TO INSTALL PIPING AT REQUIRED INVERT AND PITCH. LAY PIPE ON BEDDING OF SAND OR INTERLOCKING AGGREGATE FOR UNIFORM BEARING ALONG LENGTH OF PIPE. BACKFILL WITH BEDDING MATERIAL TO A MINIMUM OF 12" ABOVE TOP OF PIPES AND COMPACT. BALANCE OF BACKFILL IN GRASS AREAS SHALL BE CLEAN EARTH OF TO 6" ABOVE SURROUNDING GRADES, UNDER FLOORS, AND PAVING INTERLOCKING AGGREGATE. ALL BACKFILL SHALL BE COMPACTED IN MAXIMUM 6" LAYERS. PATCH FLOOR TO MATCH EXISTING.
- PROVIDE WASTE AND WATER CONNECTION FOR EQUIPMENT FURNISHED BY OTHER CONTRACTORS OR OWNER. INCLUDE ALL ACCESSORIES REQUIRED BY CODE, DRAWING, OR MANUFACTURER. COORDINATE WITH GENERAL CONTRACTOR.
- ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED. PROVIDE 1" THICK INSULATION FOR HW PIPING AND 1/2" THICK INSULATION FOR CW PIPING. INSULATION SHALL INCLUDE ASJ AND SELF-SEALING LAP. FITTINGS AND VALVES SHALL BE INSULATED WITH PRE-MOLDED FIBERGLASS FITTINGS AND COVERED WITH A PREFORMED PVC FITTING COVER INSULATION JACKET. FITTING COVER MUST BE PLENUM RATED. ALL PIPING SHALL BE NEATLY AND CLEARLY LABELED INDICATING SERVICE AND DIRECTION OF FLOW.
- DOMESTIC WATER VALVES SHALL BE LEAD FREE AND SIMILAR TO MILWAUKEE VALVE UPBA-100 OR UPBA-150 STANDARD PORT BALL VALVE, WITH EXTENSION STEM HANDLE STYLE UH FOR INSULATED PIPE.
- TEST ALL WASTE AND WATER PIPING IN ACCORDANCE WITH OPC SECTION 312, LOCAL CODES, AND ORDINANCES. TEST WATER PIPING TO HYDROSTATIC PRESSURE OF 100 PSIG FOR 15 MINUTES. PURGE POTABLE WATER SYSTEMS OF DELETERIOUS MATTER AND DISINFECT PRIOR TO USE, PER OPC SECTION 610 AND IN ACCORDANCE WITH AWWA STANDARDS.
- FIELD VERIFY EXACT POINTS OF CONNECTION, INVERTS, SIZES, AND FLOW DIRECTIONS OF ALL EXISTING UTILITY SERVICES PRIOR TO THE START OF WORK. MODIFY DESIGN AS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
- ALL PLUMBING SHALL BE CONCEALED UNLESS NOTED TO BE EXPOSED. PROVIDE ALL ACCESS DOORS AND PANELS WHERE REQUIRED TO REACH VALVES AND OTHER APPURTENANCES. ALL PLUMBING PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE TO PRESERVE HEADROOM. COORDINATE WITH OTHER TRADES.
- INSTALL ALL ACCESSIBLE PLUMBING FIXTURES AS REQUIRED BY THE A.D.A. OFFSET AND INSULATE ALL EXPOSED WASTE AND SUPPLY PIPING UNDER HANDICAPPED LAVATORIES WITH THE HAND-LAV GUARD KIT BY TRUEBRO OR EQUIVALENT. TANK WATER CLOSET TRIP LEVERS SHALL BE INSTALLED ON THE ACCESSIBLE SIDE OF THE FIXTURE. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS OF ALL ACCESSIBLE FIXTURES.
- SLOPE OF HORIZONTAL DRAINAGE PIPE SHALL BE 1/4" PER FOOT FOR 2-1/2" PIPE OR LESS (AND FOR ANY DRAINAGE PIPING UPSTREAM OF A GREASE INTERCEPTOR) AND 1/8" PER FOOT FOR 3" TO 6" PIPE PER OPC TABLE 704.1.
- PROVIDE ALL HANGERS AND SUPPORTS REQUIRED TO PROPERLY SUPPORT, SECURE, AND ALIGN PIPING, AND ACCOMMODATE ANY PIPING INSULATION. SPACING TO COMPLY WITH OPC REQUIREMENTS.
- IN THE INSTALLATION OR REMOVAL OF ANY PART OF A DRAINAGE SYSTEM, DEAD ENDS SHALL BE PROHIBITED. CLEANOUT EXTENSIONS AND APPROVED FUTURE DRAINAGE PIPING SHALL NOT BE CONSIDERED AS DEAD ENDS.
- CLEANOUTS SHALL BE NOT MORE THAN 100 FEET APART IN HORIZONTAL DRAINAGE LINES PER OPC SECTIONS 708.1.1 THROUGH 708.1.7. ALL CLEANOUTS SHALL BE ACCESSIBLE. INSTALL AT DRAIN DIRECTION CHANGES OVER 45 DEGREES. INSTALL CLEANOUTS AT OR NEAR THE FOOT OF EACH VERTICAL WASTE OR SOIL STACK. WHERE CLEANOUTS ARE RECESSED IN COLUMN ENCLOSURE OR SIMILAR PROVIDE ROUND STAINLESS STEEL ACCESS COVER WITH SECURING SET SCREW.
- GAS PIPING CONNECTIONS TO EQUIPMENT SHALL INCLUDE GAS COCK, UNION AND DIRT LEG. ALL GAS PIPING SHALL CONFORM TO RECOMMENDED PRACTICE AND REGULATIONS OF THE LOCAL GAS COMPANY AND INTERNATIONAL PIPE AND GAS CODE. GAS PIPING SHALL BE AS FOLLOWS:
 - ABOVE GRADE INSIDE BUILDING, LOW PRESSURE - SCHEDULE 40 SEAMLESS BLACK STEEL PIPE, BEVELED ENDS.
 - 2" AND SMALLER - SCREWED FITTINGS, WROUGHT IRON, 2 1/2" AND LARGER - SCH. 40 WELDED BLACK STEEL PIPE.
 - SUPPORTS AND HANGERS SHALL BE PROVIDED TO PROPERLY SUPPORT, SECURE AND ALIGN PIPING AND TO MEET FIELD CONDITIONS. SPACING SHALL COMPLY WITH ASHRAE STANDARDS AND OBC REQUIREMENTS.
- PROVIDE ELECTRIC HEAT TRACE FOR ALL DOMESTIC COLD WATER PIPING INSTALLED IN UNHEATED SPACES SUBJECT TO FREEZING (BASEMENT/CRAWL SPACES). PROVIDE RAYCHEM XL-TRACE #3XLE2 (0° F START UP) SELF REGULATING CABLE OR EQUIVALENT. CABLE RATING SHALL BE FOR 40 DEG. F. TEMPERATURE MAINTENANCE. APPROX. 125 FT, 333 WATTS, 208/1/60. INSULATE PER ENERGY CODE REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE ELECTRIC HEAT TRACE FOR ALL SANITARY PIPING INSTALLED IN UNHEATED SPACES SUBJECT TO FREEZING (BASEMENT/CRAWL SPACES). PROVIDE RAYCHEM XL-TRACE #3XLE2 (0° F START UP) SELF REGULATING CABLE OR EQUIVALENT. CABLE RATING SHALL BE FOR 40 DEG. F. TEMPERATURE MAINTENANCE. APPROX. 150 FT, 333 WATTS, 208/1/60. INSULATE PER ENERGY CODE REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE ELECTRIC HEAT TRACE FOR ALL DOMESTIC HOT WATER PIPING INSTALLED IN UNHEATED SPACES SUBJECT TO FREEZING (BASEMENT/CRAWL SPACES). PROVIDE RAYCHEM XL-TRACE #3XLE2 (0° F START UP) SELF REGULATING CABLE OR EQUIVALENT. CABLE RATING SHALL BE FOR 40 DEG. F. TEMPERATURE MAINTENANCE. APPROX. 60 FT, 333 WATTS, 208/1/60. INSULATE PER ENERGY CODE REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE ELECTRIC HEAT TRACE FOR ALL GAS PIPING INSTALLED IN UNHEATED SPACES SUBJECT TO FREEZING (BASEMENT/CRAWL SPACES). PROVIDE RAYCHEM XL-TRACE #3XLE2 (0° F START UP) SELF REGULATING CABLE OR EQUIVALENT. CABLE RATING SHALL BE FOR 40 DEG. F. TEMPERATURE MAINTENANCE. APPROX. 100 FT, 333 WATTS, 208/1/60. INSULATE PER ENERGY CODE REQUIREMENTS. COORDINATE WITH ELECTRICAL CONTRACTOR.



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EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

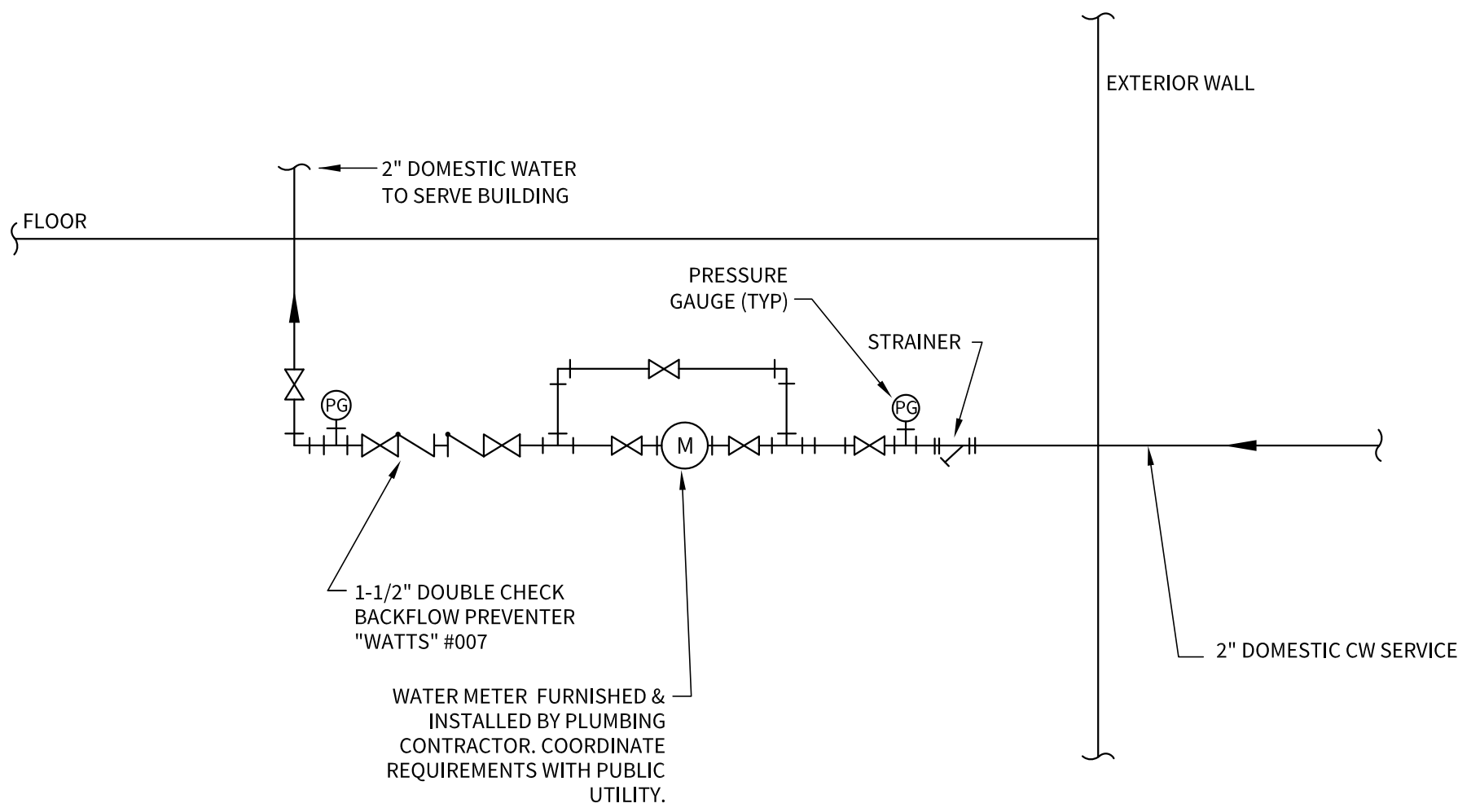
3130 EAST MAIN STREET
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REVIEW SET OCT 18 2024

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PLUMBING SCHEDULES
AND SPECIFICATIONS

