GENERAL DEMOLITION NOTES

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4. DELIVER DEMOLISHED EQUIPMENT, WIRING, ETC. TO OWNER OR DISPOSE OF, AS DIRECTED BY OWNER.
5. FIELD VERIFY EXACT LOCATION OF ALL EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT INDICATED ON DRAWINGS.
6. ALL ITEMS TO BE RE-USED OR RELOCATED SHALL BE CLEANED, REPAIRED, AND RESTORED TO LIKE NEW CONDITION PRIOR TO RE-USE.

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3. ALL DUCTWORK TAKEN OUT OF SERVICE SHALL BE REMOVED.
4. COORDINATE CUTTING, PATCHING OF EXISTING WALLS, CEILINGS, ROOF AND FLOORS AFFECTED BY MECHANICAL DEMOLITION WITH G.C.

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3. WHERE ABANDONED FEEDERS AND BRANCH CIRCUITS ARE CONCEALED WITHIN WALLS, FLOORS AND HARD CEILINGS THAT ARE TO REMAIN, REMOVE ALL WIRING AND CAP CONDUITS AT BOTH ENDS.
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5. ALL EQUIPMENT, FIXTURES, RACEWAY, WIRING AND DEVICES WHICH ARE REMOVED SHALL BE REMOVED FROM THE JOB SITE BY THIS CONTRACTOR, UNLESS DIRECTED OTHERWISE BY THE ARCHITECT OR OWNER'S REPRESENTATIVE. CONFORM TO ALL LAWS AND ORDINANCES IN EFFECT CONCERNING THE PROPER DISPOSAL OF LUMINAIRES AND LAMPS.
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DEMO NOTES BY SYMBOL

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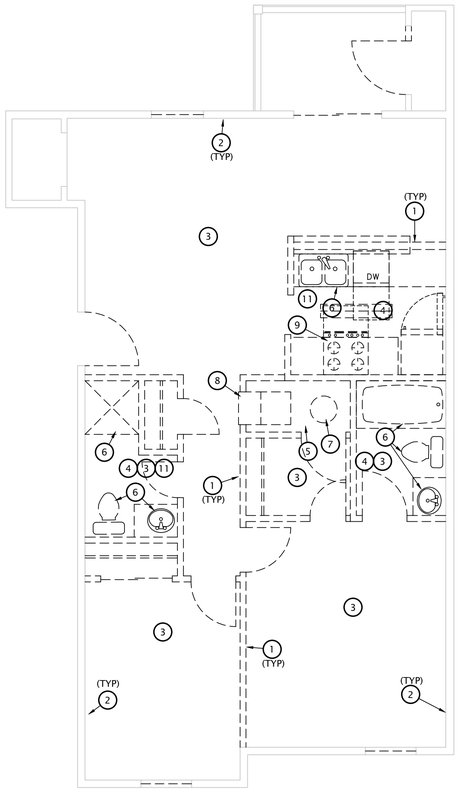
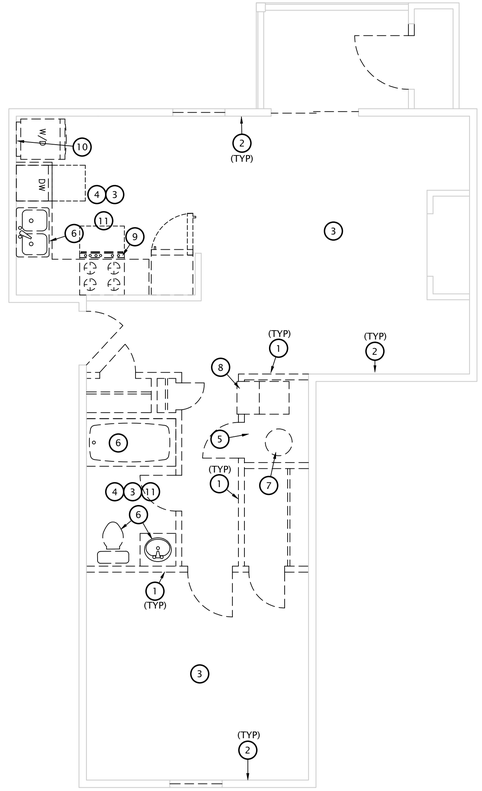


