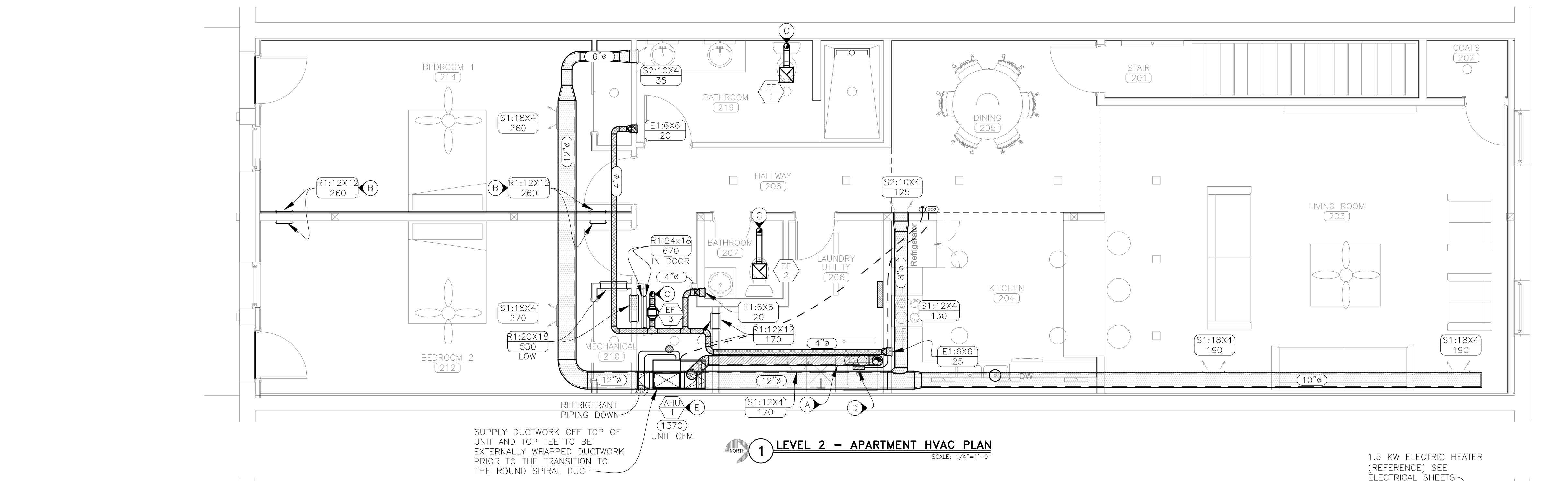
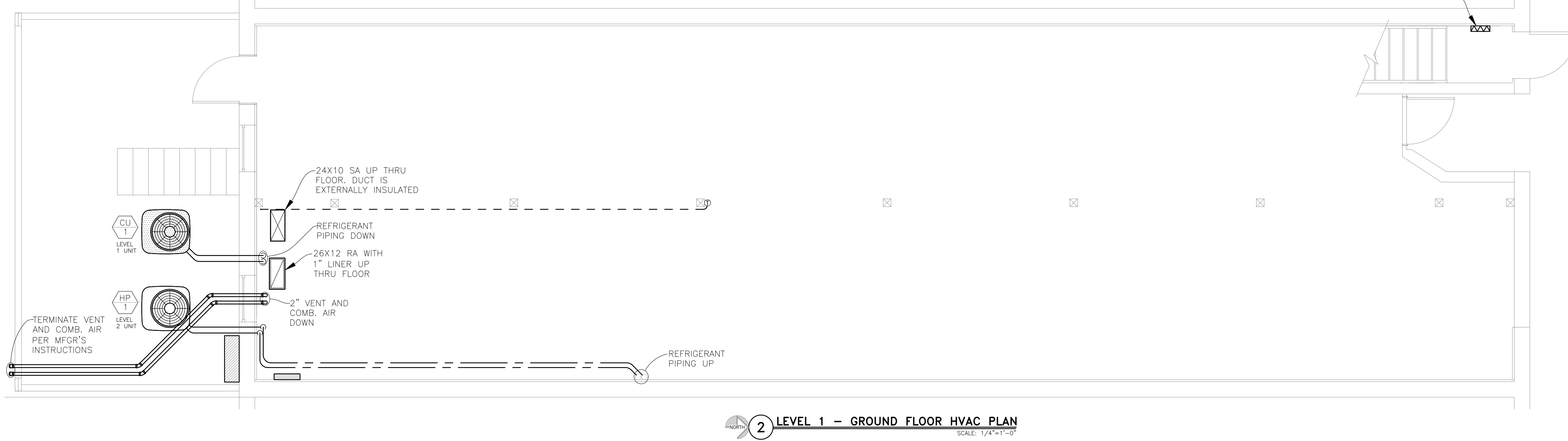
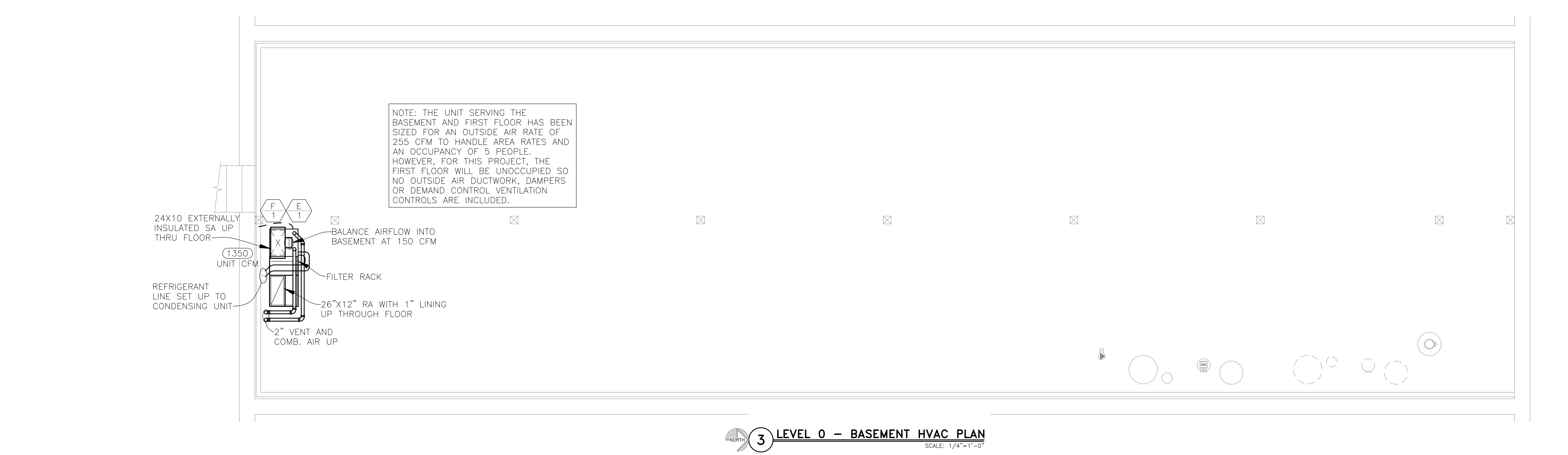




GENERAL NOTES

- FABRICATION, INSTALLATION AND TESTING OF ALL HVAC SYSTEMS SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE, ALL STATE AND LOCAL CODES, AND ALL MANUFACTURER INSTALLATION GUIDELINES.
- ALL METALLIC AND FLEXIBLE DUCTS SHALL BE CONSTRUCTED AND INSTALLED AS SPECIFIED IN THE IMC AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- ALL DUCTWORK WITH TWO DIMENSION <WxD> INDICATES RECTANGULAR DUCT. ALL <Dφ> INDICATES ROUND DUCT. DIMENSIONS ARE FOR SHEET METAL SIZES. DUCTWORK WITH LINER HAS BEEN UPSIZED TO INCLUDE THE ADDITIONAL 1" THICK LINER. DUAL WALLED INSULATED DUCT IS INDICATED BY ITS INTERNAL DIAMETER. PROVIDE STANDARD TURNING VANES OR CURVED ELBOW WITH SQUARE THROAT ON RECTANGULAR DUCTS. ROUND DUCT SHALL MAINTAIN A CENTERLINE TURNING RADIUS OF 1.5 X DUCT DIAMETER.
- DUCTWORK SHALL BE THE FOLLOWING:
 - SUPPLY DUCTWORK – SECOND FLOOR APARTMENT: SINGLE WALL SPIRAL DUCTWORK WITH 1" LINCOUSTIC LINER BY JOHNS MANVILLE OR EQUAL. THIS DUCTWORK IS LIMITED TO THE SECOND FLOOR APARTMENT AREAS AS INDICATED.
 - SUPPLY DUCTWORK – FIRST FLOOR AND BASEMENT: SINGLE WALL DUCTWORK WITH 1.5" THICK EXTERIOR INSULATION.
 - OUTSIDE AIR DUCTWORK: DUAL WALL SPIRAL DUCT WITH 1" INSULATION. THIS DUCTWORK IS LIMITED TO THE SECOND FLOOR APARTMENT OUTSIDE AIR DUCT INDICATED.
 - RETURN AIR DUCTWORK: SINGLE WALL DUCTWORK WITH 1" LINER.
 - EXHAUST AIR DUCTWORK: SINGLE WALL SPIRAL DUCTWORK.
- REFRIGERANT PIPING SHALL BE TYPE ACR COPPER TUBING WITH SILVER BRAZED JOINTS. INSULATE WITH 1/2" CLOSED CELL ELASTOMERIC INSULATION THAT COMPLIES WITH ASTM C534 GRADE 1. INSULATION SHALL MEET ASTM E84 FLAME AND SMOKE RATINGS OF 50/50. SEAL ALL INSULATION JOINTS. EXTERIOR REFRIGERANT PIPING TO HAVE TWO COATS OF ARMACELL WB FINISH, OR EQUAL. PAINT TO BE WHITE WATER BASED, 100% ACRYLIC COATING. COATING SHOULD OFFER UV PROTECTION. SLOPE HORIZONTAL GAS LINES 1 INCH PER 20 FT TOWARD THE OUTDOOR UNIT. HEAT PUMP HORIZONTAL GAS LINES SHALL BE LEVEL. USE LONG RADIUS BENDS.
- ALL INSULATION SHALL MEET THE ASTM E 84 FLAME/SMOKE SPREAD INDEX OF 25/50 MAXIMUM. DUCT SEAMS SHALL BE SEALED.
- SPLIT SYSTEM UNIT TO BE PROVIDED WITH MANUFACTURED SUPPLIED, OR COMMERCIAL FABRICATED FILTER RACKS ARE NOT TO BE FABRICATED BY SHEET METAL CONTRACTOR WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER.
- CONDENSATE PIPE SHALL BE SCHEDULE 40 PVC. PROVIDE 0.5 INCH THICK INSULATION SLOPE IN THE DIRECTION OF DISCHARGE A MINIMUM OF 1/8" PER FOOT. COORDINATE CONDENSATE DRAIN DISCHARGE LOCATION WITH PLUMBING CONTRACTOR.
- COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL LINE VOLTAGE WIRING AND CONDUIT. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING FOR MECHANICAL SYSTEMS. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL CONDUIT FOR LOW VOLTAGE WIRING.
- INSTALL AIR BALANCE DAMPERS FOR ALL SUPPLY AIR DEVICES AND AS REQUIRED TO PROPERLY BALANCE SYSTEM TO AIR FLOWS INDICATED. ALL DAMPERS MAY NOT BE SHOWN ON PLAN.

KEYED NOTES

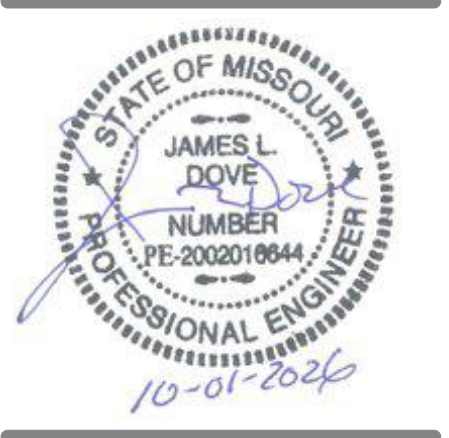
- OUTSIDE AIR INTAKE DUCT SHALL BE 6" DUAL WALL INSULATED DUCTWORK. DO NOT USE SINGLE WALL INTERNALLY LINED DUCTWORK FOR THIS BRANCH. EXTEND DUAL WALL UP THROUGH ROOF. WHERE DUCT CAN CHANGE TO SINGLE WALL DUCTWORK, TERMINATE WITH GOOSENECK FITTING AND BIRDSCREEN. PAINT ROOFTOP GOOSENECKS WITH PRIMER AND 2 COATS WHITE ALKYD PAINT. BALANCE TO 95 CFM O.A.
- MOUNT ONE GRILL LOW, AND ONE GRILLE HIGH. STUD SPACE WILL SERVE AS RETURN AIR PATH.
- 4"φ UP THROUGH ROOF TO GOOSENECK. TERMINATE WITH BIRD SCREEN. PAINT ROOFTOP GOOSENECKS WITH PRIMER AND 2 COATS WHITE ALKYD PAINT.
- OUTSIDE AIR DAMPER ACTUATOR WIRED THROUGH CO2 SENSOR. COORDINATE LINE VOLTAGE WIRING TO MECHANICAL CONTRACTOR PROVIDED 24VAC TRANSFORMER WITH ELECTRICAL CONTRACTOR.
- PROVIDE BOTTOM DUCT RETURN PLENUM UNDER UNIT WITH 1" DUCT LINER AND OPPOSED BLADE DAMPER FOR OA BALANCING. ALSO ROUTE CONDENSATE DRAIN FROM EVAPORATOR COIL TO INDIRECT DISCHARGE AT FLOOR DRAIN.