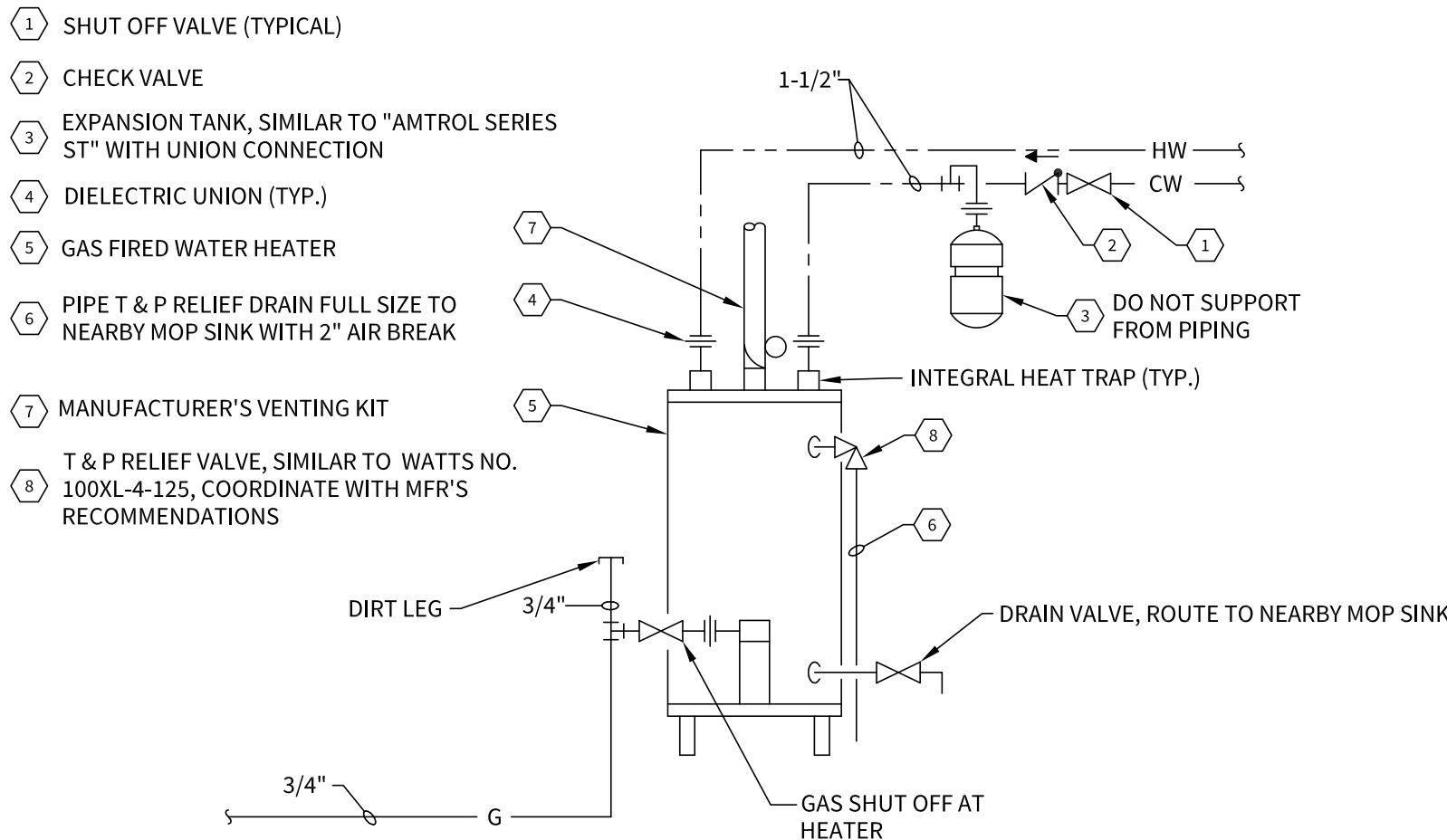


DOMESTIC WATER SERVICE DIAGRAM

SCALE: NTS

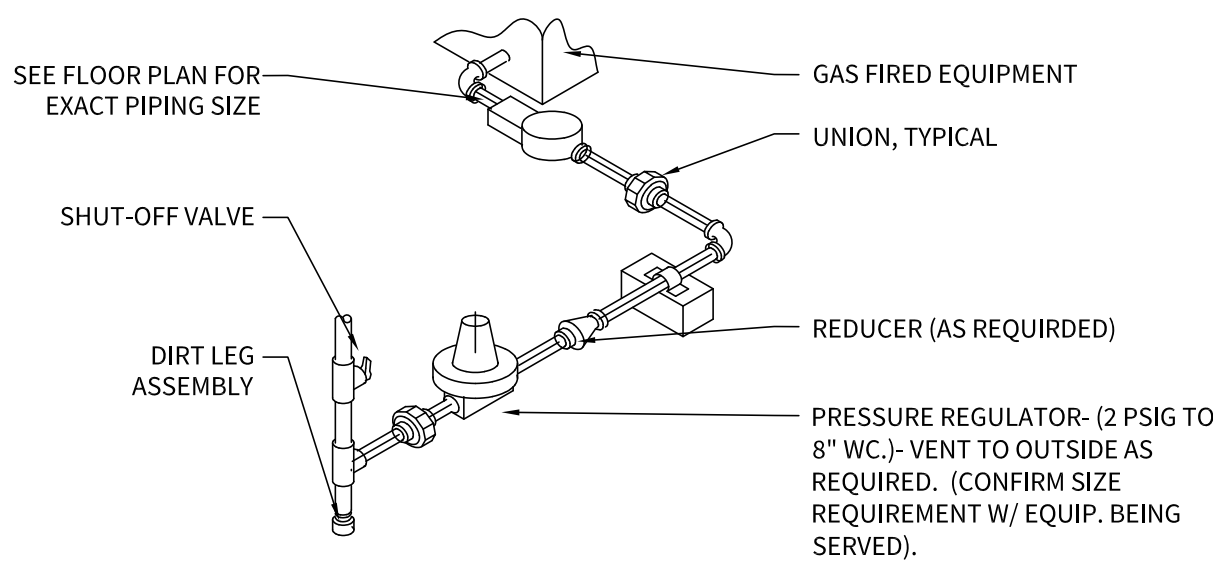
NOTES:

- COORDINATE EXACT METER LOCATION AND BACKFLOW PREVENTER SPECIFICATIONS WITH PUBLIC UTILITY.
- ALL DRAIN PIPING SHALL BE ROUTED SO AS NOT TO INTERFERE WITH VALVE OPERATION.
- ALL VALVES SHALL BE A MAX. OF 7'-0" A.F.F.



GAS-FIRED WATER HEATER DETAIL

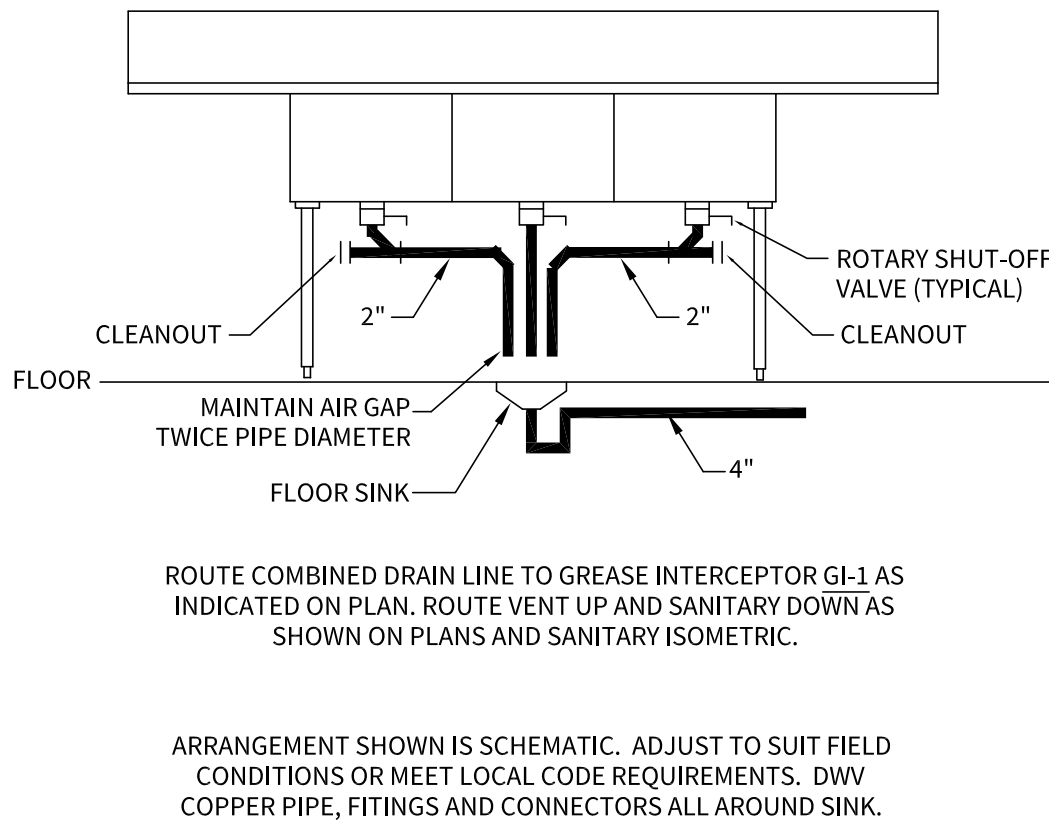
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NOTE: PROVIDE COMPLETE ASSEMBLY AS REQUIRED. REGULATORS NOT REQUIRED AT ALL LOCATIONS, VERIFY PRIOR TO ROUGH-IN.

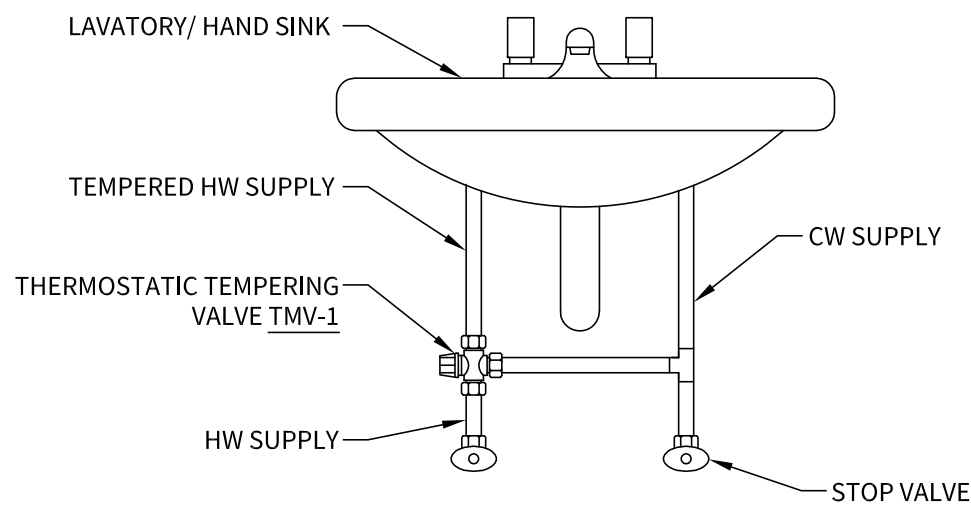
EQUIPMENT GAS PIPING DETAIL

SCALE: NTS



3-COMPARTMENT SINK DETAIL

SCALE: NTS

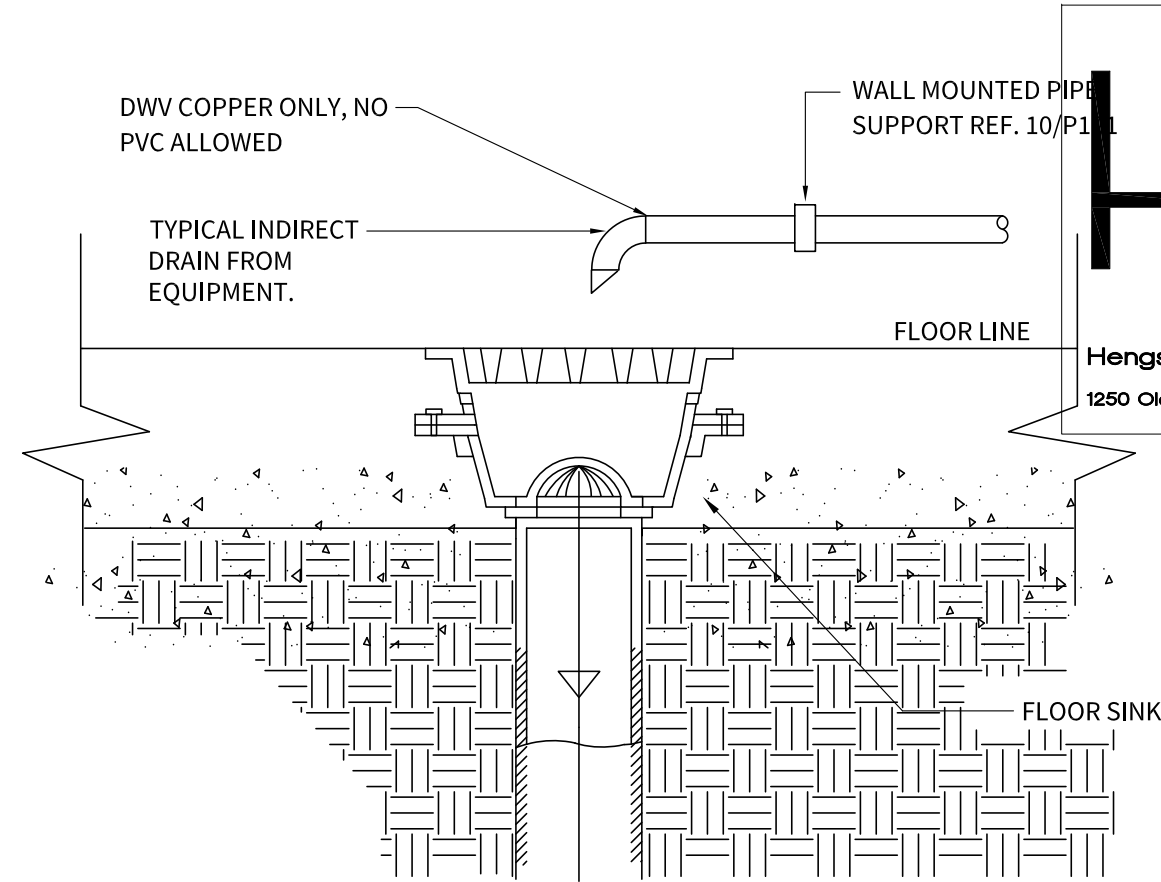


NOTE:

- INSULATE ALL EXPOSED WASTE AND SUPPLY PIPING UNDER LAVATORIES WITH THE HANDI-LAV GUARD INSULATION KIT BY TRUEBRO OR EQUAL.