3 UNIT TYPE 'C' M/E DEMO PLAN
1/4" = 1'-0"



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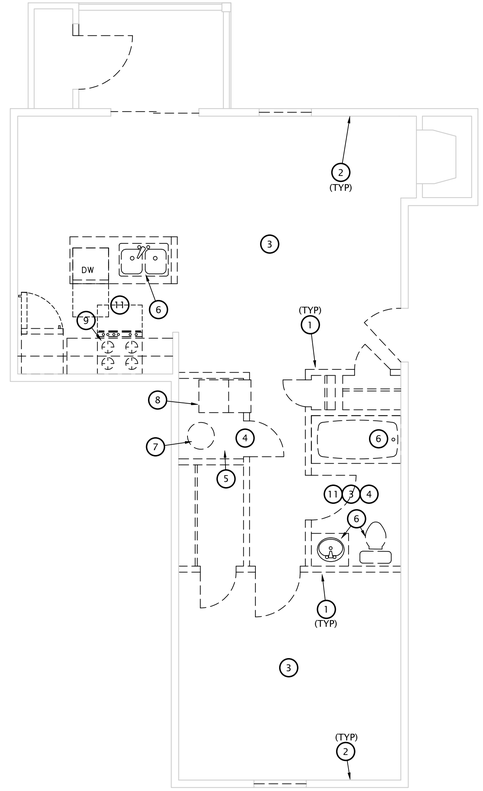

1 UNIT TYPE 'A' M/E DEMO PLAN
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Project 26032 **Apr. 2026**

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JONES GILLAM RENZ

BRIDGEPORT APARTMENTS

REMODEL, REHABILITATION APARTMENTS

KANSAS CITY, MISSOURI

04/24/2026
STATE OF MISSOURI
TIMOTHY J. SCHWARTZ
NUMBER E-24720
REGISTERED PROFESSIONAL ENGINEER

DATE: 04–24–2026
JOB: 21–3157
SHEET: ME1.1

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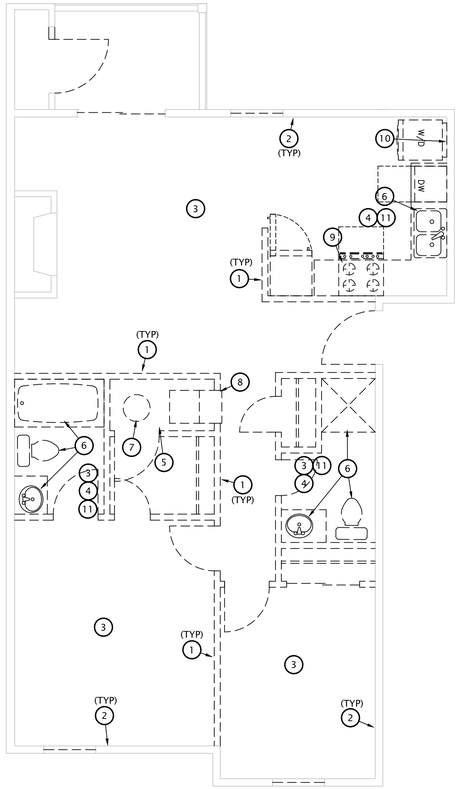
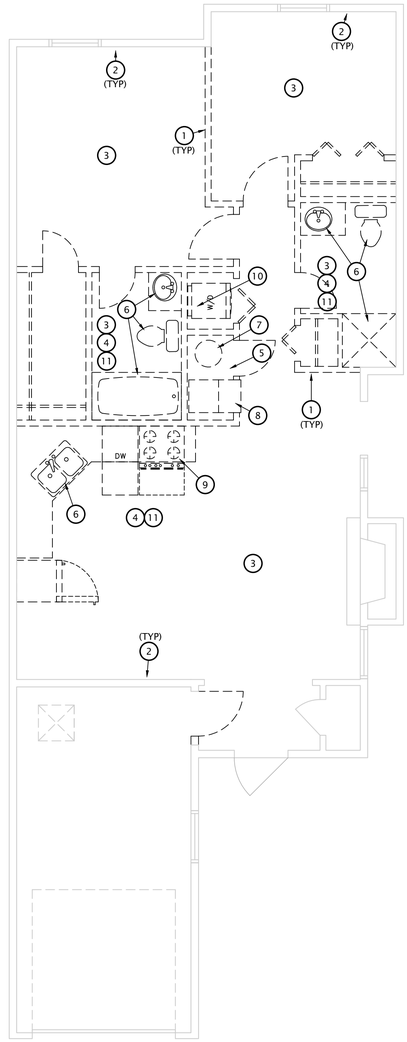
SEE ME1.1 FOR NOTES BY SYMBOL