HVAC LEGEND

	KEYED NOTE SPECIFIC TO LOCATION ON PLAN
	CONNECTION TO EXISTING SYSTEM
	PIPE BREAK (CONTINUES ON)
	DEVICE SCHEDULE TAG
	AIR DEVICE: SIZE (INCHES)/CFM
	DUCT SIZE-RECTANGULAR (INCHES X INCHES)
	DUCT SIZE-ROUND (INCHES DIAMETER)
	THERMOSTAT WITH EQUIPMENT LABEL
	REFRIGERANT PIPING
	PIPE UP, PIPE DOWN, PIPE REDUCER

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DUNKLIN APARTMENT RENOVATION
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Design By: **GES**
Drawn By: **GES**
Checked By: **JLD**

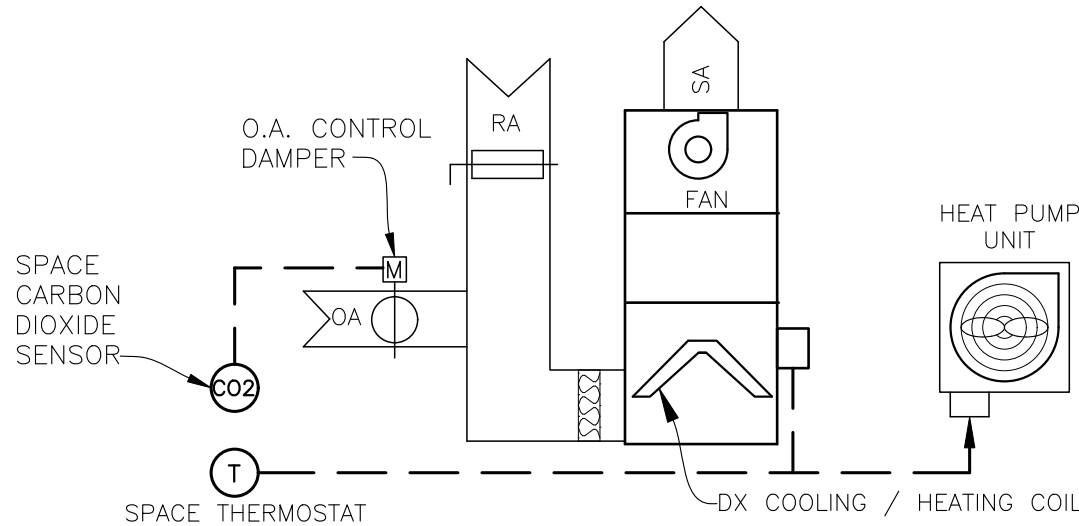
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Scale: 1/4" = 1'-0"

BASEMENT, FIRST AND SECOND FLOOR HVAC PLANS

Date: 2026.10.01

M101



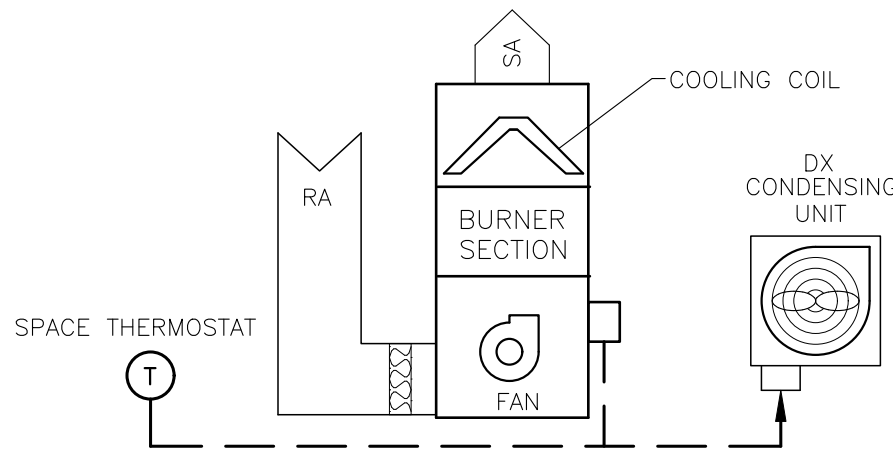
APARTMENT AHU-1, HP-1 SEQUENCE OF OPERATION

THE AHU FAN SHALL RUN CONTINUOUSLY. THE OUTSIDE AIR CONTROL DAMPER SHALL BE NORMALLY CLOSED. INCREASING LEVELS OF SPACE CARBON DIOXIDE ABOVE 800 PPM (ADJUSTABLE) SHALL CAUSE THE OUTSIDE AIR DAMPER TO MODULATE OPEN.

INCREASING SPACE TEMPERATURE OVER COOLING SETPOINT (74 DEG. F) AS SENSED BY THE SPACE THERMOSTAT SHALL CAUSE THE CONDENSING UNIT TO ENERGIZE AND CYCLE TO MAINTAIN SETPOINT.

DECREASING SPACE TEMPERATURE BELOW HEATING SETPOINT (72 DEG. F) AS SENSED BY THE SPACE THERMOSTAT SHALL CAUSE THE FURNACE TO ENERGIZE TO MAINTAIN SETPOINT.

EXHAUST FAN EF-3 SHALL RUN CONTINUOUSLY TO DRAW A MINIMUM AMOUNT OF EXHAUST AIR FROM THE TWO BATHROOMS, AND THE KITCHEN TO MEET INDICATED CODE REQUIRED CONTINUOUS EXHAUST AIR. ADDITIONALLY, INDIVIDUAL BATHROOM EXHAUST FANS SHALL BE SWITCHED ON WITH RESTROOM LIGHTING AND SHALL REMAIN ON AFTER THE LIGHT SWITCHES HAVE BEEN TURNED OFF BY THE ACTIVATION OF A TIMER WITH ADJUSTABLE TIME DURATIONS.



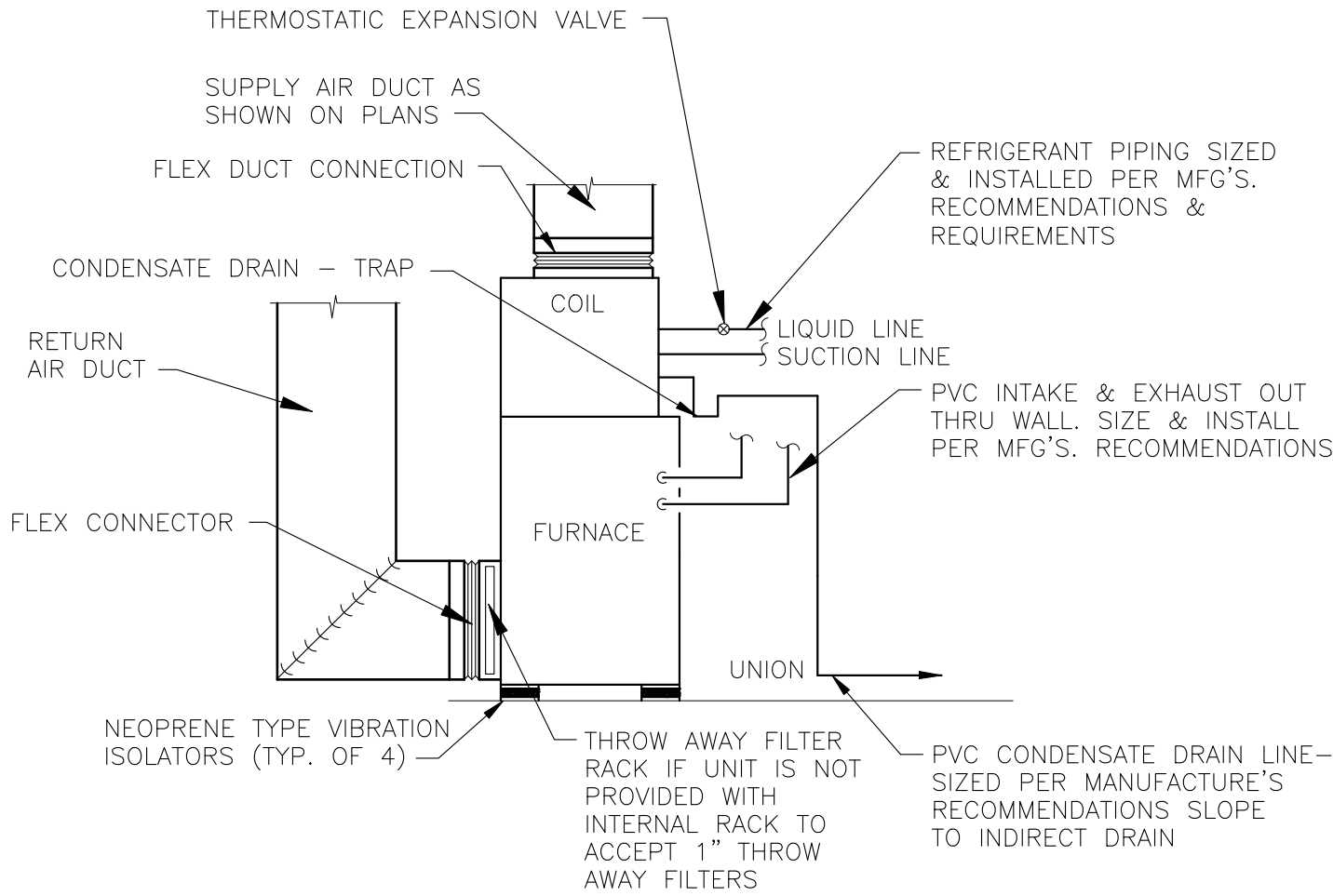
MAIN LEVEL / BASEMENT F-1, E-1
CU-1 SEQUENCE OF OPERATION

THE FURNACE FAN SHALL CYCLE ON / OFF WITH THE CALL FOR COOLING OR HEATING.

INCREASING SPACE TEMPERATURE OVER COOLING SETPOINT (75 DEG. F) AS SENSED BY THE SPACE THERMOSTAT SHALL CAUSE THE CONDENSING UNIT TO ENERGIZE AND CYCLE TO MAINTAIN SETPOINT.

DECREASING SPACE TEMPERATURE BELOW HEATING SETPOINT (68 DEG. F) AS SENSED BY THE SPACE THERMOSTAT SHALL CAUSE THE FURNACE BURNER TO FIRE TO MAINTAIN SETPOINT.

THE EQUIPMENT HAS BEEN SIZED FOR THE INCLUSION OF 255 CFM OUTSIDE AIR. HOWEVER, SINCE THE SPACE USAGE FOR THE MAIN LEVEL IS UNKNOWN, THE SYSTEM SHALL OPERATE WITHOUT OUTSIDE AIR AS THE SPACE WILL BE UNOCCUPIED.



1 SPLIT SYSTEM INDOOR UNIT INSTALLATION DETAIL

HEAT PUMP OUTDOOR UNIT SCHEDULE (SECOND FLOOR APARTMENT UNIT)							
MARK	MODEL	DESCRIPTION	EER/COP	COOLING CAPACITY	HEATING CAPACITY	ELECTRICAL	REFRIGERANT LINE SIZE/WEIGHT
HP 1	TRANE 5TWR4048A1	4 TON NOMINAL	14.3 SEER2 12 EER2	41,955 BTUH OAT: 95°F	28,470 BTUH @ 17°F	240V 1 PHASE MCA: 25A MAX FUSE: 40A	
NOTES							
1	PROVIDE LIQUID LINE DRYER, INSULATED SUCTION LINE, LOW AMBIENT CONTROLS, LOUVERED COIL GUARD, AND MANUFACTURED EQUIPMENT CURB						
2	PROVIDE UNIT WITH CRANKCASE HEATER KIT AND 7" HIGH SNOW LEGS-BASE AND CAP, AND EVAPORATOR DEFROST CONTROL						

CONDENSING UNIT SCHEDULE (BASEMENT / FIRST FLOOR UNIT)							
TAG	MODEL	DESCRIPTION	SEER/EER	COOLING CAPACITY	ELECTRICAL REQUIREMENTS	REFRIGERANT LINE SIZE	WEIGHT
CU 1	TRANE STTR4048A1	4 TON	14.3 SEER2 12 EER2	TOTAL: 44.8 MBH AT 95°F	240 VAC / 1 PHASE MCA: 24A MAX FUSE: 40A		
NOTES							
1	PROVIDE LIQUID LINE DRYER, INSULATED SUCTION LINE, LOW AMBIENT CONTROLS, LOUVERED COIL GUARD, AND MANUFACTURED EQUIPMENT CURB						
2	PROVIDE UNIT WITH CRANKCASE HEATER KIT AND 7" HIGH SNOW LEGS-BASE AND CAP, AND EVAPORATOR DEFROST CONTROL						

AIR HANDLING UNIT (2ND FLOOR APARTMENT UNIT)							
TAG	MFG/MODEL	DESCRIPTION	COOLING CAPACITY	SUPPLY/OUTSIDE AIRFLOW	HEATING INPUT	ELECTRICAL REQUIREMENTS	NOTES
AHU 1	TRANE STEM6D06-AV41	4 TON DX FAN COIL UNIT	TC: 41.95 MBH SC: 29.96 MBH EAT: 75.5/64 LAT: 55	SUPPLY: 1370 CFM ESP: 0.75 IN WG OAT: 95 CFM	28.47 MBH HEAT PUMP AT 17°F OAT 14.4 KW EMERG. HEAT	240/60/1	PROVIDE WITH 14.4 KW-CKT BRKR
NOTES							
1	PROVIDE EXTERNAL FILTER RACK. MOUNT UNIT ON RUBBER VIBRATION ISOLATION PADS						
2	PROVIDE A TRANE XR203 5-1-1 THERMOSTAT, PROGRAM FOR HEAT PUMP APPLICATION WITH EMERGENCY ELECTRIC HEAT						

FURNACE SCHEDULE							
TAG	MODEL	DESCRIPTION	SUPPLY/OUTSIDE AIRFLOW	HEATING CAPACITY	ELECTRICAL REQUIREMENTS	NATURAL GAS REQUIREMENTS	WEIGHT
F 1	TRANE S9X2C	95% AFUE 2 STAGE GAS	SUPPLY: 1350 CFM ESP: 0.75" WG OAT: 255 CFM	80 MBH INPUT 50.4 MBh OUT (STG 1) 77.6 MBh OUT (STG 2)	115V 1 PHASE	1/2" NPT	
NOTES							
1	PROVIDE EXTERNAL FILTER RACK. MOUNT UNIT ON RUBBER VIBRATION ISOLATION PADS						
2	UNIT TO BE CONDENSING TYPE (~ 95% EFFICIENT) WITH PVC FLUE AND COMB. AIR.						
3	INDOOR EVAPORATOR COIL SCHEDULE NUMBER MATCHES FURNACE NUMBER (i.e. FURNACE F-1 AND EVAPORATOR E-1 ARE PAIRED)						
4	PROVIDE A TRANE XR203 5-1-1 THERMOSTAT, PROGRAM FOR GAS FURNACE / DX COOLING APPLICATION						