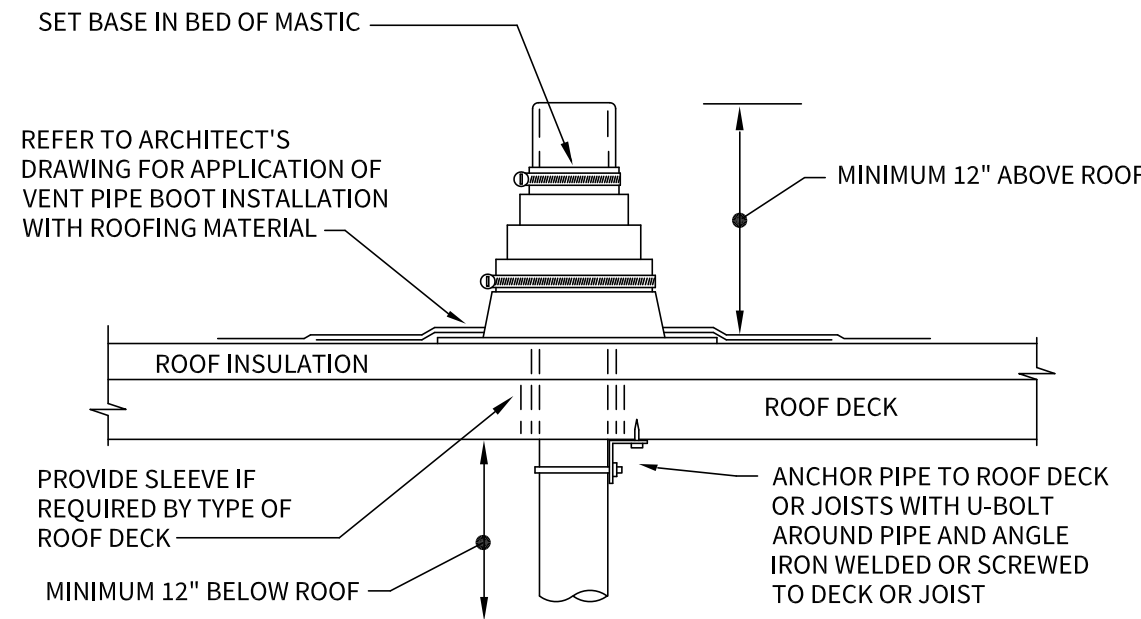
LAVATORY AND HAND SINK TEMPERING VALVE DETAIL

SCALE: NTS



FLOOR SINK DETAIL

SCALE: NTS



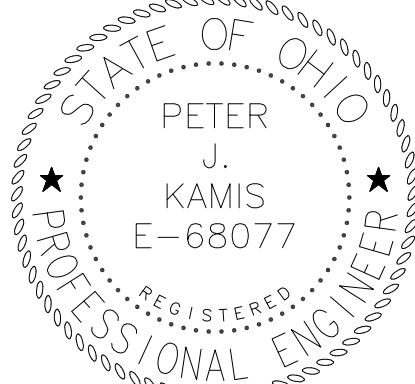
REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MINIMUM TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND CONTERFLASHING WITH ROOFING CONTRACTOR.

VENT THROUGH ROOF DETAIL

SCALE: NTS



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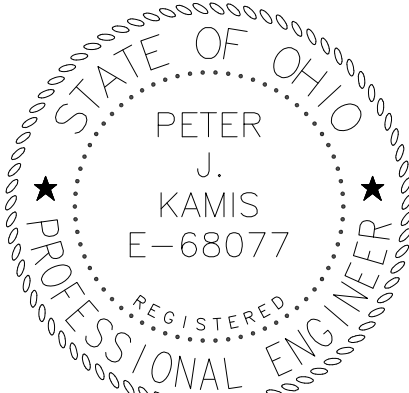
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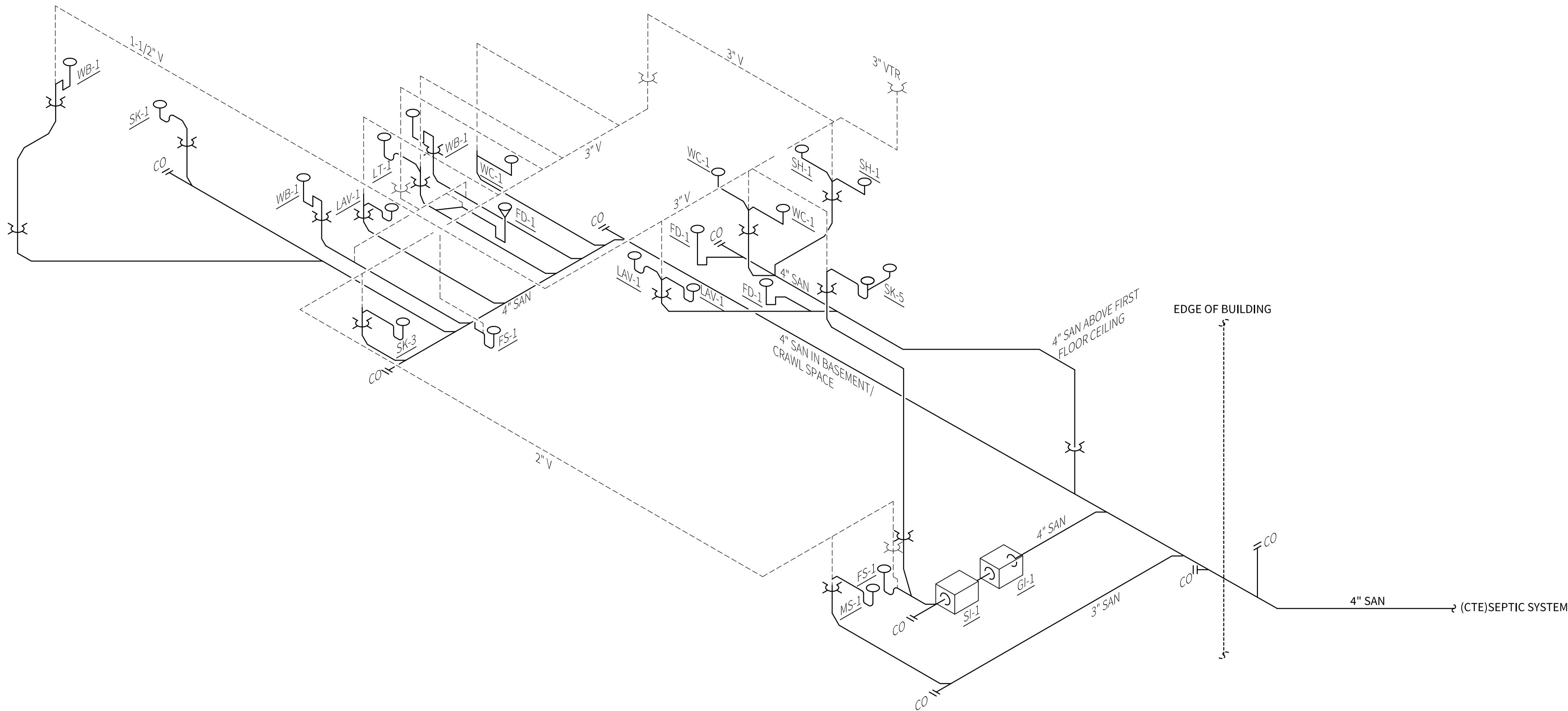
PLUMBING
DETAILS



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SANITARY ISOMETRIC

SCALE: NTS

NOTE: REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE AND SANITARY AND VENT PLUMBING PLANS ON SHEETS P1.2 AND P1.3 FOR FIXTURE CONNECTION SIZES.

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CODED NOTES:

- 1

THIS ROOM IS EXISTING TO REMAIN. PROTECT AND MAINTAIN ALL EXISTING CONNECTIONS AS REQUIRED.
- 2

GAS WATER HEATER TO REMAIN. PROTECT AND MAINTAIN EXISTING ELECTRICAL CONNECTION AS REQUIRED.
- 3

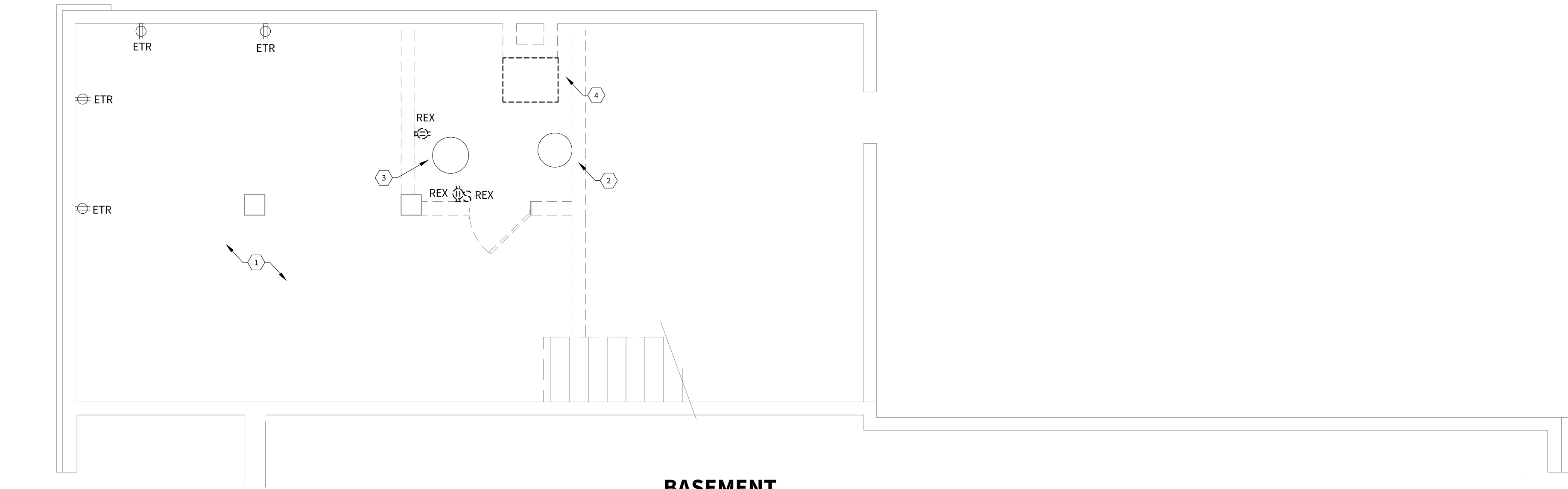
EXISTING SUMP PUMP TO REMAIN. PROTECT AND MAINTAIN EXISTING CIRCUITING FOR EXTENSION TO NEW SURFACE MOUNTED RECEPTACLE INDICATED ON SHEET E1.0.
- 4

EXISTING FURNACE TO BE REMOVED AND REPLACED. MAINTAIN EXISTING CIRCUITING FOR EXTENSION TO REPLACEMENT UNIT.
- 5

EXISTING GENERATOR TO BE REMOVED. DISCONNECT AND REMOVE SERVICE WIRING BACK TO SOURCE. MAINTAIN EXISTING SURFACE MOUNTED SERVICE CONDUIT FOR REUSE.
- 6

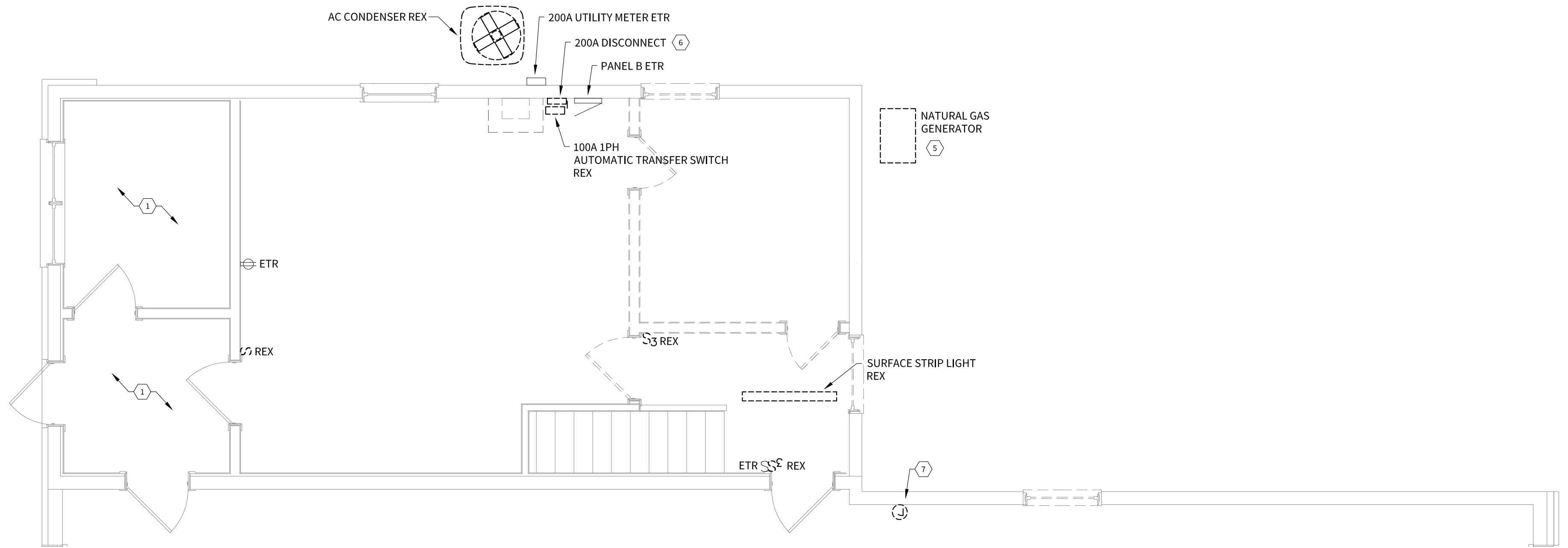
200A SERVICE DISCONNECT TO BE REMOVED. MAINTAIN EXISTING SERVICE WIRING FOR RECONNECTION TO NEW ELECTRICAL PANEL.
- 7

WALL MOUNTED EXHAUST FAN TO BE RELOCATED TO FIREHOUSE ROOF IN EXISTING LOCATION. EXTEND CIRCUITING TO NEW LOCATION AS REQUIRED.