1 **UNIT TYPE 'D' M/E DEMO PLAN**
1/4" = 1'-0"



2 **UNIT TYPE 'E' M/E DEMO PLAN**
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ME1.2

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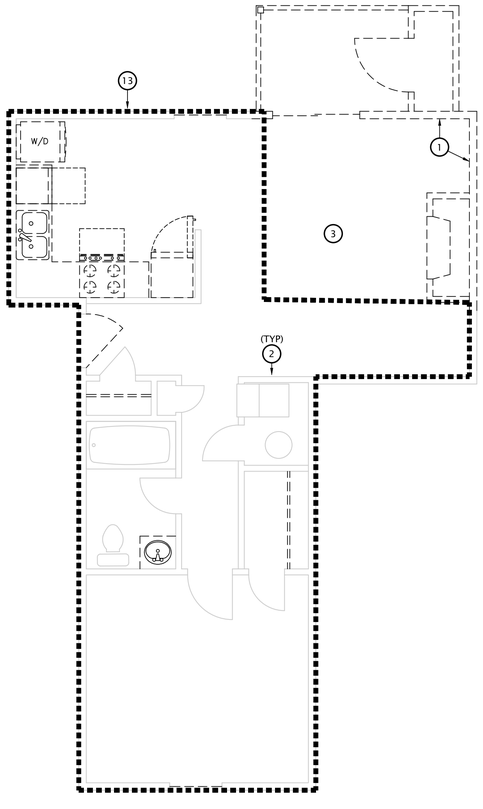

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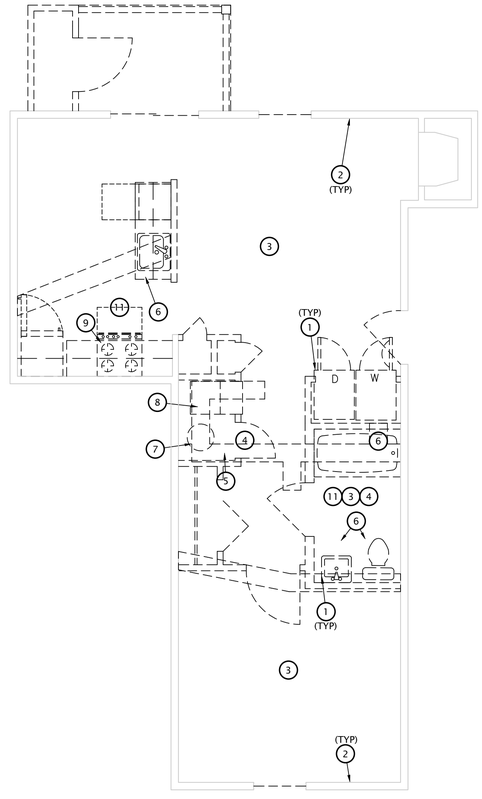

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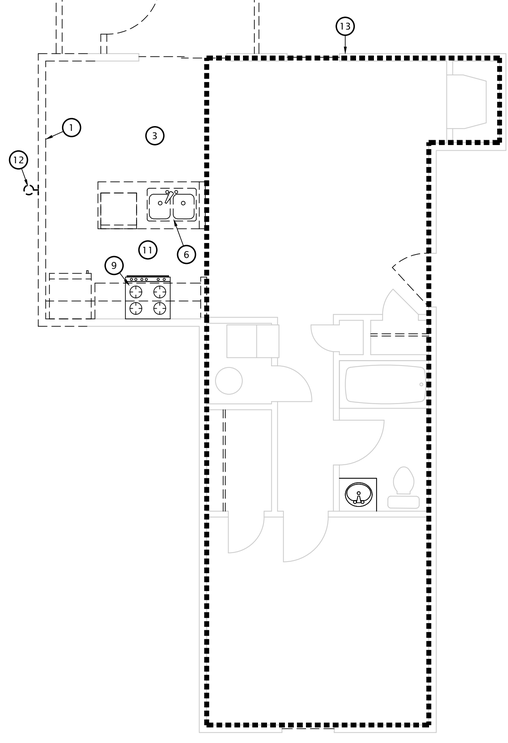

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DIVISION 15 - MECHANICAL SPECIFICATIONS

SECTION 15050 - BASIC MECHANICAL MATERIALS AND METHODS

15050.01 The drawings and general provisions of the Contract, including General Conditions, Supplementary General Conditions, and General Requirements apply to the work specified in DIVISION 15 - MECHANICAL.