EVAPORATOR COIL SCHEDULE				
TAG	MODEL	DESCRIPTION	CONNECTIONS	NOTES
E 1	TRANE 5TXC	CASED UPFLOW/DOWNFLOW COIL : CFM = 1350 COOLING TOTAL = 44.7 MBH, SENSIBLE = 32.46 MBH, EAT = 78.3 DB/65.7 WB, LAT ~ 55.8 MATCHED TO F-1 FURNACE AND CU-1 CONDENSING UNIT		

EXHAUST FAN SCHEDULE				
TAG	MFG/MODEL	DESC.	AIRFLOW/ELECTRICAL	SPECIFICATION
EF 1	JENCO FF-80	CEILING MOUNTED EXHAUST FAN	70 CFM @ 0.2 IN WG SP 120V 1 PHASE 0.75 AMPS / 48 WATTS	MOTOR: DIRECT DRIVE; FAN: FORWARD CURVED CENTRIFUGAL; CASING: 20 GAUGE GALVANIZED STEEL WITH WHITE POLYMERIC GRILLE; AMCA SEAL; UL LISTING
EF 2	JENCO FF-80	CEILING MOUNTED EXHAUST FAN	70 CFM @ 0.2 IN WG SP 120V 1 PHASE 0.75 AMPS / 48 WATTS	MOTOR: DIRECT DRIVE; FAN: FORWARD CURVED CENTRIFUGAL; CASING: 20 GAUGE GALVANIZED STEEL WITH WHITE POLYMERIC GRILLE; AMCA SEAL; UL LISTING
EF 3	JENCO TD100X1	INLINE EXHAUST FAN	65 CFM @ 0.2 IN WG SP 120V 1 PHASE ~20 WATTS	MOTOR: DIRECT DRIVE WITH FAN SPEED CONTROLLER PROVIDE WITH 4" CAR100 BACKDRAFT DAMPER
NOTES				
1	INCLUDES INTEGRAL BACKDRAFT DAMPER & MOUNTING BRACKETS. PROVIDE ACCESSORY SPEED CONTROL. OPERATE WITH SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR.			

AIR DEVICE SCHEDULE				
TAG	MODEL	DESC.	STYLE	REMARK
S1	SDGE	SUPPLY	SPIRAL DUCT GRILLE WHITE, ALUMINUM	CURVED FRAME, DOUBLE DEFLECTION PARALLEL TO SHORT DIMENSION; SURFACE MOUNT
S2	510	SUPPLY	STEEL, WHITE LOUVERED GRILLE	DOUBLE DEFLECTION; BLADES PARALLEL TO SHORT DIMENSION; SURFACE MOUNT
R1	535	RETURN	STEEL, WHITE LOUVERED GRILLE	FIXED BLADES; 45° DEFLECTION; 1/2" BLADE SPACING; SURFACE MOUNT
E1	535	EXHAUST	STEEL, WHITE LOUVERED GRILLE	FIXED BLADES; 45° DEFLECTION; 1/2" BLADE SPACING; SURFACE MOUNT
NOTES				
1	PROVIDE OPPOSED BLADE DAMPER THAT IS OPERABLE FROM GRILLE FACE			
2	SPIRAL DUCT GRILL TO HAVE FRONT FACE CABLE ADJUSTMENT TO THE VOLUME CONTROL AIR SCOOP			



STERILIZE POTABLE WATER PIPING IN ACCORDANCE WITH LOCAL WATER PROVIDER REQUIREMENTS AND LOCAL HEALTH DEPARTMENT REGULATIONS.

16. POTABLE WATER PIPE BELOW GRADE: PROVIDE POLYETHYLENE SDR-9, 200 PSI, OR EQUAL OR OTHER MATERIALS APPROVED BY LOCAL AUTHORITIES. EXTERIOR WATER SUPPLY SYSTEM PIPE SHALL BE INSTALLED NOT LESS THAN 6 INCHES BELOW THE FROST LINE AND NOT LESS THAN 18 INCHES BELOW GRADE.

17. ALL COPPER TO COPPER JOINTS UNDER CONCRETE SLAB TO BE SILVER ALLOY BRAZED WITH A MELTING POINT ABOVE 1000 F (538 C), (ASME B31.2: NFPA 31, 51, 58). SILVER BRAZING ALLOWED SHALL BE AWS A5.8 CLASSIFICATION BCUP-5, CONTAINING 15% SILVER, 80% COPPER, AND 5% PHOSPHOROUS. PROTECT ALL WATER PIPE THROUGH CONCRETE PENETRATIONS WITH PLASTIC OR INSULATION SLEEVE.

18. POTABLE WATER PIPE AND JOINTS ABOVE GRADE: PROVIDE HARD DRAWN SEAMLESS COPPER PIPE, TYPE "L" WITH LEAD-FREE SOLDERED JOINTS CONFORMING TO ASTM B 32.

19. INSULATE POTABLE WATER PIPE ABOVE GRADE WITH FIBERGLASS INSULATION ENCLOSED WITH ALL SERVICE JACKET, OR FOIL SKIM KRAFT JACKETING PER THE FOLLOWING SCHEDULE:

1. COLD WATER PIPE: 1/2" THICKNESS
2. HOT WATER PIPE 1/2" TO 1-1/4": 1" THICKNESS
3. HOT WATER RETURN PIPE: 1" THICKNESS

20. PROTECT COPPER PIPE AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPE IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPE, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL, SUCH AS EPDM RUBBER, TO PREVENT CONTACT WITH DISSIMILAR METALS.

21. BRANCH ISOLATION / SHUTOFF VALVES: PROVIDE FULL PORT, BALL TYPE (UNLESS OTHERWISE NOTED), AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.

22. PLUMBING FIXTURE AND EQUIPMENT SHUT-OFF STOPS SHALL BE QUARTER TURN, BALL OR CERAMIC DISK TYPE VALVES. STOPS SHALL HAVE 1/2" COMPRESSION INLET AND COMPRESSION OR THREADED/GASKET OUTLET. PLASTIC/POW STYR PRODUCTS AND/OR COMPRESSION SHUTOFFS SHALL NOT BE USED.

23. PROVIDE COMPLETE FIXTURES AND INCLUDE FLEX-PIPE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC. CONTRACTOR SHALL LEAK TEST FINISHED WATER PIPING IN ACCORDANCE WITH ASME-B31.3 LEAK/PRESSURE TESTING GUIDELINES.

- (A) EXCAVATE SIDEWALK FOR INSTALLATION OF NEW WATER SERVICE BRANCHES INCLUDING A NEW 1" BRANCH OFF OF EXISTING 1" WATER SUPPLY. EXTEND NEW 1" SUPPLY TO NEW WATER METER PIT WITH COVER. COORDINATE WITH AMERICAN WATER TO PROVIDE METER YOKE AND NEW 3/4" METER.
- (B) 1" CW FOR FUTURE MAIN LEVEL TENANT.
- (C) ROUTE P&T RELIEF PIPE TO INDIRECT DISCHARGE AT FLOOR SINK.
- (D) PROVIDE 3.5" HIGH HOUSEKEEPING PAD AND POLY CATCH BASIN UNDER WATER HEATER. ROUTE HARD PIPED DRAIN FROM CATCH BASIN TO FLOOR SINK.
- (E) TWO WATER SERVICE ENTRANCES ARE STACKED. THE UPPER FLOOR APARTMENT SERVICE SHALL BE ABOVE THE LOWER FLOOR SERVICE. THE SECOND FLOOR SERVICE HAS A 3/4" RPZ BACKFLOW PREVENTER (BFP-1). THE MAIN LEVEL SERVICE HAS A 1" RPZ BACKFLOW PREVENTER (BFP-2). BOTH SERVICES WILL ALSO A PRESSURE REDUCING VALVE PRV-1. PROVIDE A 1/2" SYSTEM DRAIN FOR BOTH SYSTEMS AFTER THE BACKFLOW PREVENTER AND THE PRV. ALSO PROVIDE A 3/4" BYPASS AROUND THE PRV WITH A BALL VALVE, FOR BOTH SYSTEMS. ALSO PROVIDE AN AIR GAP AND DRAIN FROM EACH BACKFLOW PREVENTER TO AN INDIRECT DISCHARGE AT THE FLOOR SINK.
- (F) THE EXISTING WATER SERVICE PIPE WAS CUT BACK INTO THE BASEMENT WALL AND WILL NEED TO BE REPLACED. INSTALL A NEW 3/4" WATER SUPPLY FROM THE METER TO INSIDE THE BUILDING.

1. PIPE SIZES ARE MARKED ALONG THE LENGTH OF RUNS ON THE PLAN. IF THE PIPE SIZE CHANGES ON EITHER SIDE OF A FITTING, A REDUCER FITTING IS IMPLIED. PLUMBING PIPE LAYOUTS ARE DRAWN FOR DESIGN INTENT AND CLARITY. CONTRACTOR SHALL MINIMIZE THE NUMBER OF TURNS AND FITTINGS WHEREVER POSSIBLE WHILE MAINTAINING DESIGN INTENT.
2. FABRICATION, INSTALLATION AND TESTING OF ALL PLUMBING SYSTEMS SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL PLUMBING CODES.
3. COORDINATE ALL CASE WORK, MILL WORK, FREE STANDING PLUMBING FIXTURES, FLOOR, WALL FINISHES AND EQUIPMENT WITH ARCHITECTURAL DRAWINGS.
4. COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES.

5 DRAIN AND VENT TO BE SCHEDULE 40 PVC (ASTM D 2665 OR DUAL MARKED ASTM D 2665 AND D 1785) SOLID WALL PIPE WITH SCHEDULE 40 SOCKET-TYPE PIPE FITTINGS (ASTM D 3311) FOR DWV PIPING. SOLVENT CEMENT JOINTS SHALL BE ALLOWED ABOVE OR BELOW GRADE.

6 SLOPE SANITARY SEWER AND VENT PIPING 2.5 INCHES AND SMALLER AT 1/4 INCH PER FOOT (2 PERCENT) MINIMUM. SLOPE SANITARY SEWER PIPING 3 INCHES TO 6 INCHES AT 1/8 INCH PER FOOT (1 PERCENT) MINIMUM. DRY VENTS MUST RISE ABOVE DRAIN CENTER LINE AT ANGLES OF 45 DEGREES OR GREATER FROM HORIZONTAL.

7 PROVIDE P-TRAPS CONSISTENT WITH PIPE SIZES AS SPECIFIED ON PLAN FOR ALL: FLOOR DRAINS, AND LAVATORIES UNLESS OTHERWISE INDICATED.

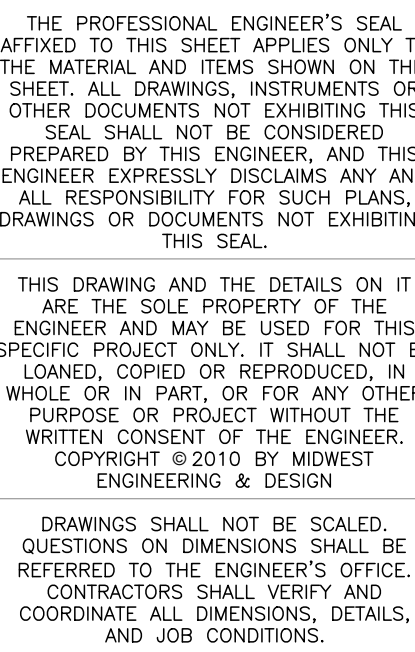
8 CLEANOUT SERVICE RISERS SHALL BE OF THE SAME DIAMETER OF THE PIPE THEY ARE SERVING UNLESS OTHERWISE MARKED.

9	FUEL GAS PIPING SHALL BE SCHEDULE 40, BLACK STEEL WITH 150 POUND MALLEABLE IRON SCREWED OR WELDED FITTINGS.
10	TEST ALL FUEL GAS PIPES BEFORE CONNECTING EQUIPMENT TO MAIN. FOLLOW ALL INSPECTION, TESTING AND PURGING REQUIREMENTS FOUND IN SECTION 406 OF THE LATEST INTERNATIONAL FUEL GAS CODE. REPAIR ALL LEAKS THAT ARE FOUND.
11	PROVIDE DIRT-LEG, TEE AND GAS VALVE AT EACH NATURAL GAS DEVICE AS REQUIRED.
12	COORDINATE WITH FUEL GAS PROVIDER TO SCHEDULE THE 0.25 POUND PER SQUARE INCH FUEL GAS PIPE INSTALLATION AND TESTING.
13	COORDINATE FUEL GAS PIPE CONNECTIONS AT HEATING EQUIPMENT WITH MECHANICAL CONTRACTOR.
14	EXPOSED EXTERIOR PIPING SHALL BE PAINTED WITH 1 COAT PRIMER, AND 2 COATS EXTERIOR GRADE YELLOW ALKYLID PAINT.