BASEMENT
DEMOLITION PLAN

SCALE: 1/4" = 1'-0" 1 ED1.0

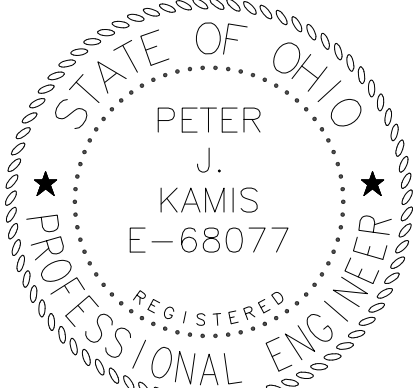


FIRST FLOOR
DEMOLITION PLAN

SCALE: 1/4" = 1'-0" 1 ED1.0



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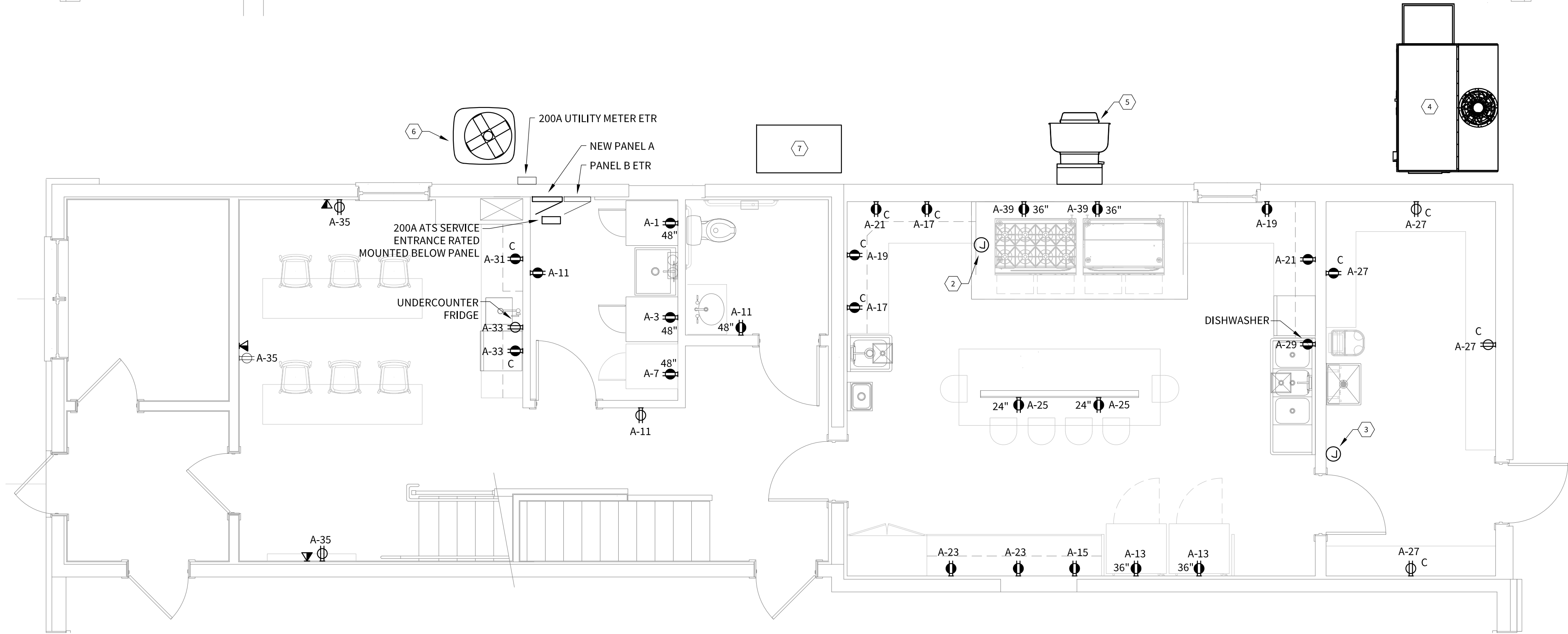
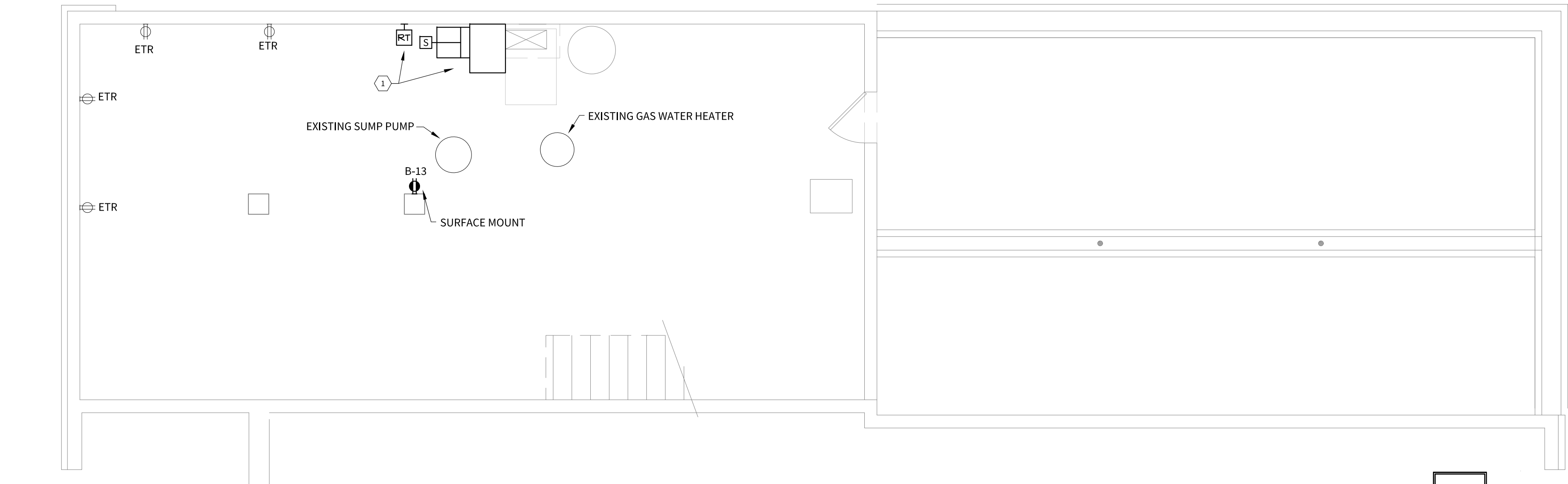
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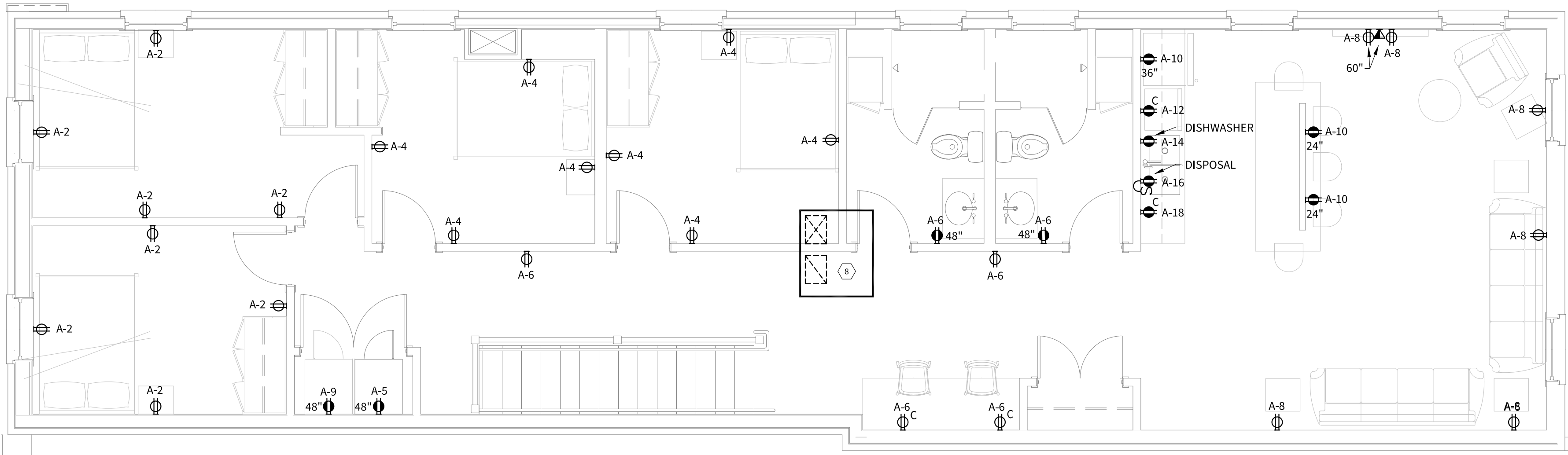
ELECTRICAL
DEMOLITION PLANS

CODED NOTES:

- 1
- FURN-1: 120V, GAS FURNACE. EXTEND EXISTING FURNACE CIRCUITING TO NEW FURNACE LOCATION INDICATED. PROVIDE REMOTE TEST STATION FOR DUCT SMOKE DETECTOR AS REQUIRED.
- 2
- JUNCTION BOX FOR HOOD LIGHTS/CONTROL. CONNECT TO SHUNT TRIP CIRCUIT A-39. FIELD COORDINATE EXACT MOUNTING LOCATION WITH HOOD SHOP DRAWINGS PRIOR TO ROUGH IN.
- 3
- WH-1: GAS WATER HEATER CONNECT TO STORAGE ROOM GENERAL RECEPTACLE CIRCUIT A-27 AS REQUIRED.
- 4
- DOAS-1: 208V 3PH, 25.5MCA, 30A MOCp, UNIT PROVIDED WITH NON-POWERED RECEPTACLE. PROVIDE WEATHERPROOF DISCONNECT AND WIRE WITH 3#10 + 1#10GND IN 3/4" C TO A-38,40,42. CONNECT RECEPTACLE TO EXISTING EXTERIOR RECEPTACLE CIRCUIT B-17.
- 5
- KEF-1: 208V 3PH, 6.6FLA, PROVIDE WEATHERPROOF DISCONNECT AND WIRE WITH 3#12 + 1#12GND IN 3/4" C TO A-32,34,36.
- 6
- CU-1: 208V 1PH, 35MCA, 60A MOCp, PROVIDE WEATHERPROOF DISCONNECT AND WIRE WITH 2#6 + 1#10GND IN 1" C TO A-24,26.
- 7
- NEW 32KW NATURAL GAS GENERATOR 100A MCB. MOUNT ON CONCRETE PAD PER GENERATOR MANUFACTURER SPECIFICATIONS. WIRE WITH 4#3 AND 1#8 GND IN 1-1/4" C TO NEW AUTOMATIC TRANSFER SWITCH.
- 8
- RTU-1(ON ROOF): 208V 1PH, 19.5MCA, 30A MOCp. UNIT PROVIDED WITH DISCONNECT AND POWERED CONVENIENCE RECEPTACLE. WIRE WITH 2#10 + 1#10 GND IN 3/4" C TO CIRCUIT B-25,27.



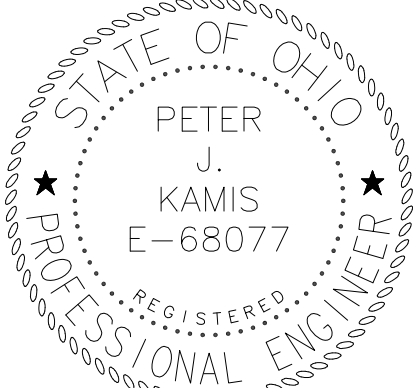
**FIRST FLOOR
POWER AND DATA PLAN**
SCALE: 1/4" = 1'-0" 1
E1.0



**SECOND FLOOR
POWER AND DATA PLAN**
SCALE: 1/4" = 1'-0" 2
E1.0



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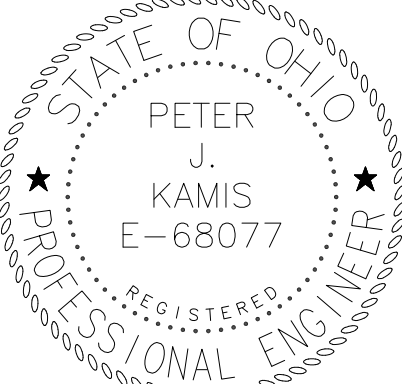
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POWER AND DATA PLANS



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LIGHTING PLANS

CODED NOTES:

- 1

WIRE OCCUPANCY SENSOR AHEAD OF LOCAL DIMMER(S) INDICATED.
- 2

CONNECT TO AREA LIGHTING CIRCUIT AHEAD OF LOCAL SWITCHING.
- 3

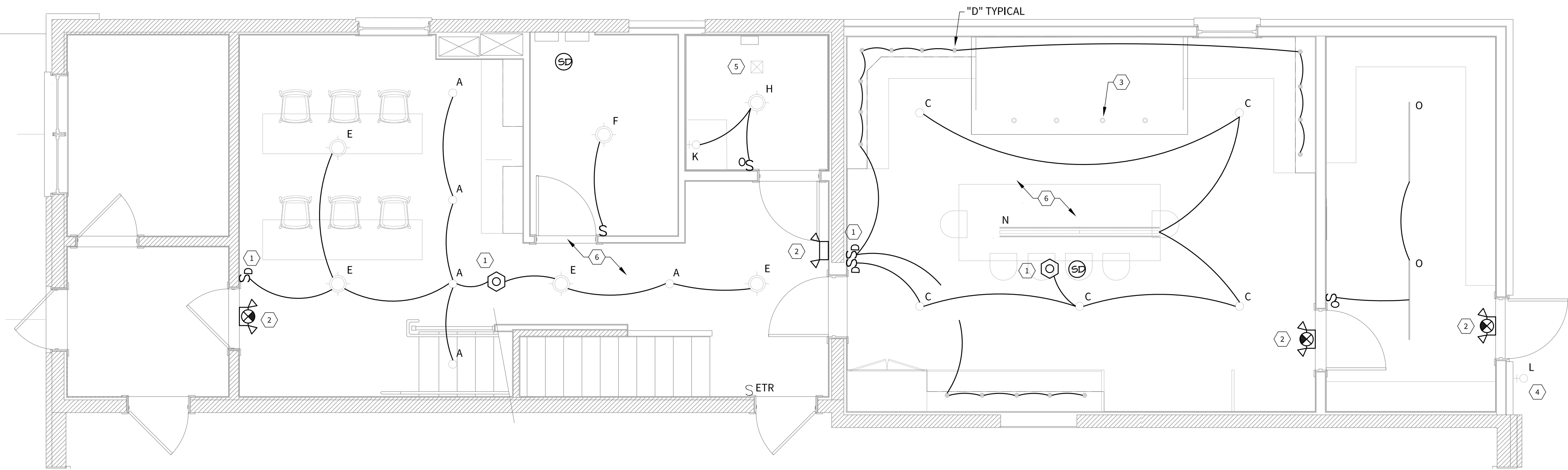
UNDER HOOD LIGHTING PROVIDED AND POWERED WITH HOOD. TYPICAL.
- 4

CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT AND CONTROL WITH EXISTING TIMECLOCK.
- 5

EXHAUST FAN: 120V, CIRCUIT AND CONTROL WITH RESTROOM LIGHTING.
- 6

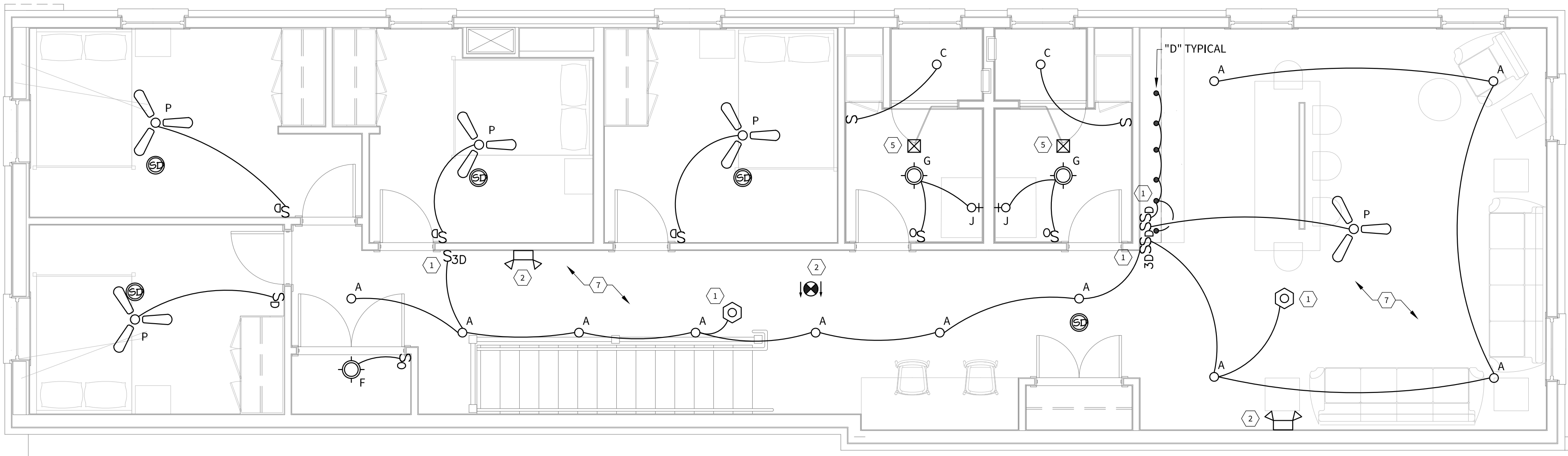
ALL NEW FIRST FLOOR LIGHTING TO BE CIRCUITED TO B-6.
- 7

ALL NEW SECOND FLOOR LIGHTING TO BE CIRCUITED TO B-8.



FIRST FLOOR
LIGHTING PLAN

SCALE: 1/4" = 1'-0" 1 E2.0

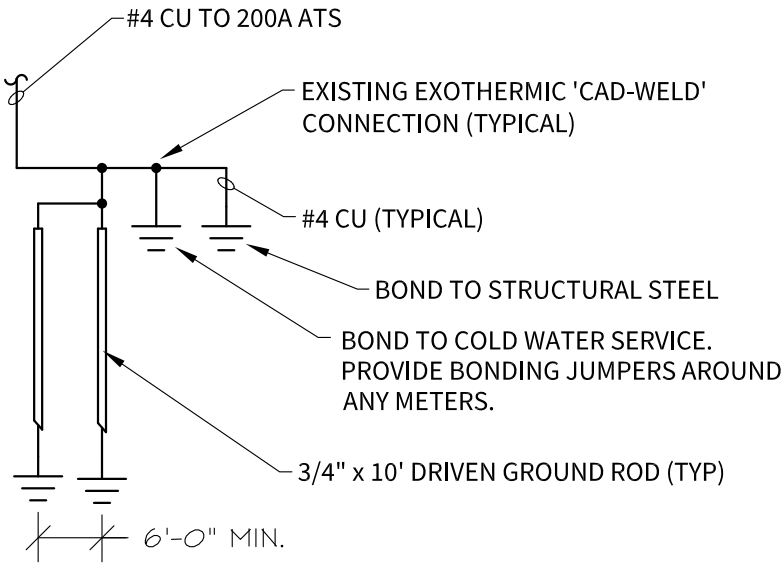


SECOND FLOOR
LIGHTING PLAN

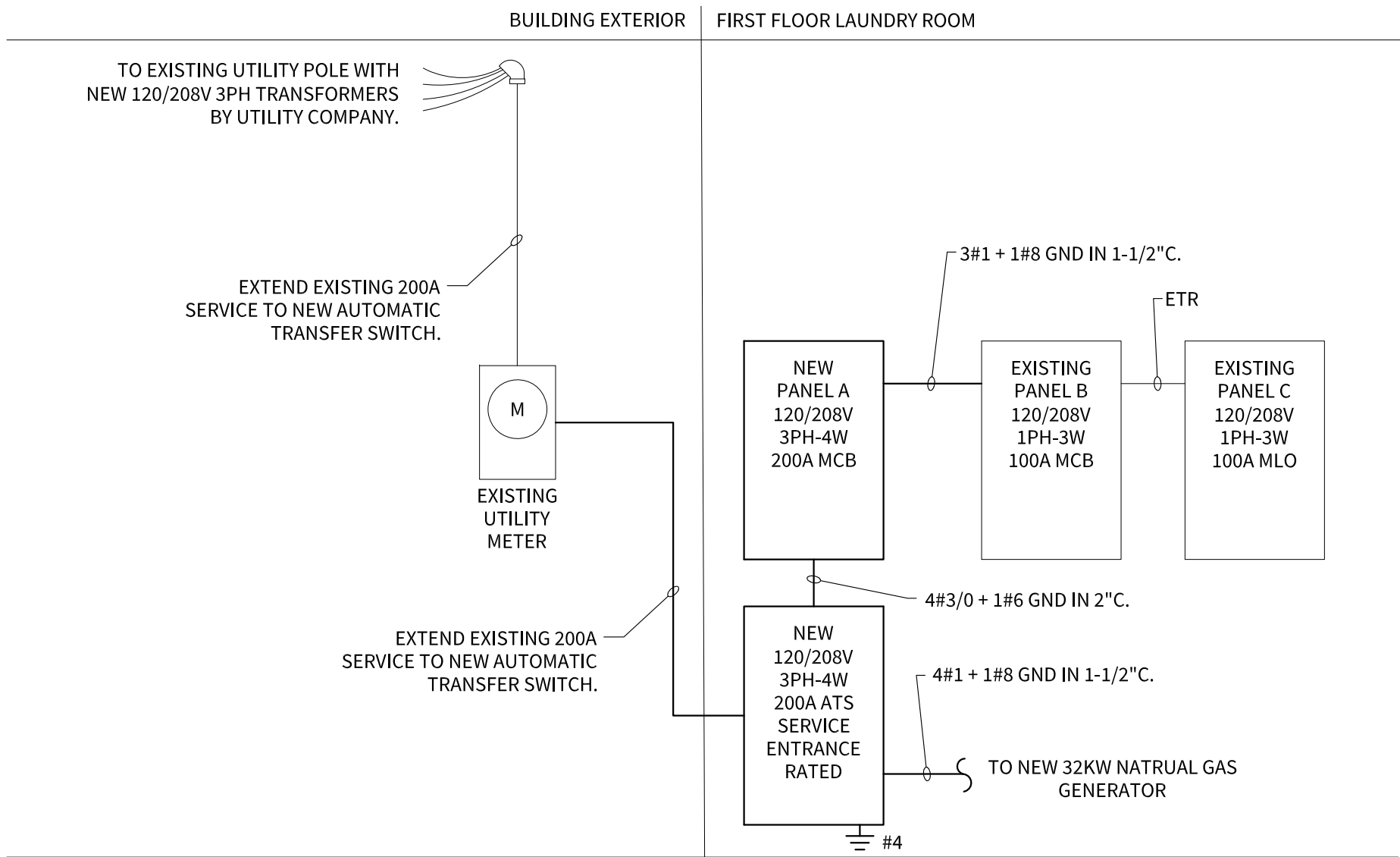
SCALE: 1/4" = 1'-0" 2 E2.0

SERVICE: 120/208V 1 Ø 3W	BUS: 225A	PANEL: B (ETR)									
MOUNTING: SURFACE	MAIN: 100A										
LOCATION: 1ST FLR LAUNDRY	AIC: EXISTING										
LOAD	WATTAGE		BKR	CKT		CKT	BKR	WATTAGE		LOAD	
	Ø A	Ø B	AMP	P	NO		AMP	Ø A	Ø B		
SPARE	-		20	1	1		2	20	1	200	PANEL RECEPTACLE
APPARATUS ROOM		600	20	1	3		4	20	1	600	APPARATUS ROOM
APPARATUS ROOM		600	20	1	5		6	20	1	817	KITCHEN, RESTROOM, MEETING RM LTS
DRIVER + TRAILER RM DOOR OPENER		1800	20	1	7		8	20	1	901	2ND FLOOR LIGHTS
WASHER + TRAILER RM LIGHTS		1200	20	1	9		10	20	1	500	FURN-1
RECEPTACLE IN APPARATUS ROOM		600	20	1	11		12	20	1	100	EXISTING TIMECLOCK
EXISTING SUMP PUMP		700	20	1	13		14	20	1	300	EXISTING BASEMENT LIGHTS
EXISTING BASEMENT RECEPTACLES		800	20	1	15		16	20	1	-	SPARE
EXTERIOR RECEPTACLES		600	20	1	17		18	20	1	840	EAST FRONT OVERHEAD DOOR
WATCH ROOM RECEPTACLES		600	20	1	19		20	20	1	600	APPARATUS ROOM HEATER
EXISTING EM LIGHTING		100	20	1	21		22	20	1	-	SPARE
SPARE		-	20	1	23		24	20	1	-	SPARE
RTU-1		2000	30	2	25		26	20	2	-	SPARE
		2000			27		28			-	
RECEPT CENTER BAY + NORTH HEATER		600	20	1	29		30	100	2	2000	PANEL C
SPACE					31		32			2000	
SPACE					33		34				SPACE
SPACE					35		36				SPACE
SPACE					37		38				SPACE
SPACE					39		40	100	2		MAIN BREAKER
SPACE					41		42				
WATTS: Ø A: 8457 AMPS: 77.2A NOTES: EXISTING PANEL, RE-USE EXISTING CB'S											
Ø B: 8601 FEEDER: SEE RISER TO THE EXTENT POSSIBLE, PROVIDE											
TOTAL: 16058 FED FROM: SEE RISER NEW CB'S AS REQUIRED.											