15050.02 The Mechanical Contract includes all labor, materials and equipment required for the complete mechanical systems as shown and herein specified.

15050.03 This contractor is responsible for reviewing ALL drawings to determine extent of coordination required with other trades. Additional offsets, bends, material will not be accepted as a result of un-coordinated work.

15050.04 This contractor is required to perform work in a professional and quality workman like manner. This includes, but is not limited to:
- a. Make vertical elements plumb and horizontal elements level unless noted otherwise.
- b. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless noted otherwise.
- c. Protect work from damage and water during construction. Replace all equipment/material damaged or exposed to water during construction.
- d. Clean equipment, interior and exterior, at completion of construction and remove all temporary labels, stains and foreign substances.
- e. Protect HVAC ductwork from accumulating dirt and debris during construction and replace all HVAC filters at completion of construction

15050.05 Each major component of equipment shall have the manufacturer's name; address, model number and rating on a nameplate securely affixed.

15050.06 All equipment of one type (such as furnaces, condensing units, etc.) shall be the products of one manufacturer, unless otherwise specified.

15050.07 The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding. Where the quality of required material is not specified, the Contractor shall furnish a first class standard item as approved by the Architect/Engineer.

15050.08 Manufacturer's names are intended to establish type and quality of items to be provided via the contract.The materials, products, and equipment described in the specifications or on the drawings establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution. Listing of these manufacturers shall in no way be construed as a device intended to limit the bidders to those specifically listed.

15050.09 Electrical Characteristics for Mechanical Equipment: Equipment of higher electrical characteristics may be furnished provided such proposed equipment is approved in writing and connecting electrical services, circuit breakers, and conduit sizes are appropriately modified. If minimum energy ratings or efficiencies are specified, equipment shall comply with requirements.

15050.10 The Drawings are schematic only and are not intended to show the exact routing of piping, ductwork, etc. Final determination of routing shall be made at the jobsite, in coordination with other trades.

15050.11 Install all equipment in strict accordance with the manufacturer's recommendations.

15050.12 All work under this contract shall conform to the requirements of all applicable local, state, and federal code requirements. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

15050.13 All components, accessories, and installation required for a complete mechanical installation shall be provided. Where materials or labor are required for completion of a system, such material or labor shall be included as if fully specified herein.

15050.14 Periodically during construction and prior to Owner acceptance of the building, Contractor shall remove from the premises and dispose of all packing material and debris related to work performed under this Division.

15050.15 Before submitting his bid, the Contractor shall visit the actual location of the job and shall fully understand the scope of the work to be done and the conditions under which it is to be performed.

15050.16 The Mechanical Contractor shall be responsible for locating and setting his own pipe sleeves, and be well aware of the job progress to avoid unnecessary delay for setting of same.

15050.17 The Mechanical Contractor shall do all excavating and backfilling necessary to complete work under this contract. Lines shall be used to lay out the trenches for underground work. Trenches shall be of sufficient width and shall be cribbed or braced to prevent cave in or settlement. Trenches close to walls and columns of the building shall not be excavated without the Architect's prior consent. The bottoms of trenches shall be tamped hard and graded to secure the required fall before laying pipe. Bell holes shall be excavated so the pipe will rest on solid ground for its entire length. Hand backfill and tamp backfill into place at sides of pipes, leaving tops and joints exposed until pipe runs have been tested and approved.

15050.18 Notify the Engineer of errors, discrepancies, or omissions in the drawings and specifications before construction or fabrication of affected work, or failing such notice, be responsible for correction of such work without cost to the Owner, Architect, or Engineer.

SECTION 15055 SERVICES

15055.01 Provide the services as shown on plans and specified.

15055.02 Locate and mark all known utilities prior to proceeding with work.

15055.03 Should any existing utilities be damaged or disrupted, immediately notify Owner and repair to existing condition.

15055.04 Contractor shall pay any and all required utility service fees associated with this project.

15055.05 Contractor shall verify all utility requirements with the appropriate utility provider. Any work required by utility providers but not indicated on the drawings shall be provided as though fully specified.