	CONNECTION TO EXISTING SYSTEM
	PIPE BREAK (CONTINUES ON)
	DEVICE SCHEDULE TAG
	PIPE SIZE (IN INCHES)(AND TYPE)
	KEYED NOTE SPECIFIC TO LOCATION ON PLAN
	VENT THROUGH ROOF
	CLEAN OUT PLUG
	PIPE UP, PIPE DOWN, PIPE REDUCER
	BALL VALVE
	CALIBRATED BALANCE VALVE
	SWING CHECK VALVE
	SPRING CHECK VALVE
	UNION
	Y-STRAINER
	PRESSURE REGULATING VALVE
	SANITARY DRAIN OR WASTE (S)
	PLUMBING VENT (V)
	POTABLE COLD WATER LINE (CW)
	POTABLE HOT WATER LINE (HW)
	POTABLE HOT WATER RETURN LINE (HWR)

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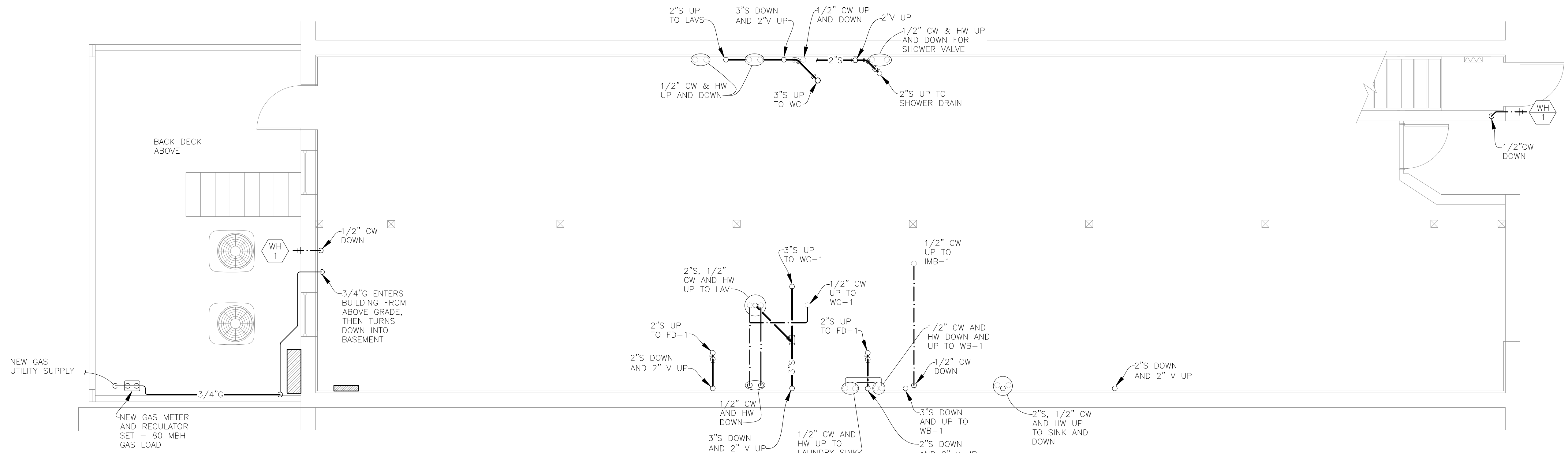


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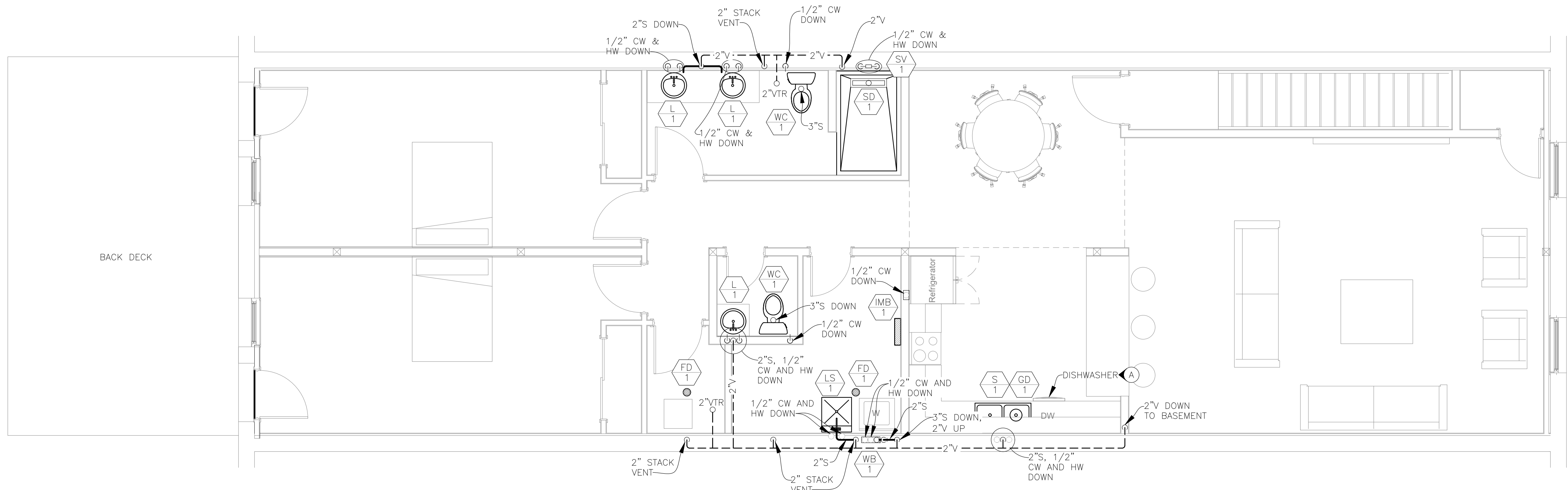
Scale: $1/4" = 1'-0"$

Date: 2026.10.01

P101



1 LEVEL 1 - GROUND FLOOR PLUMBING PLAN
SCALE: 1/4"=1'-0"



2 LEVEL 2 - APARTMENT PLUMBING PLAN
SCALE: 1/4"=1'-0"

GENERAL PLUMBING NOTES

- SEE SHEET P101 FOR PLUMBING GENERAL NOTES.
- INSTALL WATER HAMMER ARRESTORS (WHA-1) AT HOT AND COLD WATER SUPPLIES FOR LAVATORIES, SINKS, TOILETS, AND AT WALL HYDRANTS.

KEYED PLUMBING NOTES

- (A) CONNECT DISHWASHER HOT WATER TO BRANCHED STOP UNDER SINK. ROUTE DISHWASHER DRAIN TUBING HIGH TO UNDERSIDE OF COUNTERTOP THEN CONNECT TO GARBAGE DISPOSAL.



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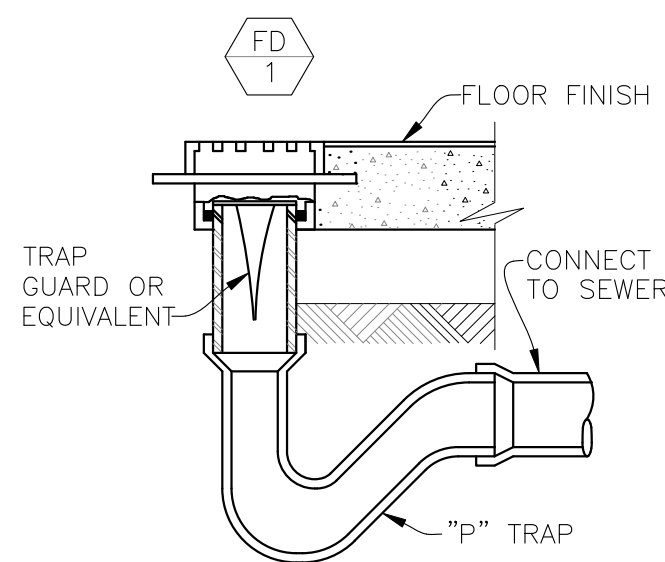
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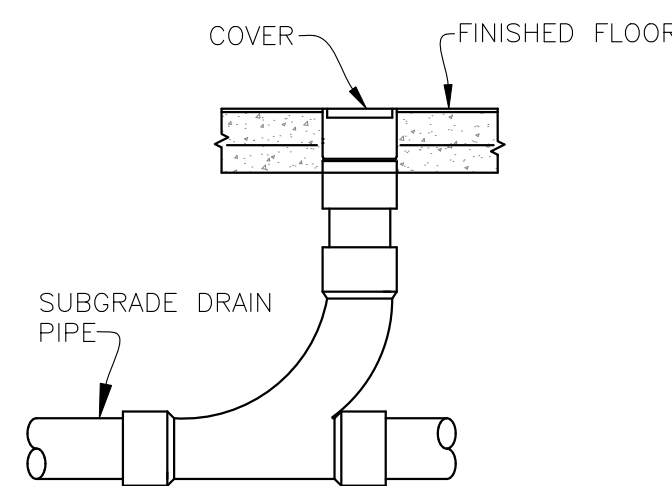
FIRST AND SECOND FLOOR PLUMBING PLANS

Date: 2026.10.01

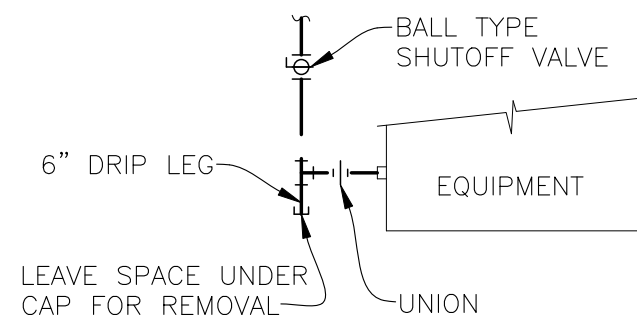
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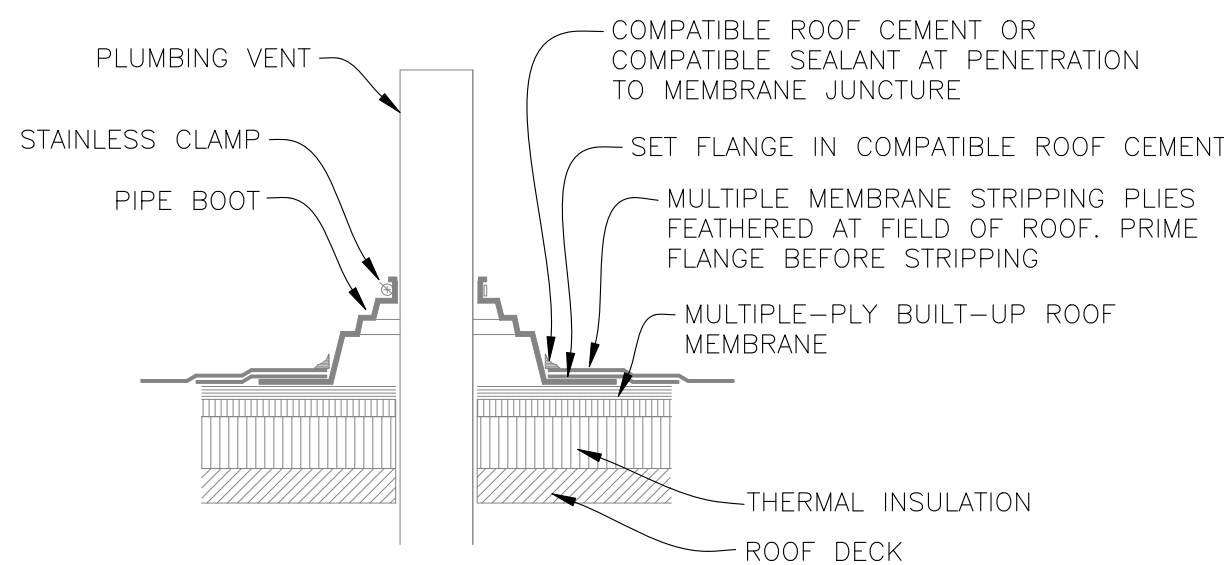
1 FLOOR DRAIN DETAIL
NO SCALE