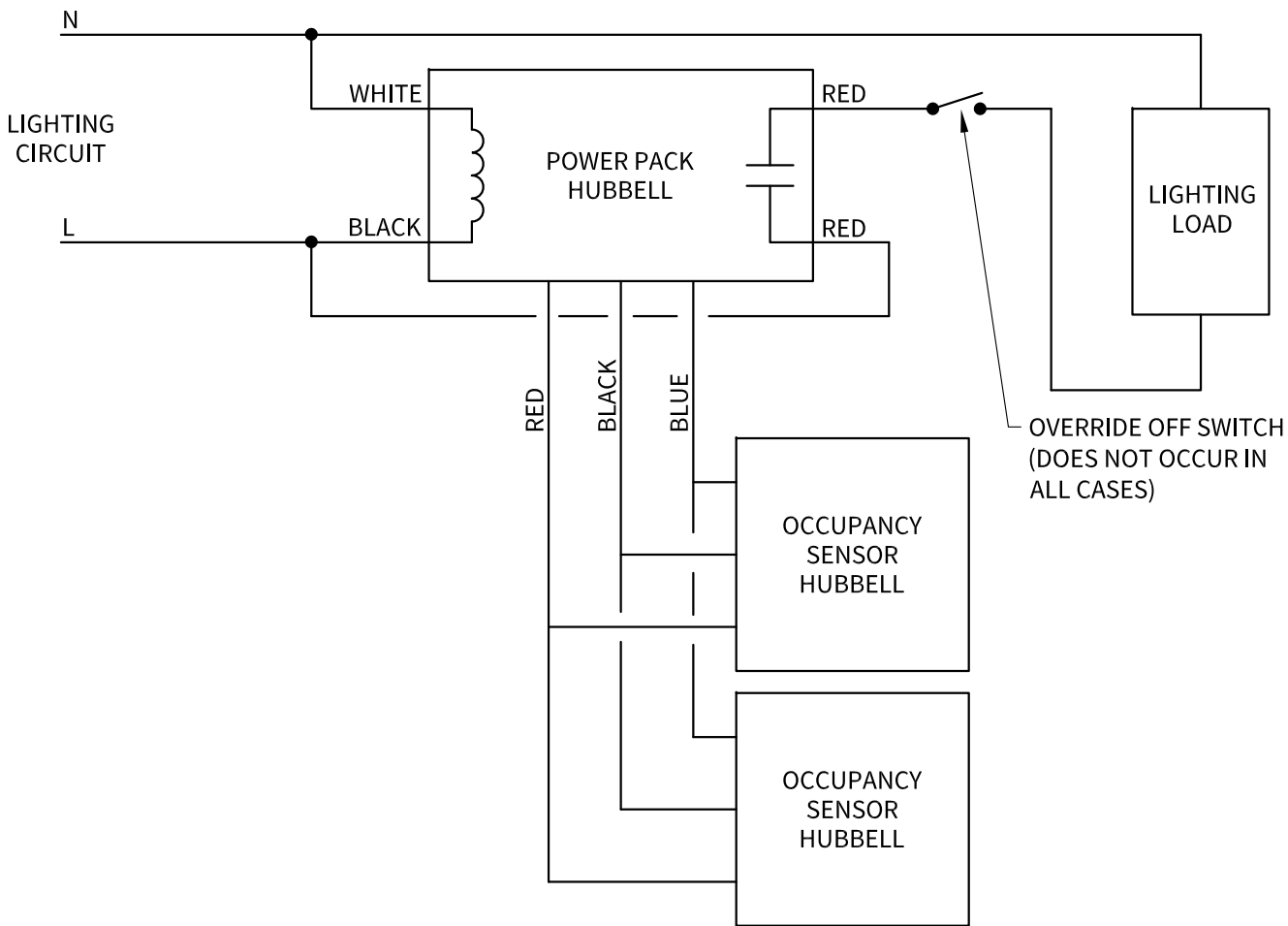
SERVICE: 120/208 V 3 Ø 4W	BUS: 200A	PANEL: A									
MOUNTING: SURFACE	MAIN: 200A MCB										
LOCATION: 1ST FLR LAUNDRY	AIC: 10000										
LOAD	WATTAGE		BKR	CKT		CKT	BKR	WATTAGE		LOAD	
	Ø A	Ø B	AMP	P	NO		AMP	Ø A	Ø B	Ø C	
1ST FLOOR WASHING MACHINE		1200	20	1	1		2	20	1	1440	BEDROOM 1 + 2 RECEPTACLES (AFCI)
1ST FLOOR WASHING MACHINE		1200	20	1	3		4	20	1	1440	BEDROOM 3 + 4 RECEPTACLES (AFCI)
2ND FLOOR WASHING MACHINE		1500	20	1	5		6	20	1	1080	2ND FLR RB, COUNTER, HALL REC (AFCI)
1ST FLOOR DRYER		1500	20	1	7		8	20	1	1080	LIVING RM, TV RECEPTACLES (AFCI)
2ND FLOOR DRYER		1500	20	1	9		10	20	1	900	2ND FLR FRIDGE, ISLAND RECEPTACLES
1ST FLR HALL, LAUNDRY, RESTRM REC		1400	20	1	11		12	20	1	360	2ND FLR KITCHEN COUNTER
KITCHEN FRIDGE + FREEZER RECEPTS		1400	20	1	13		14	20	1	1200	2ND FLR DISHWASHER
KITCHEN MICROWAVE		1200	20	1	15		16	20	1	1000	2ND FLR GARBAGE DISPOSAL
KITCHEN COUNTER GENERAL RECEPTS		360	20	1	17		18	20	1	360	2ND FLR KITCHEN COUNTER
KITCHEN COUNTER GENERAL RECEPTS		360	20	1	19		20	20	1	-	SPARE
KITCHEN COUNTER GENERAL RECEPTS		360	20	1	21		22	20	1	-	SPARE
KITCHEN COUNTER GENERAL RECEPTS		360	20	1	23		24	60	2	3640	CU-1
KITCHEN ISLAND RECEPTACLES		360	20	1	25		26			3640	
STORAGE COUNTER REC + WATER HTR		800	20	1	27		28	100	2	8457	PANEL B
DISHWASHER		1200	20	1	29		30			8601	
BREAK ROOM COUNTER RECEPTACLE		360	20	1	31		32			792	
BREAK ROOM COUNTER + FRIDGE REC		600	20	1	33		34	20	3	792	KEF-1
MEETING ROOM GENERAL RECEPTS		-	20	1	35		36			792	
SPARE		-	20	1	37		38			3059	
HOOD LIGHTS + STOVE + GRIDDLE REC		540	20	1	39		40	30	3	3059	DOAS-1
SHUNT TRIP					41		42			3059	
WATTS: Ø A: 16391 AMPS: 167.7A NOTES: NEW PANEL											
Ø B: 21848 FEEDER: SEE RISER BREAKERS LABELED AFCI SHALL BE AFCI PROTECTED.											
Ø C: 22092 FED FROM: SEE RISER											
TOTAL: 60331											



GEC System Detail
SCALE: NTS 4
E3.0



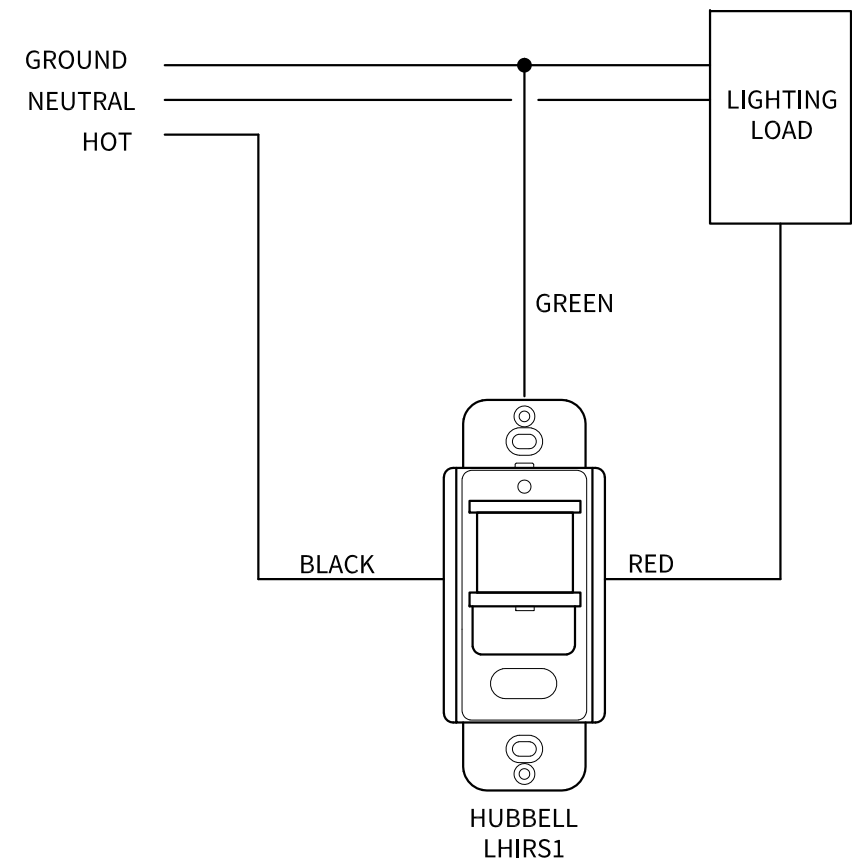
PARTIAL RISER DIAGRAM
SCALE: NTS 1
E3.0



CEILING MOUNTED OCCUPANCY SENSOR WIRING
SCALE: NTS 2
E3.0

DUAL TECHNOLOGY(ULTRASONIC AND INFRARED) CEILING MOUNTED OCCUPANCY SENSOR FOR LIGHTING CONTROL. 1700 SQ. FT. COVERAGE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE HUBBELL OMNIDT-2000RP OR APPROVED EQUAL.

NOTE:
LOCATE SENSORS SO SENSOR IS AT LEAST 5'-0" FROM THE EDGE OF SUPPLY AIR DIFFUSERS.

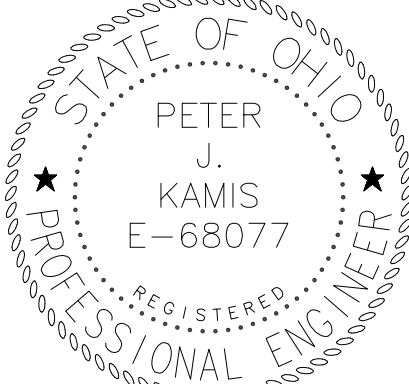


WALL MOUNTED OCCUPANCY SENSOR WIRING
SCALE: NTS 3
E3.0

- NOTES:
1. SWITCH IS EITHER AUTO ON OR MANUAL ON/AUTO OFF
2. THIS IS A GROUND-LEAKAGE POWERED SENSOR. IT MUST BE GROUNDED TO FUNCTION.



MATTHEW WOLF ARCHITECT
1814 EAST 40TH SUITE 3B / CLEVELAND OH 44103
MATT@MATTWOLFARCHITECT.COM / 216 235 5381



PETER J. KAMIS, PE
LICENSE #68077
EXP. DATE 12/31/2025

KINGSVILLE FIRE DEPARTMENT

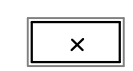

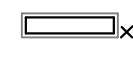





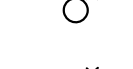









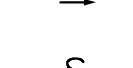
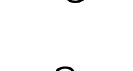
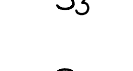

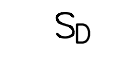



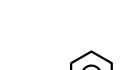
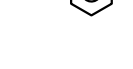

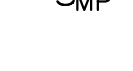
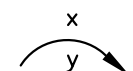
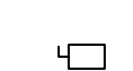
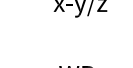
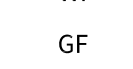
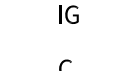

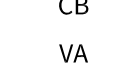
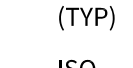

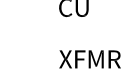

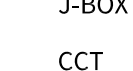

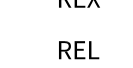
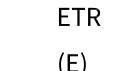
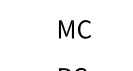
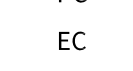
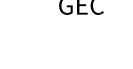




3130 EAST MAIN STREET
KINGSVILLE OHIO 44048

BID / PERMIT OCT 28 2024
REVIEW SET OCT 18 2024
PROJECT #: 2022

E
3.0

RISER DIAGRAM,
DETAILS, AND PANEL SCHEDULES

ELECTRICAL SYMBOLS

	2x4 FIXTURE, 'x' INDICATES FIXTURE TYPE	C.SR	DUPLEX RECEPTACLE, 125VAC, 20A, MTD @ 18" AFF UNLESS OTHERWISE INDICATED.
	2x2 FIXTURE, 'x' INDICATES FIXTURE TYPE		"C" DENOTES: MOUNT 8" ABOVE COUNTER. "SR" DENOTES: PROVIDE 'SPLIT RECEPTACLE'. SEE DETAIL FOR MORE INFORMATION.
	1x4 FIXTURE, 'x' INDICATES FIXTURE TYPE		DOUBLE DUPLEX RECEPTACLE, 125VAC, 20A, MTD @ 18" AFF UNLESS OTHERWISE INDICATED
	2x4 FIXTURE, EMERGENCY NIGHT LIGHT, 'x' INDICATES FIXTURE TYPE		DUPLEX RECEPTACLE, 125VAC, 20A, GROUND FAULT INTERRUPT, MTD @ 18" AFF UNLESS OTHERWISE INDICATED
	2x2 FIXTURE, EMERGENCY NIGHT LIGHT, 'x' INDICATES FIXTURE TYPE		JUNCTION BOX FOR HARDWIRED WATER COOLER, 125VAC, 20A, EC TO PROVIDE GROUND FAULT INTERRUPT PROTECTION AT CIRCUIT BREAKER.
	1x4 FIXTURE, EMERGENCY NIGHT LIGHT, 'x' INDICATES FIXTURE TYPE	WC	
	STRIP FIXTURE, 'x' INDICATES FIXTURE TYPE		DUPLEX RECEPTACLE, 125VAC, 20A, MTD @ 18" AFF UNLESS OTHERWISE INDICATED. TAMPER PROOF. (1)USB-A AND (1)USB-C CHARGING JACKS. HUBBELL #USB20MCSW
	UNDERCOUNTER FIXTURE, 'x' INDICATES FIXTURE TYPE		SIMPLEX SPECIALTY RECEPTACLE, MD @ 18" AFF UNLESS OTHERWISE INDICATED.
	DOWN LIGHT, 'x' INDICATES FIXTURE TYPE	φ	
	DOWNLIGHT WALL WASHER, 'x' INDICATES FIXTURE TYPE	ⓐ	
	WALL SCONCE, 'x' INDICATES FIXTURE TYPE	ⓑ	
	TRACK LIGHT, 'x' INDICATES FIXTURE TYPE	ⓑ	
	EMERGENCY LIGHTING UNIT BATTERY PACK, WALL MOUNTED	ⓑ	
	EMERGENCY LIGHTING UNIT BATTERY PACK, CEILING MOUNTED	ⓑ	
	EMERGENCY LIGHTING UNIT/EXIT SIGN COMBO, WALL MOUNTED	ⓑ	
	EMERGENCY LIGHTING UNIT/EXIT SIGN COMBO, CEILING MOUNTED	ⓑ	
	6V EMERGENCY LIGHTING REMOTE FIXTURE. TWO(2) 1.5W LED LAMPS. CONNECT TO LOW-VOLTAGE SIDE OF BATTERY UNIT. WET LOCATION LISTED.	ⓑ	
	EXIT SIGN, PROVIDE DIRECTIONAL ARROWS AS SHOWN	ⓑ	
	SWITCH, SPST, 120/277VAC, 20A, MTD @ 48" AFF UNLESS OTHERWISE INDICATED	ⓑ	
	SWITCH, 3-WAY, 120/277VAC, 20A, MTD @ 48" AFF UNLESS OTHERWISE INDICATED	ⓑ	
	SWITCH, 4-WAY, 120/277VAC, 20A, MTD @ 48" AFF UNLESS OTHERWISE INDICATED	ⓑ	
	SWITCH, DIMMER, MTD @ 48" AFF UNLESS OTHERWISE INDICATED. PROVIDE LUTRON 'NOVA' SERIES OR APPROVED EQUAL	ⓑ	
	VACANCY SENSOR WALL SWITCH, PASSIVE INFRARED, MTD @ 48" AFF, PROVIDE HUBBELL LH-IRS-1-N-WH.	ⓑ	
	VACANCY SENSOR WALL SWITCH, 0-10V DIMMING, PASSIVE INFRARED, MTD @ 48" AFF, PROVIDE HUBBELL LHD-IRS-3-N-WH.	ⓑ	
	CEILING MOUNTED OCCUPANCY SENSOR FOR LIGHTING CONTROL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL FOR MORE INFORMATION.	ⓑ	
	TOGGLE OPERATED 115/230V FRACTIONAL HORSEPOWER MANUAL MOTOR SWITCH WITH INDICATING LIGHT, OVERLOAD PROTECTION AND HANDLE GUARD/LOCK-OFF. SQUARE-D CLASS 2510.	ⓑ	
	CIRCUIT HOMERUN, 'x' INDICATES PANEL, 'y' INDICATES CIRCUIT NUMBER	ⓑ	
	DISCONNECT SWITCH, 'x' INDICATES FRAME SIZE, 'y' INDICATES POLES, 'z' INDICATES FUSE SIZE, NF INDICATES NON-FUSED.	ⓑ	
	WEATHER-PROOF	ⓑ	
	GROUND FAULT	ⓑ	
	ISOLATED GROUND	ⓑ	
	CONDUIT	ⓑ	
	GROUND	ⓑ	
	CIRCUIT BREAKER	ⓑ	
	VOLT-AMPERE	ⓑ	
	TYPICAL	ⓑ	
	ISOLATED	ⓑ	
	NATIONAL ELECTRIC CODE	ⓑ	
	COPPER	ⓑ	
	TRANSFORMER	ⓑ	
	AUTOMATIC TRANSFER SWITCH	ⓑ	
	JUNCTION BOX	ⓑ	
	CIRCUIT	ⓑ	
	NIGHT LIGHT	ⓑ	
	REMOVE EXISTING	ⓑ	
	RELOCATE EXISTING	ⓑ	
	EXISTING TO REMAIN	ⓑ	
	EXISTING TO REMAIN, ETR	ⓑ	
	MECHANICAL CONTRACTOR	ⓑ	
	PLUMBING CONTRACTOR	ⓑ	
	ELECTRICAL CONTRACTOR	ⓑ	
	GROUNDING ELECTRODE CONDUCTOR	ⓑ	