15055.09 Water and sewer utilities are indicated on the drawings. Coordinate with Civil drawings.

SECTION 15060 PIPE AND FITTINGS

15060.01 Above Grade Piping and Fittings:
- A. Type L hard copper pipe with sweat type fittings and 50/50 solder shall be used for all discharge pipe from relief valves, condensate drain, and non-potable domestic water piping.
- B. Domestic water piping:
  1. Type L hard copper pipe with sweat type fitting and 95/5 lead free solder.
  2. If approved by owner, cross-linked polyethylene (PEX) with brass barbed fittings. All components shall be from same manufacturer, and installed in strict accordance with Manufacturer's instructions. System used must have been in production for a minimum of five years.

  All piping installed where subject to damage shall be copper.
- C. Service weight centrifugally cast iron soil pipe, bearing the mark of the Cast Iron Institute, with "NO HUB" joints shall be used for soil, waste and vent lines. All changes in direction shall be made by the use of 45 wyes, half wyes, long sweep l/4 bends, 1/6, 1/8, or 1/16 bends. Sanitary tees may be used where the changes in direction of flow is from horizontal to vertical. Where space conditions necessitate the use of short radius fitting, approval shall be obtained before installation. NOTE: WHERE PERMITTED BY LOCAL BUILDING CODES, ABOVE GROUND SANITARY WASTE AND VENT PIPING MAY BE SCHEDULE 40 PVC WITH SOLVENT WELDED JOINTS. ALL FITTINGS SHALL BE DRAINAGE PATTERN FITTINGS, AND NO PVC PIPING SHALL BE USED IN RETURN AIR PLENUMS.

15060.02 Below Grade Pipe and Fittings
- A. Schedule 40 PVC drain waste and vent piping with solvent welded joints shall be used for all soil, waste and vent lines. All changes in directions shall be made by the use of 45 wyes, half wyes, long sweep 1/4 bends, 1/6, 1/8, or 1/16 bends. Sanitary tees may be used where the changes in direction of flow are from horizontal to vertical. Where space conditions necessitate the use of short radius fitting, approval shall be obtained before installation.
- B. Water Piping:
  1. Copper Pipe: ASME B16.18, cast copper alloy or ASME B16.22 wrought copper and bronze with ASTM B 32, alloy Sn95 solder joints.
  2. PE Pipe: ASTM D2239, or ASTM D2447 Schedule 40, with ASTM D2609 PE fittings and mechanical joints with stainless steel clamp.

15060.03 Soil, Waste and Vent Piping
- A. The arrangement of the systems must be as direct as possible avoiding all unnecessary offsets. All pipe shall run as indicated on the drawings, unless some condition should arise which would make it necessary or seem advisable to alter same; in which case, the Architect or his representative must be consulted before making any change. Horizontal lines shall be graded at 1/8" per foot, unless noted otherwise. Where necessary, lines may pitch at 1/10" per foot when approved or noted.
- B. Every vent for traps shall be connected to the waste line by as short a connection as possible, but in no case shall such connections have a length greater than 2' in length, measuring horizontally from the center of the fixture to the vent. Horizontal vents shall connect into the main stack at least 18" above the highest fixture.
- C. Each fixture and piece of equipment requiring connection to the sanitary drainage system shall be equipped with a trap. Each trap shall be placed as near the fixture as possible and no fixture shall be double trapped. Combination drain/vent piping is acceptable where indicated and allowed by building codes.
- D. All under slab plastic piping shall be installed in strict compliance with building codes as well as all manufacturers' recommendations.

15060.04 Domestic Water Piping
- A. All runs of pipe shall be installed as shown on drawings, unless some condition should arise which would make it necessary or seem advisable to alter same; in which case, the Architect or his representative must be consulted before making any change.

15060.05 Refrigeration Piping
- A. All refrigerant piping shall be Type L ACR hard copper with silfos joints. All elbow fittings,except suction line oil traps, shall be long radius type. Suction line oil traps shall be comprised of short radius elbows to minimize the quantity of oil retained.
- B. All refrigerant lines shall be charged with nitrogen during all sweating and heating operations, and shall be evacuated with a vacuum pump prior to charging.

SECTION 15080 MECHANICAL INSULATION

15080.01 Insulate refrigerant suction lines with 3/4" foam pipe insulation, "Armacell Armaflex" or equivalent. Paint exterior insulation with two coats of "Armacell Armaflex" finish.