2 FLOOR CLEANOUT DETAIL
NO SCALE

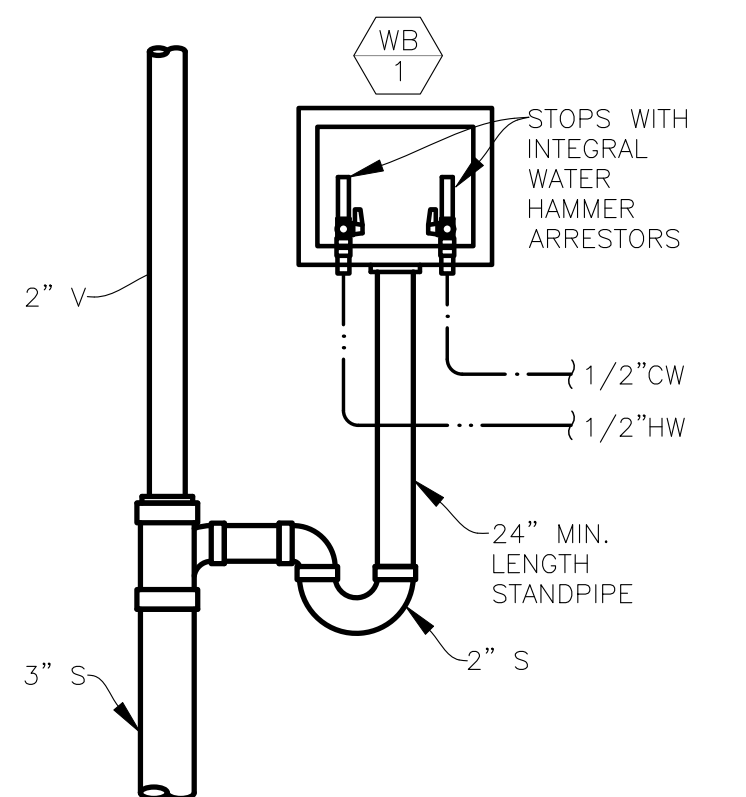


3 GAS CONNECTION DETAIL
NO SCALE

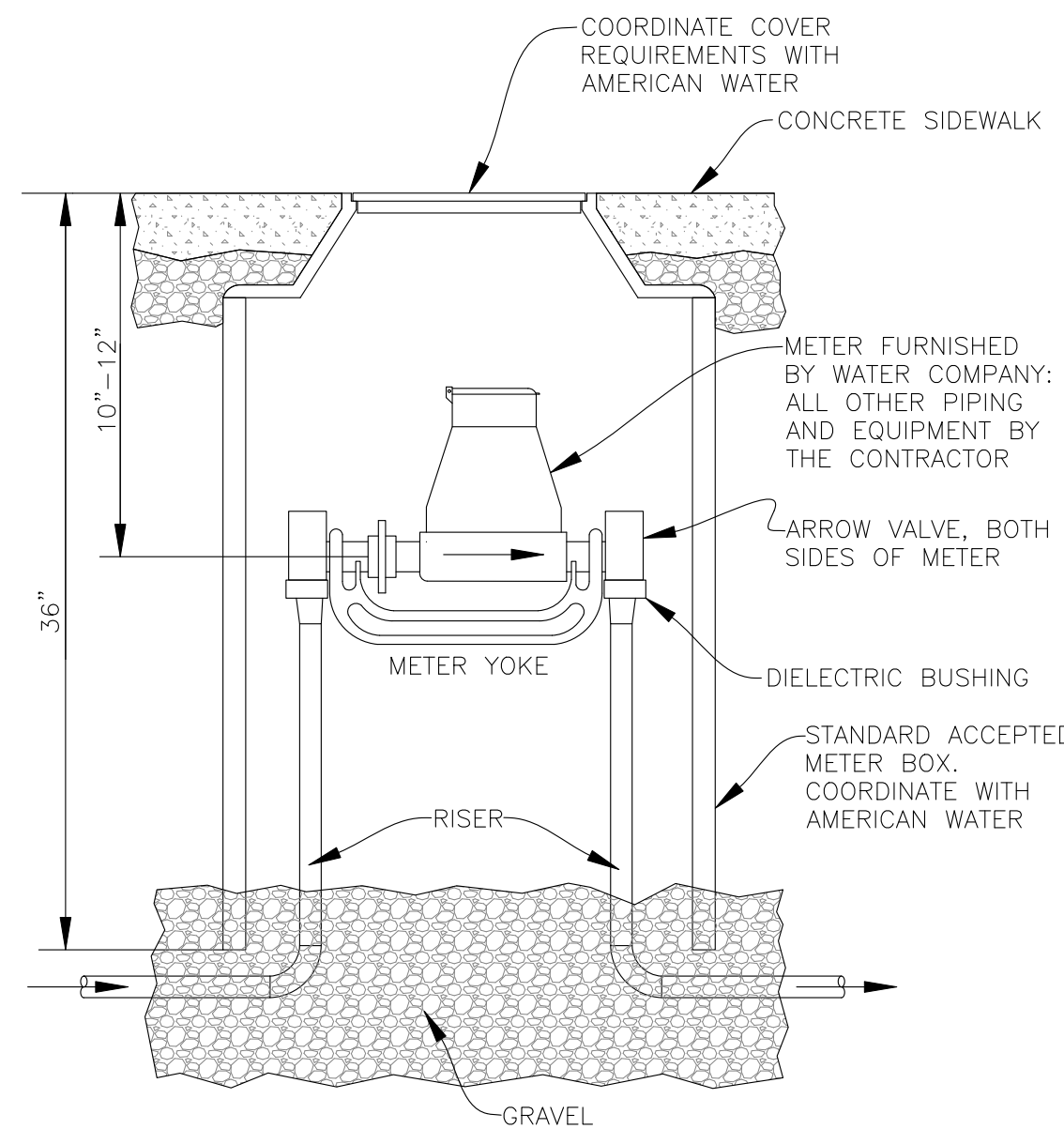


NOTES:
1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

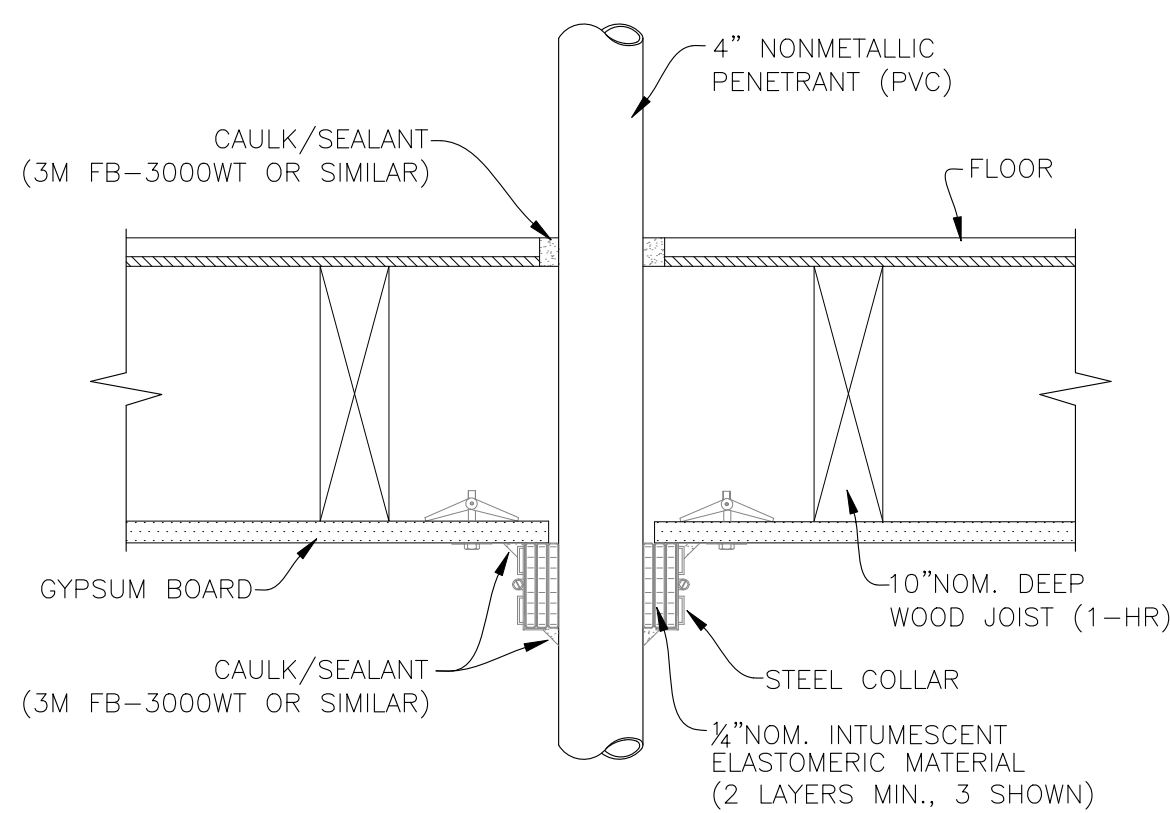
4 PLUMBING VENT ROOF TERMINATION DETAIL
NO SCALE



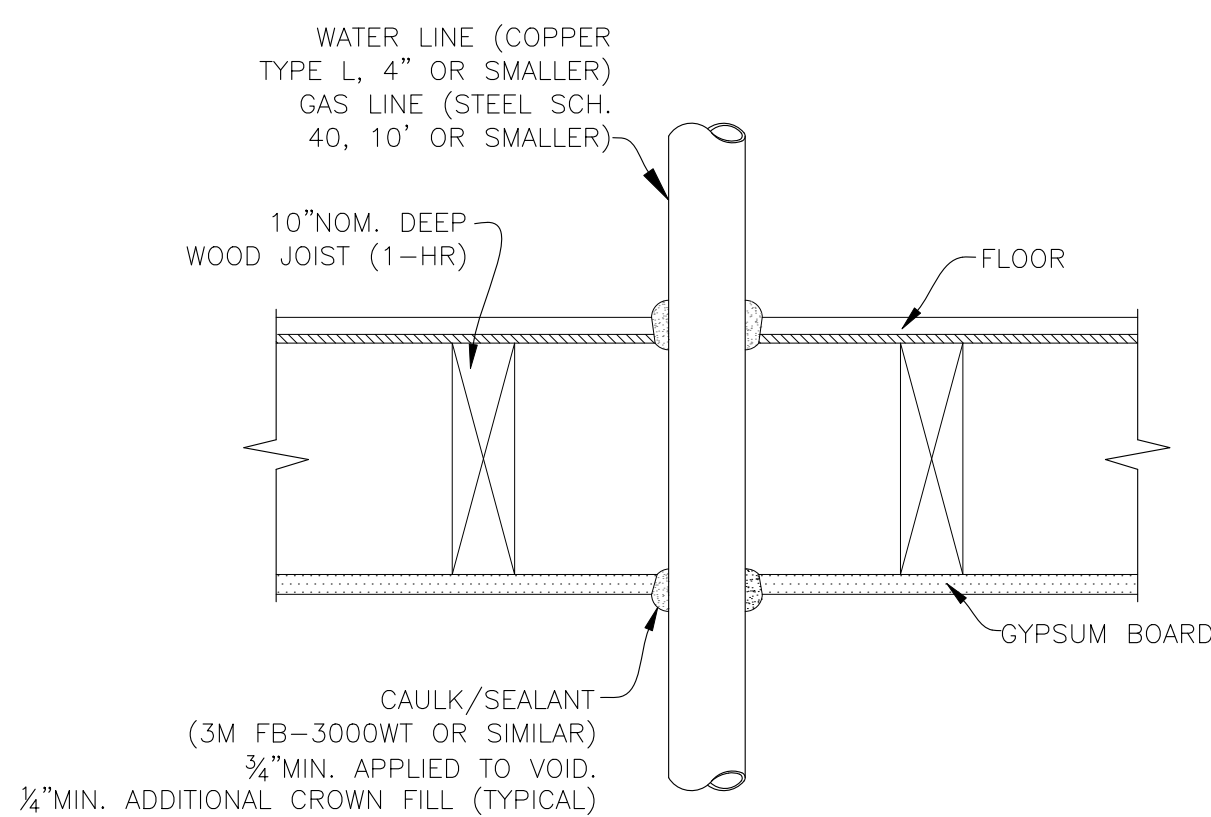
5 WASHER BOX PIPING DETAIL
NO SCALE



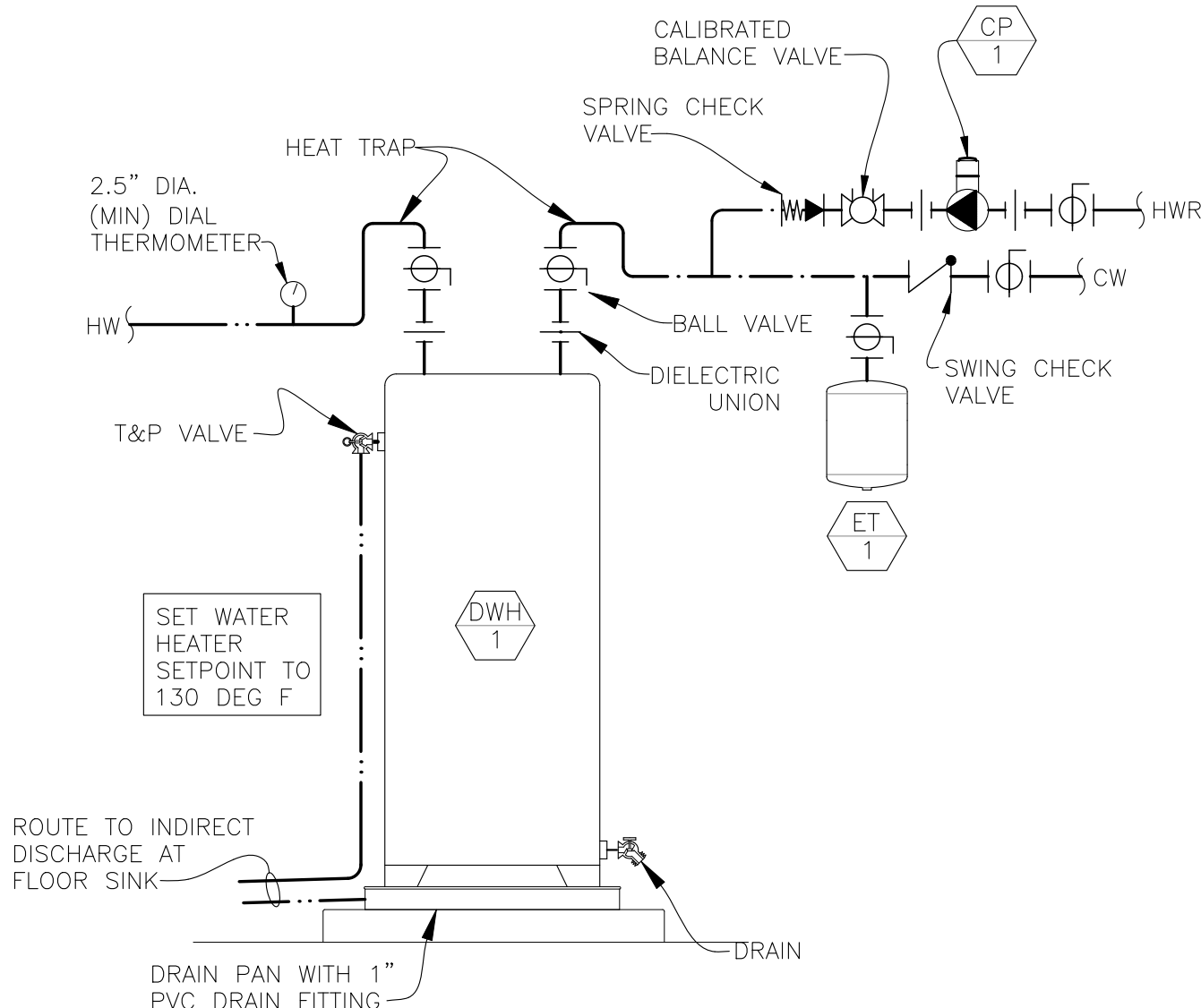
6 WATER METER INSTALLATION DETAIL
NO SCALE



7 4" OR SMALLER NONMETALLIC 1-HR FLOOR/CEILING PENETRATION (F-C-2024)
NO SCALE



8 METALLIC (GAS, WATER, ELECTRIC) 1-HR FLOOR/CEILING PENETRATION (F-C-1002)
NO SCALE



9 WATER HEATER INSTALLATION DETAIL
NO SCALE

SHOWER FIXTURE SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
SV 1	DELTA BT14096 MONITOR	SHOWER VALVE AND HEAD	0.5" INCH WATER CONNECTIONS	PRESSURE BALANCE MIXING VALVE FOR USE WITH MULTICHOICE UNIVERSAL ROUGH VALVE BODY. INSTALL AT 80 INCHES ABOVE FINISHED SHOWER FLOOR.	1
NOTES	MODEL	DESCRIPTION	CONNECTIONS	REMARK	
1		BRASS BODY, SINGLE HANDLE, CHROME PLATED ESCUTCHEON, ARM, HANDLE AND SHOWER HEAD			