ELECTRICAL SPECIFICATIONS

1.	THE GENERAL CONDITIONS OF THE CONTRACT, THE SUPPLEMENTARY CONDITIONS, ELECTRICAL DRAWINGS, MECHANICAL DRAWINGS, ARCHITECTURAL DRAWINGS, STRUCTURAL DRAWINGS, THE FOLLOWING SPECIFICATIONS, SHOP DRAWINGS, AND ANY ADDENDUMS TO THE ABOVE ARE PART OF THE CONTRACT FOR THE WORK. WORK SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND ARCHITECT. AS-BUILT DRAWINGS SHALL BE PROVIDED.	WIRING DEVICE AND COVER PLATE COLOR SHALL BE AS SELECTED BY ARCHITECT. COVER PLATES SHALL BE HIGH-IMPACT NYLON. WIRING DEVICES SHALL BE HUBBELL, PASS & SEYMOUR, OR EQUAL.
12.	THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR UNNOTICED FIELD CONDITIONS.	TELEPHONE AND DATA EQUIPMENT AND WIRE SHALL BE FURNISHED AND INSTALLED BY OTHERS UNDER SEPERATE CONTRACT WITH OWNER. COORDINATE WITH OWNER.
13.	CEILING CAVITY IS A RETURN AIR PLENUM. EXPOSED LOW VOLTAGE COMMUNICATIONS, TELEPHONE, SECURITY AND OTHER MISCELLANEOUS WIRING SHALL BE SUITABLE FOR INSTALLATION IN AIR HANDLING PLENUMS PER NEC.	
14.	THE ELECTRICAL CONTRACTOR IS CAUTIONED THAT THE BUILDING IS OCCUPIED AND WORK SHALL NOT INTERFERE WITH THE NORMAL OPERATION OF THE BUILDING AND ITS TENANTS. THE PROJECT SHALL BE MANAGED AT ALL TIMES BY A COMPETENT FOREMAN.	
15.	FIRE ALARM	
		A. CONTRACTOR TO PROVIDE ALL NECESSARY COMPONENTS AND/OR PROGRAMMING TO INTERFACE WITH AND/OR EXTEND THE EXISTING FIRE ALARM SYSTEM AND TO COORDINATE WITH EXISTING FIRE ALARM MANUFACTURER.
		B. ALL FIRE ALARM COMPONENTS SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED PER NFPA 72 AND ADA. ALL APPLIANCES AND DEVICES SHALL BE COMPATIBLE WITH AND LISTED TO BE USED WITH THE EXISTING FIRE ALARM SYSTEM. DEVICES SHALL MATCH EXISTING BUILDING STANDARD.
		C. NEW STROBES: NEW FIRE ALARM SYSTEM STROBES SHALL XENON TYPE WITH A CLEAR OR NOMINAL WHITE COLOR. INTENSITY SHALL BE 75 CANDELA MINIMUM. FLASH RATE SHALL BE A MINIMUM OF 1HZ AND A MAXIMUM OF 3HZ. TWO OR MORE STROBES SERVING THE SAME ROOM SHALL BE SYNCHRONIZED.
		D. SHOP DRAWINGS: LOCATION OF EQUIPMENT SHALL BE AS INDICATED ON DRAWINGS. CONTRACTOR SHALL SUBMIT EQUIPMENT SUPPLIER'S COMPLETE SET OF ENGINEERED SHOP DRAWINGS TO THE AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK. ENGINEERED SHOP DRAWINGS SHALL INCLUDE FLOOR PLAN, EQUIPMENT LOCATION, BATTERY CALCULATIONS, CONDUCTOR TYPES AND SIZES, VOLTAGE DROP CALCULATIONS, CONDUIT SIZE, WIRE FILL, SYSTEM WIRING, INTERNAL WIRING FOR ALL COMPONENTS AND EQUIPMENT, HOOK-UP, ETC. DRAWINGS SHALL INCLUDE MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES AND MATERIALS. TYPICAL DRAWINGS WILL NOT BE ACCEPTED.
		E. FIRE ALARM CONTRACTOR SHALL BE LANDLORD APPROVED.
		F. THE ENTIRE SYSTEM SHALL BE INSPECTED AND TESTED ACCORDING TO THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. ALL MODIFICATIONS AND ADDITIONS TO THE SYSTEM SHALL BE MADE TO THE EXTENT AS REQUIRED TO SATISFY THIS AUTHORITY.
		G. ANY AND ALL TENANT ACCESS SYSTEMS THROUGHOUT THIS SCOPE OF WORK SHALL BE TIED INTO BUILDING'S FIRE ALARM/LIFE SAFETY SYSTEM AND MUST RELEASE UPON ACTIVATION OF FIRE ALARM SYSTEM.
16.	WORKSTATION SYSTEMS FURNITURE SHALL BE PROVIDED WITH BASE-INFEED POWER SERVICE AS INDICATED ON THE PLANS. PROVIDE BOX, SEALTITE CONDUIT, ETC. AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE JUMPER WIRES AS REQUIRED TO MAINTAIN THE FURNITURE'S SYSTEM WITH THE CIRCUITS SHOWN ON THE PLANS. COORDINATE INSTALLATION WITH THE MANUFACTURER. PROVIDE FINAL CONNECTION TO WORKSTATION SYSTEMS FURNITURE.	MULTI-WIRE BRANCH CIRCUITS SUPPLYING POWER TO WORKSTATION SYSTEMS FURNITURE SHALL BE PROVIDED WITH A MEANS TO DISCONNECT SIMULTANEOUSLY ALL UNGROUNDED CONDUCTORS AT THE PANELBOARD.
17.	POWER DISTRIBUTION	
		A. PANELBOARDS SHALL BE ENCLOSED TYPE, CABINETS OF CODE GAUGE STEEL WITH CONCEALED STEEL TRIM HINGES AND FLUSH TYPE LOCKS. BACK BOXES SHALL BE CODE GAUGE STEEL. DOORS AND TRIM SHALL BE ONE-PIECE WITH 180 DEGREE MOVEMENT. PROVIDE SEPARATE EQUIPMENT GROUND, NEUTRAL, AND ISOLATED GROUND BUSES AS INDICATED. PANELBOARDS SHALL BE EQUIPPED WITH BOLT-ON MOLDED-CASE CIRCUIT BREAKERS OF THE TYPE, POLES AND TRIP RATINGS, AS INDICATED WITH INTERRUPTING CAPACITY PER BUILDING REQUIREMENTS.
		B. TRANSFORMERS SHALL BE DRY TYPE, 150°C RISE MAXIMUM, TWO(2) TAPS ABOVE AND TWO(2) TAPS BELOW NORMAL RATED VOLTAGE, SOUND LEVELS SHALL NOT EXCEED NEMA STANDARDS. PROVIDE MOUNTING AS SHOWN ON THE PLANS.
		C. DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH DUAL-INTERLOCKED BOX COVERS, FUSED OR NON-FUSED, WITH NUMBER OF POLES AND SIZES AS SHOWN ON THE PLANS. PROVIDE NEUTRAL ASSEMBLY AND GROUND LUGS WHERE REQUIRED. ENCLOSURE SHALL BE NEMA TYPE 1 FOR DRY AND INDOOR LOCATIONS. ENCLOSURE SHALL BE NEMA TYPE 3R FOR WET, SPRINKLED, AND OUTDOOR LOCATIONS. FUSES SHALL BE DUAL ELEMENT BY BUSSMAN OR FERRAZ-SHAWMUT.
		D. PROVIDE PRODUCTS MANUFACTURED BY SQUARE-D OR APPROVED EQUAL BY CUTLER-HAMMER OR GENERAL ELECTRIC.
		E. ELECTRICAL EQUIPMENT LOCATION IS SHOWN ON PLANS TO INDICATE INTENT ONLY. FIELD COORDINATE ACTUAL INSTALLATION LOCATION. ACTUAL INSTALLATION LOCATION SHALL SATISFY WORKING SPACE AND DEDICATED ELECTRICAL SPACE REQUIREMENTS. FIELD COORDINATE ACTUAL INSTALLATION LOCATION TO AVOID CONFLICTS WITH OTHER EQUIPMENT, SYSTEMS, AND BUILDING ELEMENTS.
		F. CONTRACTOR SHALL CALCULATE OR ENGAGE AN ENGINEER TO CALCULATE MAXIMUM AVAILABLE FAULT CURRENT AT SERVICE EQUIPMENT. CONTRACTOR SHALL FIELD MARK SERVICE EQUIPMENT WITH THE DATE THE THE CALCULATION WAS PERFORMED AND THE MAXIMUM AVAILABLE FAULT CURRENT. ALL PER NEC 110.24.
		G. WHEN MODIFICATIONS TO THE ELECTRICAL INSTALLATION OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT, CONTRACTOR SHALL VERIFY OR RECALCULATE OR ENGAGE AN ENGINEER TO CALCULATE MAXIMUM AVAILABLE FAULT CURRENT AT SERVICE EQUIPMENT. CONTRACTOR SHALL FIELD MARK SERVICE EQUIPMENT WITH THE DATE THE THE CALCULATION WAS PERFORMED AND THE MAXIMUM AVAILABLE FAULT CURRENT. ALL PER NEC 110.24.
18.	NEW UTILITY SERVICE	
		A. PROVIDE NEW UTILITY SERVICE AND ASSOCIATED EQUIPMENT.
		B. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ELECTRIC UTILITY, COORDINATING SERVICE REQUIREMENTS, ARRANGING UTILITY CONNECTION, AND PAVING FOR ALL ASSOCIATED UTILITY CHARGES/FEEES.
		C. COORDINATE ALL OUTAGES WITH OWNER AND THE UTILITY. ALL SCHEDULED OUTAGES SHALL BE DURING TIMES WHEN THE BUILDING IS NOT IN USE.
19.	LIGHTING	
		A. PROVIDE LIGHTING FIXTURES AS SHOWN IN THE LIGHTING FIXTURE SCHEDULE OR APPROVED EQUAL.
		B. BALLASTS SHALL BE HIGH POWER FACTOR ELECTRONIC WITH TYPE-A SOUND RATING AND FUSED WITH BUSSMAN GLR FUSE IN HLR HOLDER. VOLTAGE AS SPECIFIED IN LIGHTING FIXTURE SCHEDULE. PROVIDE LUTRON HI-LUME, OR APPROVED EQUAL, DIMMING BALLASTS FOR FLOURESCENT FIXTURES SHOWN ON THE PLAN TO BE DIMMED.
		C. LAMPS SHALL BE OSRAM SYLVANIA, GENERAL ELECTRIC, OR APPROVED EQUAL.
		D. INTENSITY OF EMERGENCY LIGHTING SHALL BE ONE FOOT-CANDLE. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL EMERGENCY LIGHT UNITS TO MEET THIS REQUIREMENT IF NECESSARY.
		E. VERIFY CEILING CONSTRUCTION WITH THE GENERAL CONTRACTOR AND COORDINATE LIGHT FIXTURE MOUNTING WITH CEILING CONSTRUCTION. SUPPORT ALL RECESSED LIGHTING FIXTURES INDEPENDENTLY OF CEILING SUSPENSION SYSTEMS. INSTALL LIGHT FIXTURES TO PRECLUDE CONTACT WITH INSULATION MATERIAL.
		F. FINAL CONNECTION TO LIGHTING FIXTURES SHALL BE WITH FLEXIBLE METAL CONDUIT OR MC CABLE FIXTURE WHIPS NO MORE THAN SIX(6) FOOT IN LENGTH.
		G. LIGHTING FIXTURES SHALL BE EQUIPPED WITH AN ACCESSIBLE DISCONNECTING MEANS LOCATED AT EACH INDIVIDUAL FIXTURE.
2.	THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR UNNOTICED FIELD CONDITIONS.	
	ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES. THE ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED TO PERFORM THE ELECTRICAL WORK.	
	THE DRAWINGS INDICATE DIAGRAMMATICALLY THE LOCATIONS OF ELECTRICAL DEVICES, EQUIPMENT, FIXTURES AND THE METHOD OF CONNECTION. MATERIALS NOT SPECIFICALLY INDICATED BUT ESSENTIAL TO COMPLETE THE WORK SHALL BE INCLUDED.	
	"PROVIDE" SHALL MEAN FURNISH EQUIPMENT, ASSOCIATED APPURTENANCES, AND INSTALL SAME.	
3.	SCOPE THE SCOPE OF WORK SHALL INCLUDE, BUT IS NOT LIMITED TO:	
	A. CONDUIT, BRANCH CIRCUITS, OUTLETS AND WIRING.	
	B. LIGHTING FIXTURES, LAMPS, MOUNTING HARDWARE, SWITCHES, CONDUIT AND WIRING.	
	C. EMERGENCY LIGHTING INCLUDING TESTING.	
	D. EXTENSION OF AND/OR RECONFIGURATION OF EXISTING POWER DISTRIBUTION SYSTEM.	
	E. DATA/TELEPHONE OUTLETS, CONDUITS AND PULL WIRES.	
	F. ALL CHANNELING AND CONCRETE PATCHING WORK REQUIRED FOR ELECTRICAL WORK EXCLUSIVELY.	
	G. RECONNECTION, AS REQUIRED INCLUDING CONDUIT AND WIRE, OF ALL BRANCH CIRCUITS CUT OFF BY DEMOLITION OF EXISTING PARTITIONS, ETC.	
	H. NECESSARY CABINETS, JUNCTION BOXES, AND PULL BOXES.	
	I. TEMPORARY CONSTRUCTION POWER AND LIGHTING TO ACCOMMODATE ALL TRADES.	
	J. GROUNDING OF ALL SYSTEMS AND EQUIPMENT.	
	K. EXTENSION OF AND/OR RECONFIGURATION OF EXISTING FIRE ALARM SYSTEM.	
	L. ELECTRICAL CONNECTION TO EQUIPMENT PROVIDED BY MECHANICAL AND/OR PLUMBING CONTRACTOR. FIELD VERIFY VOLTAGE, CURRENT, AND CONNECTION REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ROUGH-IN. NOTIFY ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT IS ACTUALLY REQUIRED. ALSO PROVIDE, LINE VOLTAGE CIRCUITING FOR AND FINAL CONNECTION TO CONTROLS TRANSFORMER(S). CONTROLS TRANSFORMER(S) AND LOW VOLTAGE CONTROLS CABLING BY MECHANICAL AND/OR PLUMBING CONTRACTOR.	
4.	ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND BEAR UL LABELS AND LISTINGS. SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT PRIOR TO ORDERING FOR PROJECT.	
5.	COORDINATE WORK WITH OTHER TRADES FOR SPACE REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE ELECTRICAL WORK. VERIFY DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN.	
6.	CONDUIT	
	A. SUPPORT CONDUIT FROM BUILDING STRUCTURE ONLY. INSTALL 1/16" PULL STRING IN ALL EMPTY CONDUITS. NO PVC SHALL BE PERMITTED ABOVE GRADE WITHIN THE BUILDING.	
	B. USE TYPE MC CABLE FOR FISHING NEW CIRCUITS THROUGH EXISTING WALLS AND FOR LIGHTING FIXTURE WHIPS. FLEXIBLE METAL CONDUIT SHALL BE USED FOR THE FINAL CONNECTION TO TRANSFORMERS AND MOTORS. FLEXIBLE LIQUID-TIGHT CONDUIT SHALL BE USED FOR FINAL CONNECTION TO ALL HARD-WIRED EQUIPMENT.	
	C. ABOVE GRADE INTERIOR DRY LOCATION CONDUIT SHALL BE ELECTRICAL METALLIC TUBING(EMT) WITH SET SCREW FITTINGS CONCEALED IN WALLS OR ABOVE CEILINGS.	
	D. ABOVE GRADE EXTERIOR CONDUIT SHALL BE RIGID METAL CONDUIT(RMC) WITH THREADED FITTINGS.	
	E. BELOW GRADE CONDUIT SHALL BE SCHEDULE 40 RIGID NONMETALLIC CONDUIT(RNC) WITH FITTINGS APPROVED FOR USE WITH RNC. TRANSITION TO EMT OR RMC ABOVE GRADE.	
	F. IF APPROVED BY LANDLORD, MC CABLE MAY BE USED FOR RECEPTACLE, LIGHTING, AND EQUIPMENT BRANCH CIRCUITING. INSTALL CONCEALED IN WALLS OR ABOVE CEILINGS.	
	G. CIRCUITING SERVING RECEPTACLES, LIGHTING, AND/OR EQUIPMENT IN PATIENT CARE AREAS(EXAM ROOMS, OPERATORY ROOMS, TREATMENT ROOMS, PROPHECY AREA, ETC.) SHALL BE ONE OR A COMBINATION OF THE FOLLOWING: 1. CONDUIT AND WIRE SYSTEM WITH A SEPARATE INSULATED GROUND(REDUNDANT GROUND) 2. ARMORED CABLE SYSTEM WITH AN ARMORED STRIP, AND SEPARATE INSULATED GROUND CONDUCTOR LISTED FOR USE AS REDUNDANT GROUND ASSEMBLY. PROVIDE HFC-90 AND ASSOCIATED FITTINGS BY AFC CABLE SYSTEMS OR EQUAL.	
7.	FIRE STOP ALL WALL AND FLOOR PENETRATIONS PER UL APPROVED METHOD AT RATED ASSEMBLIES.	
8.	WIRE AND CABLE	
	A. WIRE AND CABLE SHALL BE 600V TYPE THWN COPPER UNLESS OTHERWISE INDICATED. WIRE #8 AND LARGER SHALL BE STRANDED CONDUCTOR. WIRE #10 AWG AND SMALLER SHALL BE SOLID CONDUCTOR.	
	B. UNLESS OTHERWISE INDICATED, NO WIRE SMALLER THAN #12 AWG SHALL BE USED. CONTROL CIRCUITS MAY BE #14 AWG.	
	C. UNLESS OTHERWISE INDICATED, PRESUME WIRE SIZE TO BE #12 AWG.	
	D. ALL 120V, 20A HOMERUNS GREATER THAN 75 FEET SHALL BE #10 AWG. ALL 277V, 20A HOMERUNS GREATER THAN 150 FEET SHALL BE #10 AWG.	
	E. SEPARATE INSULATED GROUNDING WIRES SHALL BE INSTALLED IN ALL CONDUIT RUNS FOR POWER AND LIGHTING. MINIMUM SIZE OF GROUND SHALL BE PER THE NEC ARTICLE 250.	
	F. ALL EQUIPMENT AND RECEPTACLE CIRCUITS SHALL BE PROVIDED WITH DEDICATED NEUTRAL CONDUCTORS (NO SHARED NEUTRALS).	
	G. COLOR CODE WIRING AS FOLLOWS:	
	BLACK A BROWN RED B ORANGE BLUE C YELLOW WHITE N WHITE/BLACK STRIPE GREEN G GREEN	
9.	PANEL DIRECTORIES SHALL BE TYPED. PROVIDE AND INSTALL ENGRAVED PHENOLIC NAMEPLATES FOR MOTOR STARTERS, PANELBOARDS, SAFETY SWITCHES ETC.	
10.	TEST WIRING SYSTEMS FOR SHORTS AND GROUNDS PRIOR TO ENERGIZING CIRCUITS.	
11.	WIRING DEVICES SHALL BE AS FOLLOWS:	
	DEVICE HUBBELL NUMBER	
	SINGLE POLE SWITCH HBL1221	
	THREE-WAY SWITCH HBL1223	
	FOUR-WAY SWITCH HBL1224	
	DUPLEX RECEPTACLE HBL5362	
	DUPLEX RECEPTACLE GFI GF5362	
	SPLIT RECEPTACLE BR20C1	