15080.02 Condensate drains from cooling coils shall be insulated with 1/2" thick preformed fiberglass pipe insulation.

15080.03 Insulate ductwork as scheduled. Duct dimensions indicated on the plans are free area.

Indoor Concealed Supply Duct: Insulate all rectangular and round sheet metal duct with 1-1/2" fiberglass Duct wrap with foil exterior vapor barrier
Indoor Concealed Return Duct: 1-1/2" fiberglass duct wrap with foil exterior vapor barrier
General Building Exhaust Duct: None Required
Outdoor Air Intake Ductwork: 1-1/2" fiberglass duct wrap with foil exterior vapor barrier.
Ductwork in unconditioned spaces: R-6
Ductwork outside building envelope: R-8

15080.04 Domestic hot water piping 3/4" or larger shall have R-3 insulation.

SECTION 15120 PIPING SPECIALTIES AND VALVES

15120.01 Valves shall be installed at locations shown and specified; the locations shall be accessible. All valves shall be installed with their stems or spindles horizontal or above.

15120.02 Provide unions where shown at all equipment connections and at other points where disconnection of piping will be required.

15120.03 Apollo bronze body ball valves, Series 70 or approved equal, with threaded or soldered end, shall be used in 3" and smaller copper and steel lines for domestic water duties. Provide with extended stem when used in insulated lines.

15120.04 Screwed or solder type ground joint unions shall be used on piping 2" and smaller.

15120.05 Unions shall not be installed in walls or partitions or above non accessible ceilings.

15120.06 Dielectric unions shall be used where copper lines connect to other types of materials.

15120.07 Provide chrome plated escutcheons on exposed pipes where they pass through walls and ceilings.

SECTION 15140 PIPING SUPPORTS, ANCHORS AND SEALS

15140.01 Provide pipe sleeves, hangers and supports.

15140.02 Pipe shall be securely supported from structure. Hangers shall be provided where required. No plastic hangers or straps shall be used.

15140.03 Pipe sleeves will be required in all pipe penetrations through exterior walls and floors. Sleeves shall be Schedule 5 steel pipe, field fabricated from minimum 16 gauge steel with 2" overlap at the seam.

15140.04 Space between sleeves and pipes in outside walls shall be filled or tightly caulked with oakum, butyl rubber, link seals or other approved equally effective material to resist the penetration of water. Pipe sleeve shall be sufficient diameter to provide approximately 1/2" clearance around pipe, and in the case of insulated pipe, approximately 1/2" around insulation.

15140.05 Sleeves shall be set no closer than three pipe diameters center to center, be set 3/4" past all wall surfaces, and securely anchored to the wall.

15140.06 Hanger and support spacing for horizontal steel and copper piping shall not exceed the following:

PIPE SIZE	STEEL PIPE	COPPER PIPE
1/2" - 1-1/4"	7'	5'
1-1/2" - 2"	9'	6'
2-1/2" - 3"	11'	10'

15140.07 Soil, waste, vent and drain pipe shall have a minimum of one hanger per pipe section at the joints and at changes in direction and branch connections.

15140.08 Spacing of supports and braces for exposed vertical piping shall not exceed the hanger spacing specified for horizontal pipe, unless otherwise indicated.

SECTION 15430 PLUMBING SPECIALTIES

15430.01 Provide Zurn, Smith, Wade, Josam, or approved equal cleanouts where shown. Cleanouts shall be the same size pipe for pipe 4" and smaller, and 4" for lines 4" and larger.

15430.02 Floor and exterior cleanouts shall be Zurn ZN-1400. Set in 12" x 12" x 4" concrete pad for exterior use.

15430.03 Wall cleanouts shall be "NO-HUB" caps behind Zurn Z1446 round stainless steel cover.

SECTION 15440 PLUMBING FIXTURES AND TRIM

15440.01 Provide complete, all fixtures indicated. All fixtures shall be set firm and true, connected to all pipe and ready for use. All fixtures shall be of one manufacturer throughout the entire installation, unless otherwise specified. Stop valves shall be provided on the water connections to all fixtures.

15440.02 Refer to plumbing fixture schedule on drawings. Fixtures from Eljer, American Standard, Crane, and Kohler are equally accepted provided comparable units are provided.