PUMP SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
CP 1	BELL & GOSSETT NBF-12U	CIRC. PUMP	UNION		
SP 1	LIBERTY PUMPS SPAC-457	BASEMENT SUMP PUMP	4" DRAIN 1.5" PUMP DISCHARGE	40 GPM @ 10' LIFT, 1/2 HP, 115VAC, 7.3 AMPS, WITH 18" X 30" DEEP SUMP PIT WITH AIRTIGHT LID, ALM-2 HIGH LEVEL ALARM, WITH AUDIO AND VISUAL	1
NOTES					
1				PROVIDE WITH DISCHARGE CHECK VALVE AND UNION FOR PUMP SERVICING	

TOILET SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
WC 1	AMERICAN STANDARD CADET PRO	WATER CLOSET	3 INCH WASTE 0.5 INCH SUPPLY	SIPHON JET TOILET, 1.6 GPF, ELONGATED 3" TANK TYPE FLUSH VALVE,	1,2 3,4
NOTES					
1	AMERICAN STANDARD 5321.110	TOILET SEAT WITH COVER	SS BOLTS TO TOILET	EVERCLEAN ELONGATED WHITE WITH SLOW CLOSE SNAP-OFF HINGES MICROBIAL PROTECTION.	
2				PROVIDE: CLOSET BOLTS, WAX RING, BRAIDED SUPPLY, 1/4 TURN STOP VALVE	
3				ANY SUBSTITUTION SHALL REQUIRE SIPHON-JET TYPE FLUSH DESIGN	
4				SEE PLUMBING GENERAL NOTES FOR SPECIFIC REQUIREMENTS FOR WATER STOPS	

LAVATORY SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
L 1	AMERICAN STANDARD AQUALYN	LAVATORY, VANITY MOUNT	1.25" WASTE	LAVATORY, COUNTER TOP: 20"x17", VITREOUS CHINA, 8" CENTERSET, 3-HOLE, SELF-RIMMING, FRONT OVERFLOW, 5-5/9" DEPTH.	1 2 3
NOTES					
1	AMERICAN STANDARD BECKLOW GOOSENECK	FAUCET 2-HANDLE	0.5" COLD WATER 0.5" HOT WATER	QUARTER TURN, CERAMIC CARTRIDGES, METAL BODY CHROME FINISH, WITH 1-1/4" TAILPIECE AND PUSH DRAIN	
2				ALL FAUCET SUBSTITUTIONS SHALL REQUIRE CERAMIC DISC CARTRIDGES	
3				SEE PLUMBING GENERAL NOTES FOR SPECIFIC REQUIREMENTS FOR WATER STOPS	

SINK SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
S 1	ELKAY LR3321	DOUBLE BOWL SINK	3/32"x21"D OVERALL 3 - 1/2" DRAIN 7 7/8" DEEP	#18 GAUGE 304 STAINLESS STEEL THREE HOLE, WITH STRAINER SIDE AND BOTTOM SOUND DEADENING PADS	1,2 3
SS 1	ZURN MODEL 14 UTILATUB	MULTI-PURPOSE SINK	0.5" COLD WATER 0.5" HOT WATER	MODEL 93.600 FAUCET, CHROME FAUCET WITH 7" SWING SPOUT, AND STEEL LEGS	1
NOTES					
1	DELTA NICOLI 19867KF	KITCHEN FAUCET	0.5 INCH COLD/HOT WATER	SINGLE HOLE, PULL-DOWN GOOSENECK, SINGLE HANDLE, CHROME FINISH	
2				PROVIDE: Z8743 DRAIN, Z8400-PC PTRAP, W/CLEAN-OUT	
3				SEE PLUMBING GENERAL NOTES FOR SPECIFIC REQUIREMENTS FOR WATER STOPS	

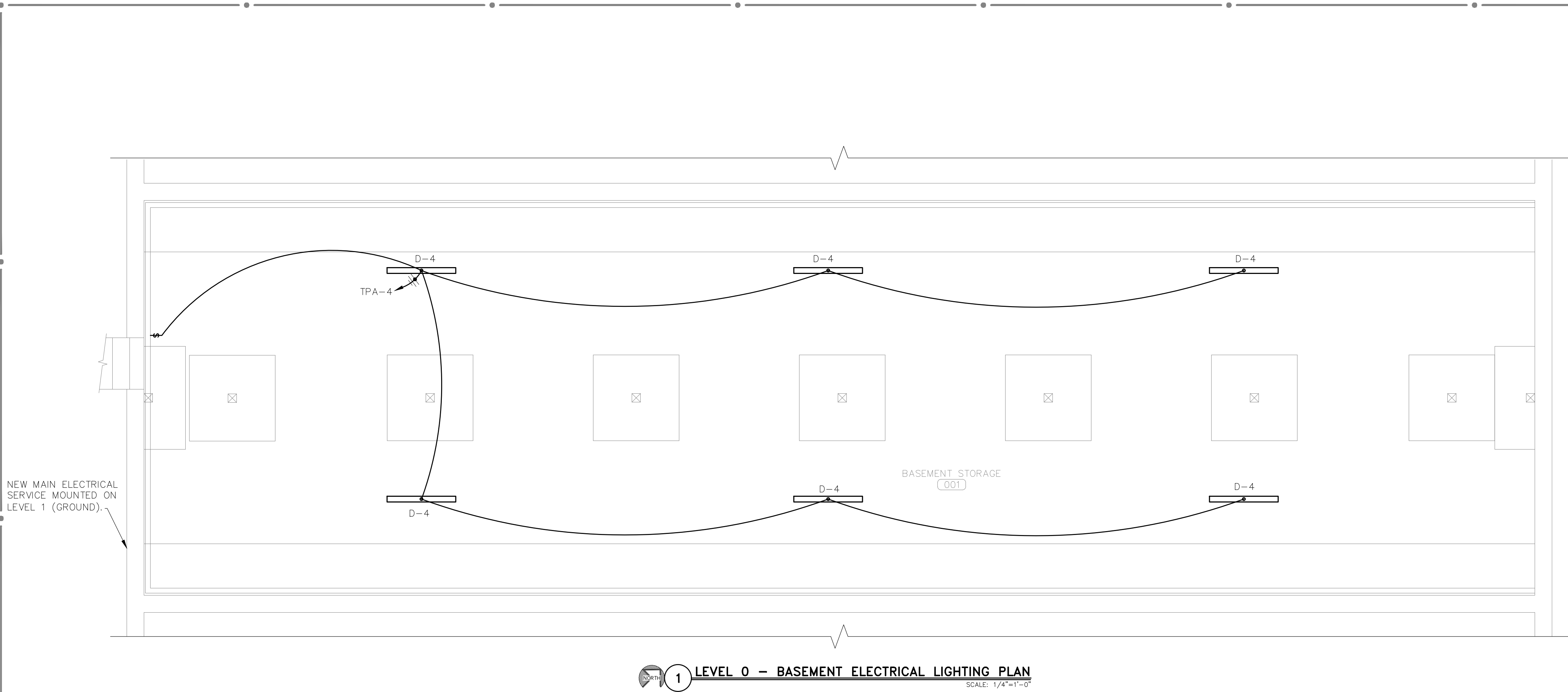
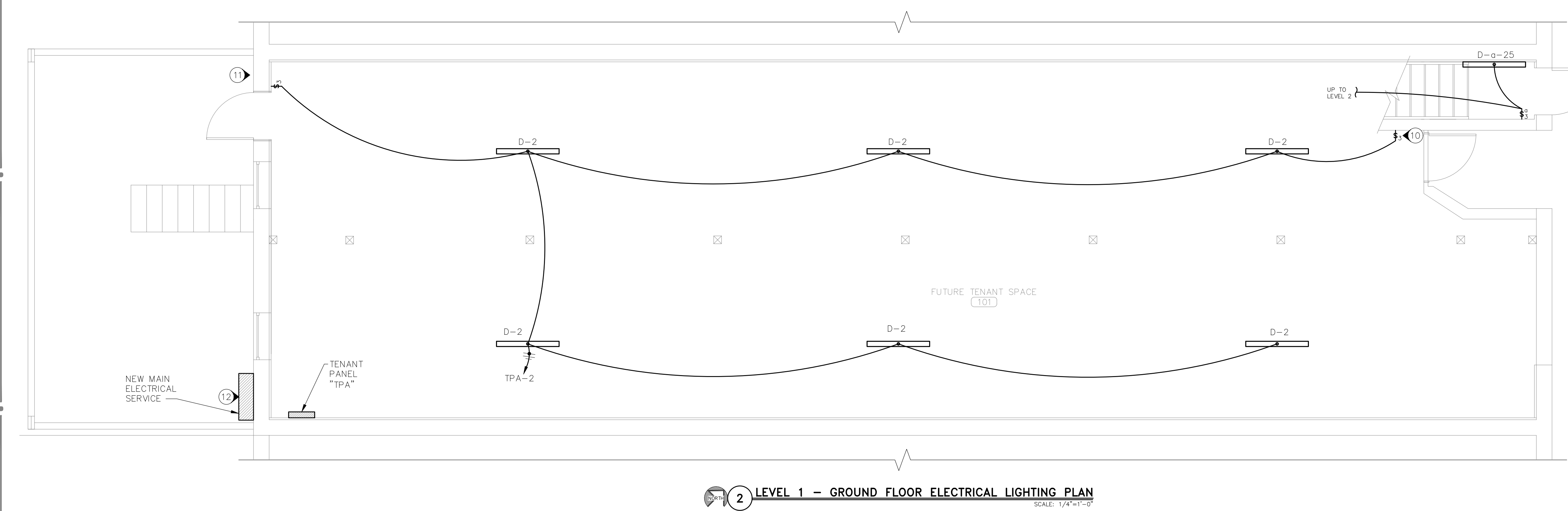
VALVE SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARK	NOTES
BFP 1	WATTS LF009-QT -S-U	RPZ TYPE BACKFLOW PREVENTER	3/4" SIZE 2ND FLOOR APARTMENT SERVICE	LEAD FREE CONSTRUCTION QUARTER TURN BALL VALVES AND UNION CONNECTIONS PROVIDE WITH STRAINER AND AIR GAP FITTING	
BFP 2	WATTS LF009-QT -S-U	RPZ TYPE BACKFLOW PREVENTER	1" SIZE FIRST FLOOR SERVICE	LEAD FREE CONSTRUCTION QUARTER TURN BALL VALVES AND UNION CONNECTIONS PROVIDE WITH STRAINER AND AIR GAP FITTING	
PRV 1	WATTS LF25AUB	PRESSURE REGULATOR	3/4" SIZE BOTH SERVICES	WITH INTEGRAL STRAINER, AND DISCHARGE GAUGE SET DISCHARGE PRESSURE TO 60 PSI (ADJUSTABLE)	
WB 1	OATEY QUADRO	WASHER BOX	0.5" COLD WATER 0.5" HOT WATER	WASHER VALVE: 1/4 TURN BRASS BALL VALVE WITH INTEGRAL WATER HAMMER ARRESTORS	
IMB 1	SIoux CHIEF 696-1010MF	VALVE, ICE MAKER OUTLET BOX	0.5" MPT-FSWT	VALVE: ICE MAKER OUTLET BOX WITH BALL VALVE AND AIR CUSHION HAMMER ARRESTER.	
WHA 1	SIoux CHIEF 652-AS	WATER HAMMER ARRESTER	VARIOUS 1/2"-2" SWEAT	WATER HAMMER ARRESTER (AIR CUSHION)	
WH 1	ZURN Z1321-C	HOSE BIBB (WALL HYDRANT)	3/4" COLD WATER	HOSE BIBB (WALL HYDRANT): ECOLOTROL, KEY OPERATED, ENCASED, NON-FREEZE, ANTI-SIPHON, AUTO DRAINING	
HB 1	ZURN Z1341-P34	HOSE BIBB (WALL HYDRANT)	3/4" COLD WATER	HOSE BIBB (WALL HYDRANT) ANTI-SIPHON	
NOTES					
1				BACKFLOW PREVENTER ASSEMBLIES ARE REQUIRED TO BE NSF 61/NSF 372 LEAD CONTENT COMPLIANT	

DRAIN WASTE AND VENT SCHEDULE					
TAG	MODEL	DESCRIPTION	CONNECTIONS	REMARKS	NOTES
FD 1	JAY R SMITH 2005Y-A	CAST IRON FLOOR DRAIN	SEE PLANS FOR PIPE SIZE	PROVIDE WITH NO-HUB CONNECTION ROUND NICKEL-BRONZE STRAINER TOP	1
FS 1	JAY R SMITH 330-YOX	FLOOR SINK 12"x12" TOP 8" DEEP	SEE PLANS FOR PIPE SIZE	CAST IRON BODY, WHITE ACID RESISTANT PORCELAIN ENAMEL INTERIOR, TOP, AND GRATE	1
FCO 1	JAY R SMITH 4020S	FLOOR CLEANOUT	SEE PLANS FOR PIPE SIZE	CAST IRON BODY, NICKEL-BRONZE TOP (ROUND). NO-HUB CONNECTION, ABS PLUG, CAST IRON BODY FLANGE AS REQUIRED	
SD 1	JAY R SMITH 9667-SLG	SHOWER DRAIN	2" NO HUB	304 STAINLESS 24" LONG	
NOTES					
1				PROVIDE WITH PROVENT TRAP GUARD, OR EQUIVALENT	