ELECTRICAL DEMOLITION NOTES

1.	HOLES IN ROOM SURFACES DUE TO THE REMOVAL OF ELECTRICAL WORK SHALL BE PATCHED TO MATCH EXISTING FINISH. OPENINGS IN FIRE RATED PARTITIONS SHALL BE SEALED WITH FIRE RATED MATERIAL.	
2.	COORDINATE DEMOLITION SUCH THAT EXISTING EMBEDDED CONDUIT AND FLUSH BOXES IN MASONRY WALLS AND CEILINGS MAY BE REUSED TO THE EXTENT POSSIBLE. FLUSH OUTLET BOXES THAT ARE NOT REUSED SHALL BE PROVIDED WITH BLANK PLATES.	
3.	DEVICES SHOWN WITH 'REX' SHALL BE REMOVED COMPLETELY INCLUDING ALL ASSOCIATED WIRING AND CONDUIT. CIRCUITING AFFECTED SHALL BE REROUTED TO OTHER ACTIVE DEVICES SHARING THAT CIRCUIT AS REQUIRED.	
4.	DEVICES SHOWN WITH 'ETR' SHALL REMAIN. PROTECT DURING DEMOLITION. DEVICES IN CEILINGS THAT ARE TO BE REPLACED SHALL BE REMOVED TEMPORARILY AND REINSTALLED.	
5.	DEVICES SHOWN WITH 'REL' SHALL BE RELOCATED. EXTEND CIRCUIT(S) AS REQUIRED.	
6.	ELECTRICAL DEMOLITION INCLUDES BUT IS NOT LIMITED TO THE RELOCATION OF AND/OR REMOVAL OF ALL ELECTRICAL RELATED DEVICES (UNLESS OTHERWISE INDICATED) LOCATED ON, IN, AND/OR THROUGH WALLS AND CEILINGS SHOWN TO BE DEMOLISHED ON THE ARCHITECTURAL PLANS. CIRCUITING AFFECTED SHALL BE REROUTED TO OTHER ACTIVE DEVICES SHARING THAT CIRCUIT AS REQUIRED.	
7.	RECONFIGURATION OF ACTIVE TELECOMMUNICATIONS WIRING/CABLING BY OTHERS.	
8.	REMOVE ACCESSIBLE PORTION OF ABANDONED TELECOMMUNICATIONS WIRING/CABLING.	
9.	REX ALL UNUSED WORK BOXES, JUNCTION BOXES, CONDUIT, ETC.	
10.	UNLESS INDICATED OTHERWISE, REX ALL UNUSED BRANCH CIRCUITS BACK TO BRANCH CIRCUIT PANEL AND TAG CIRCUIT BREAKER AS 'SPARE'.	
11.	NO ATTEMPT HAS BEEN MADE TO INDICATE ALL EXISTING ELECTRICAL DEVICES TO BE REMOVED AND/OR RELOCATED. HOWEVER, THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THE EXTENT OF DEMOLITION PRIOR TO SUBMITTING BID. REMOVE AND/OR RELOCATE EXISTING ELECTRICAL DEVICES ON WALLS OR CEILING BEING REMOVED. COORDINATE SUCH CONDITIONS WITH ARCHITECTURAL DRAWINGS.	
12.	ELECTRICAL CONTRACTOR TO MAKE SAFE ALL ELECTRICAL PANELBOARDS, DEVICES, EQUIPMENT, ETC. DURING DEMOLITION PHASE. TAKE ALL NECESSARY PRECAUTIONS SUCH AS PROVIDING LOCK-OUT DEVICES, REMOVAL OF CIRCUITING, DISCONNECT POWER TO ANY AND ALL EQUIPMENT SLATED TO BE REMOVED, ETC.	

PLAN NOTES

1.	FIELD VERIFY MOUNTING HEIGHTS AND LOCATIONS OF ALL DEVICES PRIOR TO ROUGH-IN. NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WHICH MAY INTERFERE WITH THE PROPER INSTALLATION OF NEW WORK.
2.	CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND SHALL NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES AND/OR DAMAGED EXISTING BASE BUILDING WORK WHICH MAY INTERFERE WITH THE PROPER EXECUTION OF NEW WORK.
3.	ALL EXIT SIGNS, NIGHT LIGHTS, EMERGENCY LIGHTING UNITS, AND EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO CIRCUIT AHEAD OF LOCAL SWITCHING. CONNECT TO THE LIGHTING CIRCUIT SERVING THE AREA SERVED BY THE EXIT AND/OR EMERGENCY LIGHTING UNIT.
4.	EXISTING SYSTEMS, DEVICES, FIXTURES, CIRCUITING, ETC. THAT ARE SHOWN ON THESE PLANS ARE BASED ON VISUAL INSPECTION AND/OR AS-BUILT DRAWINGS, BUT MAY NOT REFLECT THE ACTUAL CONDITIONS IN EVERY CASE. THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE AND EXAMINE THE WORK BEFORE SUBMITTING HIS PROPOSAL. HE SHALL NOTE THE EXISTING CONDITIONS, THE EXTENT OF HIS WORK, AND INTERFERENCE BY OTHER TRADES WITH HIS WORK. ANY DISCREPANCIES SHOULD BE DISCUSSED WITH THE ARCHITECT OR ENGINEER.
5.	CIRCUITING SHOWN TO EXISTING PANELS IS SHOWN ON DRAWINGS FOR INDICATING INTENT ONLY. FIELD VERIFY EXISTING CIRCUITING, EXISTING CIRCUIT NUMBERS AND/OR SPARES, AND SPACES AVAILABLE IN PANELS. UNLESS INDICATED OTHERWISE, EXISTING CIRCUITS BEING FED FROM EXISTING CB'S SHALL REMAIN. IF A CIRCUIT NUMBER SHOWN ON THE DRAWING INDICATES CIRCUITING TO A CB REQUIRED TO SERVE AN EXISTING CIRCUIT, USE THE NEXT AVAILABLE CB OF THE SIZE AND CONFIGURATION REQUIRED. IF EXISTING CB IS NOT AVAILABLE, PROVIDE NEW CB IN EXISTING PANEL SPACE AS REQUIRED. FIELD VERIFY EXISTING PANELS HAVE ADEQUATE CAPACITY TO HANDLE ADDITIONAL LOADS.
6.	CONTRACTOR TO PROVIDE ALL NECESSARY COMPONENTS (AMPLIFIERS, REPEATERS, EXPANDER PANELS, ETC.) AND/OR PROGRAMMING TO INTERFACE WITH AND/OR EXTEND THE EXISTING FIRE ALARM SYSTEM AND TO COORDINATE WITH EXISTING FIRE ALARM MANUFACTURER.
7.	RACEWAY PASSING FROM THE INTERIOR TO THE EXTERIOR OF THE BUILDING SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO A COLDER SECTION OF THE RACEWAY.



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EXP. DATE 12/31/2025

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ELECTRICAL SPECIFICATION