WATER HEATER SCHEDULE					
TAG	MFG/MODEL	DESCRIPTION	CONNECTIONS	REMARKS	NOTES
DWH 1	RHEEM ELDS2 50 GALLONS	WATER HEATER ELECTRIC	0.75" INLET/OUTLET TOP TAPS 240 VAC, 4500 WATTS	WATER HEATER: TANK TYPE, NON-SIMULTANEOUS ELEMENT OPERATION. PROVIDE WITH T&P VALVE AND PLASTIC DRIP PAN	1
ET 1	WATTS PLT-5	TANK EXPANSION	3/4" NPT	TANK: EXPANSION. POTABLE WATER, POLYPROPYLENE LINER, FLEXIBLE BUTYL DIAPHRAGM, ADJUSTABLE, PRE-CHARGED, 50 GALLON MAX	

GARBAGE DISPOSAL SCHEDULE					
TAG	MODEL	DESCRIPTION	MOTOR	REMARKS	NOTES
GD 1	INSINKERATOR BADGER 1	GARBAGE DISPOSAL	1/3 HP, 120 V	PROVIDE WITH POWER CORD AND PLUG	

WATER SOFTENER SCHEDULE					
MARK	MFG/MODEL	DESCRIPTION	CONNECTIONS	SPECIFICATION	
WS 1	WATER RIGHT IM-1054	WATER SOFTENER	1.0 INCH	WATER SOFTENER AND BRINE TANK 1.5 CU. FT. MEDIA, 18" DIA. X 33" HIGH BRINE TANK 5 GPM @3.8 PSI NOMINAL, 14.3 GPM @ 15 PSI PEAK	



- NOTES
- N

INDICATES KEYED NOTES

1

ALL EXPOSED LINE VOLTAGE WIRING SHALL BE PULLED IN PROPERLY SIZED CONDUIT (EMT) WITH APPROVED FITTINGS. ALL WIRE IS TO BE COPPER. ALL CONDUIT IS TO BE RUN NEATLY AND PARALLEL TO BUILDING LINES. INSTALL PULL BOXES ON ANY RUNS THAT REQUIRE MORE THAN 360° WORTH OF BENDS. USE OF MC CABLE IN CONCEALED AREAS (WALLS AND HARD CEILINGS ONLY) OF THE BUILDING IS ALLOWED BUT MUST BE SUPPORTED PER NEC REQUIREMENTS. ELC MAY REUSE EXISTING CONDUIT IF IT IS FEASIBLE AND PER CODE. USE EMT AND JUNCTION BOXES WITH AN MC WHIP OF 6 FEET OR LESS FOR ALL EXPOSED CEILINGS AND ALL LAY-IN CEILINGS.

2

ALL LINE VOLTAGE WIRE SHALL BE TYPE THHN OR THWN, #12 COPPER OR LARGER, UNLESS OTHERWISE NOTED. ANY 20A LOADS FED FURTHER THAN 75' SHALL BE INCREASED TO A #10 COPPER CONDUCTOR.

3

ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE LOCAL BUILDING CODES AND REGULATIONS AND CURRENT NEC. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ELECTRICAL PERMITTING FEES AND COORDINATION WITH LOCAL AUTHORITY ON INSTALLATION INSPECTIONS. GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A MINIMUM OF ONE YEAR FROM FINAL ACCEPTANCE UNLESS OTHERWISE STATED IN CONSTRUCTION SPECIFICATIONS.

4

A GREEN INSULATED GROUNDING CONDUCTOR SHALL BE INSTALLED TO ALL ELECTRICAL DEVICES AND SOLIDLY CONNECTED TO THE METAL FRAME OF THE DEVICE.

5

SEE LIGHT FIXTURE SCHEDULE ON SHEET E102.

6

COVER PLATES IN ALL AREAS SHALL BE NYLON. ALL DEVICES SHALL BE SPECIFICATION GRADE AND WHITE IN COLOR. DIMENSIONS GIVEN AS (XX") IS TO CENTERLINE OF DEVICE. ALL LIGHT SWITCHES ARE AT 48" AFF TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.

7

ALL MOTOR CONNECTIONS ARE TO BE WITH FLEXIBLE CONDUIT, NOT TO EXCEED 6' IN LENGTH (UNLESS NOTED OTHERWISE OR REQUIRED BY THE NEC).

8

COORDINATE WITH OWNER ON EXACT ELECTRICAL PANEL LOCATION. ELECTRICAL PANELS ARE TO HAVE COPPER BUSSING.

9

ELC TO RUN ALL POWER AND LIGHTING CIRCUITS IN THE BASEMENT AND LEVEL 1 TO PANEL "TPA" UNLESS SPECIFIED OTHERWISE.

10

COORDINATE LOCATION OF SWITCH WITH WALL LOCATION.

11

ELC TO ENSURE ALL EXISTING ELECTRICAL SERVICE EQUIPMENT, WIRE, CONDUIT, AND DISCONNECT SWITCHES HAVE BEEN REMOVED FROM THIS AREA AND BACK TO THE POLE MOUNTED TRANSFORMER TO THE NORTH.

12

NEW 500 AMP ELECTRICAL SERVICE PANEL AND METERS. SEE SHEET E501.

13

IF ANY MECHANICAL, PLUMBING, OR ELECTRICAL EQUIPMENT SPECIFIED IN THE DRAWINGS IS SUBSTITUTED BY A CONTRACTOR, THAT CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE EQUIPMENT'S ELECTRICAL PROTECTION PER THE MANUFACTURER'S NAMEPLATE, AND THE CURRENT NEC, ALONG WITH ALL EXPENSES INCURRED DUE TO SAID SUBSTITUTION. THE CONTRACTOR WHO IS PROVIDING THE SUBSTITUTION SHALL COORDINATE WITH ALL DISCIPLINES AFFECTED BY THIS CHANGE.

ELECTRICAL LEGEND	
<div><div><div>FIXTURE TYPE</div><div>SWITCH DESIGNATION</div><div>CIRCUIT NUMBER</div></div></div>	
<div><div><div>F-g-12</div><div><div></div></div></div></div>	SQUARE RECESSED CEILING MOUNT FIXTURE
<div><div><div></div><div></div></div></div>	ROUND RECESSED CEILING MOUNT FIXTURE
<div><div><div></div></div></div>	CEILING MOUNT FLUSH FIXTURE
<div><div><div></div></div></div>	CEILING MOUNT STRIPLIGHT
<div><div><div></div></div></div>	UNDERCABINET LIGHT FIXTURE
<div><div><div></div></div></div>	CEILING MOUNTED FAN OR FAN LIGHT SEE FIXTURE SCHEDULE FOR SPECIFICATION
<div><div><div></div></div></div>	WALL MOUNTED SCONCE FIXTURE
<div><div><div></div></div></div>	WALL MOUNT FIXTURE
<div><div><div></div></div></div>	SWITCHES—SINGLE POLE, 3 WAY, 4 WAY STANDARD MOUNTING HEIGHT 48" AFF
<div><div><div></div></div></div>	DIMMER SWITCH, STANDARD 48" AFF
<div><div><div></div></div></div>	DELAY TIMER SWITCH, STANDARD 48" AFF
<div><div><div></div></div></div>	NEW SURFACE MOUNTED PANELBOARD
<div><div><div></div></div></div>	NEW FLUSH MOUNTED PANELBOARD
<div><div><div></div></div></div>	HOME RUN—SHORT STROKES INDICATE PHASE OR SWITCHED WIRES, LONG STROKE INDICATE NEUTRAL, LONG WITH DOT INDICATE GROUND

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DUNKLIN APARTMENT RENOVATION

CLARK RENTAL PROPERTIES

126 EAST DUNKLIN STREET

JEFFERSON CITY, MISSOURI 65101

STATE OF MISSOURI
JAMES L. DOVE
NUMBER
PE-2002018944
10-01-2026
PROFESSIONAL ENGINEER

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Checked By: JLD

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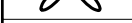
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BASEMENT AND
GROUND FLOOR
ELECTRICAL
LIGHTING PLAN

Date: 2026.10.01

E101

LIGHTING FIXTURE SCHEDULE										
FIXTURE DATA					LAMP DATA				REMARK	
	TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	MTG ①	VOLTS VA	LAMP QTY	WATTS TYPE ②		
	A	6" FLAT LED SQUARE WAFER	JUNO LIGHTING	WF6SQSMAL041SWW5 90CRIMWM6	R	120 13	1	13 LED	SET INITIAL COLOR TEMP TO 3000K	
	B	FMDR LED FLUSH MOUNT SERIES	JUNO LIGHTING	FMDR 17IN SWW5 90CRI MB	SC	120 25	1	25 LED	SUPPLY WITH ACUITY SENSOR FORWARD PHASE PADDLE DIMMER (WPD WH)	
	C	6" FLAT LED ROUND WAFER	JUNO LIGHTING	WF6SWW590CRIMWM6	R	120 13	1	13 LED	SET INITIAL COLOR TEMP TO 3000K	
	D	LED STRIPLIGHT	JUNO LIGHTING	ZL1D L48 ASR 3000LM FST MVOLT 35K 80CRI WH	SC	120 30	1	30 LED		
	E	UCES LED SWITCHABLE WHITE UNDERCABINET	JUNO LIGHTING	USES 18IN SWW5 90CRI WH M6	S	120 13	1	13 LED	DIMMER TO BE MAESTRO MAELV SERIES, MRF2-6ELV	
	F	OLINDA FLUSH MOUNT CEILING FAN 52"	SMAFAN	CFW524E5-L11-B2-1-FM	SC	120 48	1	48 LED	BLACK FINISH - WALL SWITCH INCLUDED	
	G	605-W LUMINOUS WALL SCONCE	SHAPER LIGHTING	605-25-W-L3/830-UNV-MW	W	120 20	1	20 LED	MOUNT 6" ABOVE MIRROR-COORDINATE WITH OWNER	
	H	LUMARK CROSSTOUR SERIES	COOPER LIGHTING	XTOR2B-Y-PC1-EWP/XTOR	W	120 12	1	12 LED	MOUNT AT 8' AFF OR AS CLOSE AS POSSIBLE	
NOTE: ①	AC - AIRCRAFT CABLE		G - GROUND	R - RECESSED	ST - STEM		-			
MOUNTING STYLE	C - COVE		P - POLE	S - SURFACE	W - WALL		-			
	CH - CHAIN HUNG		PM - PENDANT MOUNT	SC - SURFACE CEILING	U - UNIVERSAL		-			
NOTE: ②	CF - COMPACT FLUORESCENT		PS - PULSE START	HPS - HIGH PRESSURE SODIUM	T - TUNGSTEN		-			
LAMP TYPE	FL - FLUORESCENT		MH - METAL HALIDE	IN - INCANDESCENT	XEN - XENON		-			
	H - HALOGEN		MV - MERCURY VAPOR	LED - LIGHT EMITTING DIODE			-			

FOR ALL LIGHT FIXTURES IN THIS SCHEDULE - THIS PART NUMBER OR EQUAL OR BY OWNER

SET ALL INSIDE LIGHTS TO 3000K IF AVAILABLE.

*=TYPE D FIXTURES IN THE STAIRWELL ARE TO BE SURFACE MOUNTED AT 7' AFF.

NOTES

N INDICATES KEYED NOTES

- SEE GENERAL NOTES ON SHEET E101.
- EXHAUST FAN ABOVE CEILING TO BE CIRCUITED WITH THE BATHROOM LIGHTS AND SHALL BE CONNECTED TO FAN DELAY TIMED SWITCH. LIGHTS GO OFF BUT FAN STAYS RUNNING FOR PRESET TIME. SET TIME DELAY TO 10 MINUTES. SWITCH TO BE AIRCYCLER SMART EXHAUST FAN DELAY TIMER OR EQUIVALENT.
- THIS SWITCH IS TO CONTROL GARBAGE DISPOSAL. SEE SHEET E-104.
- COORDINATE WITH MECHANICAL CONTRACTOR ON INSTALLATION OF EXHAUST FAN 3. SEE SHEET E104 FOR CIRCUITING.

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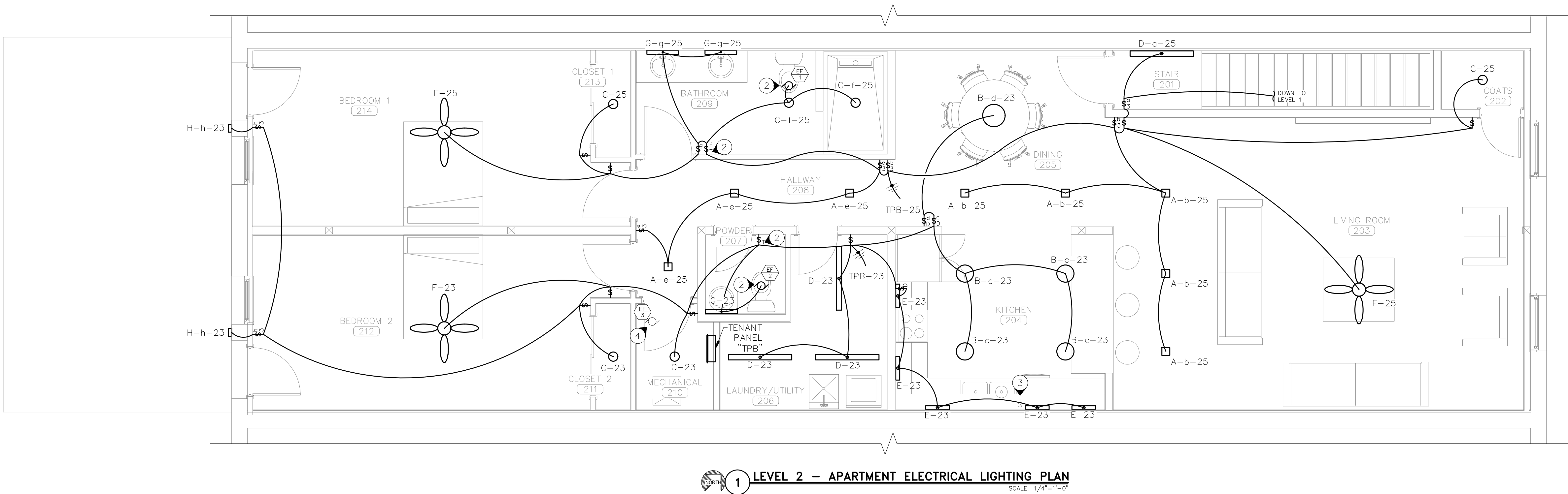
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LEVEL 2
APARTMENT
ELECTRICAL
LIGHTING PLAN

Date: 2026.10.01

E102

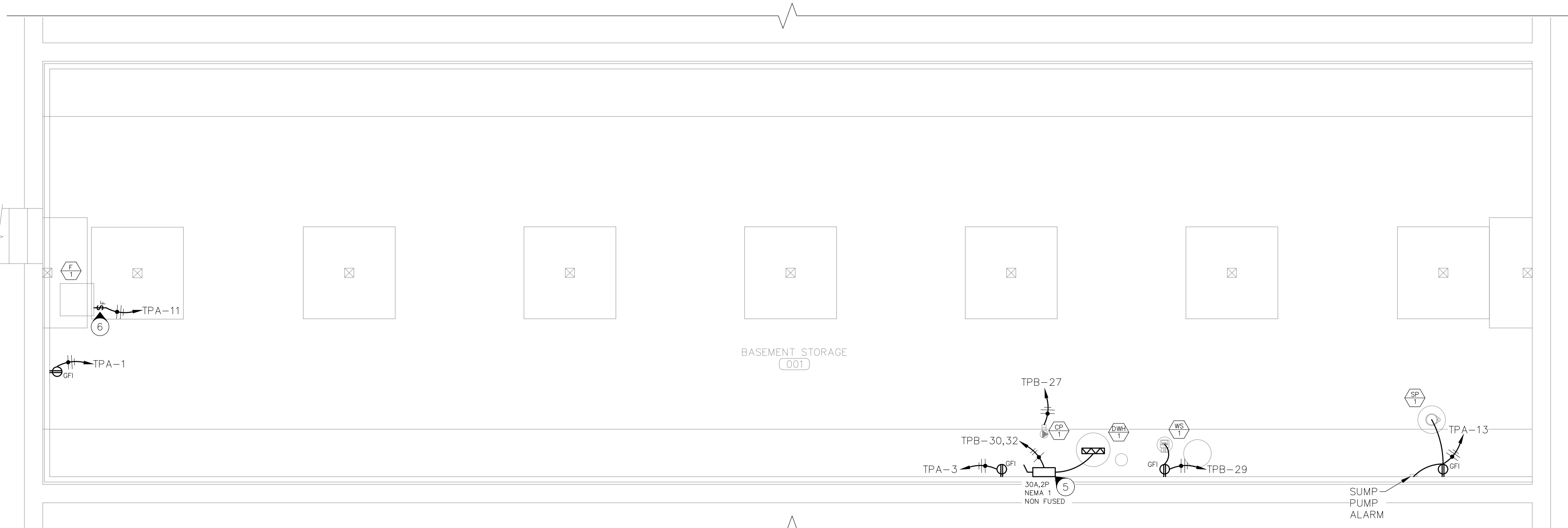


UNIT HEATER SCHEDULE				
MARK	MODEL	DESCRIPTION	SPECIFICATION	REMARK
UH-1	QMARK HEATER CWH1151DSF	WALL MOUNTED ELECTRIC HEATER	1500 WATTS 120V/1 PHASE 5120 BTUH 12 LBS	POWER ON/OFF SWITCH, MANUAL RESET THERMAL OVERHEAT PROTECTOR DISCONNECTS POWER PERMANENTLY LUBRICATED FAN MOTOR, TAMPER- PROOF PLUG FOR THERMOSTAT HOLE

NOTES

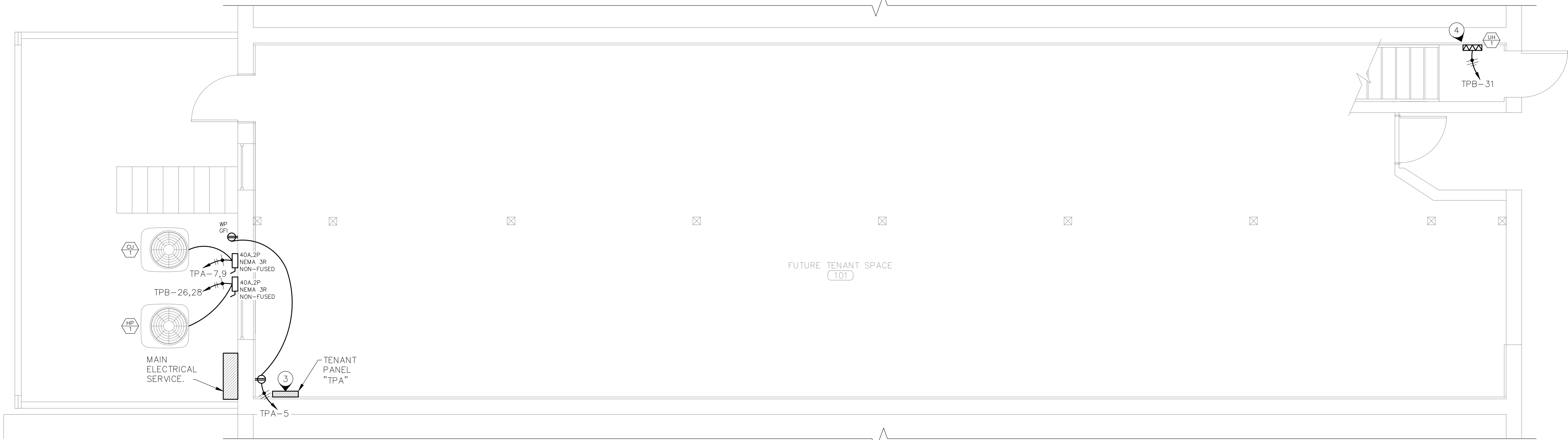
N INDICATES KEYED NOTES

- SEE GENERAL NOTES ON SHEETS E101.
- ALL GENERAL PURPOSE RECEPTACLES SHALL BE RECESSED, 2 POLE, 3 WIRE, GROUNDING TYPE 5-20R RATED FOR 20 AMPERE AND SHALL BE TAMPER RESISTANT. MOUNT AT 18" AFF UNLESS OTHERWISE NOTED. COVER PLATES IN ALL AREAS SHALL BE NYLON. ALL DEVICES SHALL BE SPECIFICATION GRADE AND WHITE IN COLOR.
- INSTALL SCHNEIDER ELECTRIC NQ42L2C 225A, 240V, 1 PHASE, 42 SPACE, COPPER BUS, MAIN LUG ONLY ELECTRICAL PANEL OR APPROVED EQUAL. SEE RISER DETAIL 1 ON SHEET E501 FOR SERVICE CONNECTION.
- ELC TO SUPPLY AND INSTALL A QMARK CWH1151DSF IN-WALL 1500 WATT ELECTRIC HEATER OR EQUIVALENT IN STAIRWELL. SEE UNIT HEATER SCHEDULE ON THIS SHEET.
- ELC TO PROVIDE 30A/2P, NEMA 3R, NON-FUSED DISCONNECT SWITCH FOR ELECTRIC WATER HEATER.
- ELC TO PROVIDE AND INSTALL BUSSMANN SSU FUSED DISCONNECT TO NEW FURNACE. SIZE PER MANUFACTURER'S NAME PLATE DATA. MOUNT TO SIDE OF UNIT IN HANDY BOX AND CIRCUIT AS SHOWN.



1 LEVEL 0 - BASEMENT ELECTRICAL POWER PLAN
SCALE: 1/4"=1'-0"

ELECTRICAL LEGEND	
	DUPLEX RECEP.- 120V GROUNDING TYPE STANDARD MOUNTING HEIGHT 18" AFF
	DUPLEX RECEP.- 120V GROUND FAULT TYPE
	DUPLEX RECEP.- 120V GFI: WEATHER PROOF
	DUPLEX RECEP.- 120V GFI PROTECTED
	FUSED SWITCH, MOUNTED ON DEVICE
	ELECTRIC HEATING EQUIPMENT
	DISCONNECT SWITCH-BY ELC
	NEW SURFACE MOUNTED PANELBOARD
	HOME RUN-SHORT STROKES INDICATE PHASE OR SWITCHED WIRES, LONG STROKE INDICATE NEUTRAL, LONG WITH DOT INDICATE GROUND



2 LEVEL 1 - GROUND FLOOR ELECTRICAL POWER PLAN
SCALE: 1/4"=1'-0"

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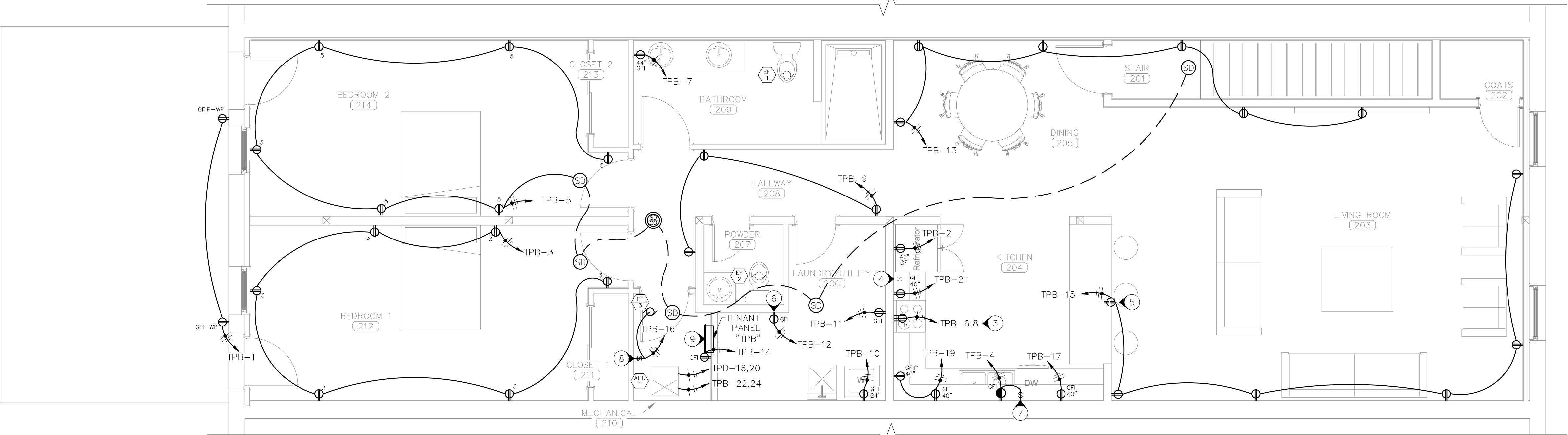
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Scale: 1/4"=1'-0"

BASEMENT AND GROUND FLOOR ELECTRICAL POWER PLAN

Date: 2026.10.01

E103



1 LEVEL 2 – APARTMENT ELECTRICAL POWER PLAN
SCALE: 1/4"=1'-0"

NOTES

(N) INDICATES KEYED NOTES

- SEE GENERAL NOTES ON SHEETS E101.
- ALL GENERAL PURPOSE RECEPTACLES SHALL BE RECESSED, 2 POLE, 3 WIRE, GROUNDING TYPE 5-20R RATED FOR 20 AMPERE AND SHALL BE TAMPER RESISTANT. MOUNT AT 18" AFF UNLESS OTHERWISE NOTED. COVER PLATES IN ALL AREAS SHALL BE NYLON. ALL DEVICES SHALL BE SPECIFICATION GRADE AND WHITE IN COLOR.
- CONTRACTOR TO VERIFY EQUIPMENT WITH OWNER. SIZE CIRCUITING AND BREAKER PER MANUFACTURER'S NAME PLATE DATA FOR EQUIPMENT CHOSEN.
- THIS SWITCH TO CONTROL UNDER-CABINET LIGHTS. SEE SHEET E-102.
- RECEPTACLE TO BE MOUNTED ON ISLAND WALL UNDERNEATH THE COUNTERTOP AT 18" AFF.
- OUTLET FOR FUTURE MODEM/ROUTER. OWNER TO COORDINATE WITH UTILITY PROVIDER DIRECTLY.
- THIS SWITCH IS TO CONTROL GARBAGE DISPOSAL.
- CONTRACTOR TO LABEL SWITCH, "EF-3 DISCONNECT. KEEP ON". PLACE SWITCH AROUND 60" AFF.
- INSTALL SCHNEIDER ELECTRIC NQ42L2C 225A, 240V, 1 PHASE, 42 SPACE, COPPER BUS, MAIN LUG ONLY ELECTRICAL PANEL OR APPROVED EQUAL. SEE RISER DETAIL 1 ON SHEET E501 FOR SERVICE CONNECTION.
- RECEPTACLE TO BE MOUNTED ON ISLAND WALL UNDERNEATH THE COUNTERTOP AT 18" AFF.
- CONTRACTOR SHALL PROVIDE FIRE RATING AT ALL FIRE RATED PENETRATIONS.

ELECTRICAL LEGEND

	DUPLEX RECEP.- 120V GROUNDING TYPE STANDARD MOUNTING HEIGHT 18" AFF
	DUPLEX RECEP.- 120V GROUND FAULT TYPE
	DUPLEX RECEP.- 120V GFI: WEATHER PROOF
	DUPLEX RECEP.- 120V GFI PROTECTED
	SWITCHED DUPLEX GROUND F. RECEPTACLE
	UNDER-COUNTER RECEPTACLE
	RANGE OUTLET-60 AMP 2 POLE *
	MOTOR- SEE EQUIPMENT DATA SCHEDULE
	DISCONNECT SWITCH-BY ELC
	SMOKE DETECTOR
	COMBO SMOKE/CARBON MONOXIDE DETECTOR
	NEW FLUSH MOUNTED PANELBOARD
	JUNCTION BOX
	HOME RUN-SHORT STROKES INDICATE PHASE OR SWITCHED WIRES, LONG STROKE INDICATE NEUTRAL, LONG WITH DOT INDICATE GROUND
	FIRE ALARM POWER/SIGNAL WIRE



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

LEVEL 2
APARTMENT
ELECTRICAL
POWER PLAN

Date: 2026.10.01

E104