15440.03 Refer to elevations on the Architect's drawings for installation height of wall mounted fixtures.

15440.04 Plumbing trim utilized shall be provided with renewable seats and replaceable internal working components.

15440.05 All fixtures shall be substantially supported in an approved manner. Furnish and install adjustable carriers as required for all wall hung fixtures.

15440.06 All spaces between fixtures and finished surfaces shall be caulked and pointed square with an approved white silicone sealant resulting in a neat and smooth appearance.

15440.07 The contractor shall be responsible for the protection and cleanliness of all fixtures, equipment and accessories.

SECTION 15670 - A/C SYSTEMS

15670.01 Provide Trane, Lennox, York, or Carrier split system combinations as scheduled on the drawings.

15670.02 Blower coils shall be provided with helix-wound, nickel chrome electric resistance heat elements. Fans shall be multispeed with internal thermal protection and permanent lubrication. Units shall be furnished for single point electric connection with integral overcurrent protection.

15670.03 All system components shall be of same Manufacturer.

15670.04 Refrigerant coils shall be copper tube with mechanically bonded aluminum fins, complying with ARI 210/240. Provide reversing valve for heat pump operation.

15670.05 Filters shall be 1" thick throwaway type.

15670.06 Exterior units shall have steel housing with removable panels to access controls. Service valves, fittings and gage ports shall be on exterior of unit. Housing shall be finished with baked enamel.

15670.07 Compressors shall be hermetically sealed scroll type mounted on vibration isolators. Provide with crankcase heater. Motor shall be permanently lubricated and have thermal and current sensitive overload protection, start capacitor, relay, and contactor.

15670.08 Provide with programmable thermostats and all required control wiring.

SECTION 15890 SHEET METAL WORK

15890.01 Provide all sheet metal work for supply, return, and exhaust air systems. Provide all grilles, louvers, hand dampers, and all work required to make the job complete as shown on the drawings.

15890.02 All duct construction, gauges, methods of construction, and methods for hanging and supporting shall conform to SMACNA Standards applicable sections of the Mechanical Code.

15890.03 All ductwork shall be constructed of galvanized sheet steel to 2" SMACNA pressure class and Class "C" sealing.

15890.04 Make joints in rectangular ductwork airtight and patch or solder open corners.

15890.05 All round ductwork shall be 26 gauge galvanized "Snap Lock" pipe with all changes in direction made via adjustable elbows. All seams and connections shall be sealed with foil faced pressure sensitive tape. Silver-coated polyethylene cloth tape is not acceptable. All rectangular duct shall be 24 gauge galvanized sheetmetal. Duct sizes shown on drawings are air stream size.

15890.06 Provide Ventfabrics, Inc., "Metaledge Ventglass" canvas connections for all duct systems at connections to motorized equipment.

15890.07 Coordinate ductwork installation with other trades and verify the location of all light fixtures, pipes, beams, and other possible obstructions, and adjust routing of ductwork as required to accommodate same.

SECTION 15950 TESTING, ADJUSTING, AND BALANCING

15950.01 All testing and balancing work shall be performed in accordance with NEBB National Standards for Testing, Adjusting, and Balancing of Environmental Systems.

15950.02 Adjust all fans and air outlets to within 10% of specified airflow.

END OF DIVISION 15

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HVAC SYMBOLS

- RECTANGULAR SUPPLY DUCT UP
- RECTANGULAR SUPPLY DUCT DOWN
- ROUND DUCT UP
- ROUND DUCT DOWN
- RECTANGULAR RETURN DUCT UP
- RECTANGULAR RETURN DUCT DOWN
- SQUARE SUPPLY DIFFUSER
- FLEXIBLE DUCTWORK - MAX 5'
- RIGID DUCTWORK
- WALL GRILLE (SUPPLY OR RETURN)
- THERMOSTAT
- 90° ELBOW WITH TURNING VANES
- GRILLE/DIFFUSER TAG
  - TOP: DEVICE TAG (SEE SCHEDULE)
  - MIDDLE: NECK SIZE
  - BOTTOM: AIRFLOW

PLUMBING SYMBOLS

- SANITARY DRAIN BELOW GRADE
- SANITARY DRAIN ABOVE GRADE
- SANITARY VENT
- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- WATER SERVICE
- SHORT RADIUS 90° ELBOW
- PIPE TURNED UP
- PIPE TURNED DOWN
- TEE UP
- TEE DOWN
- TEE
  SHORT RADIUS 45° ELBOW
- CO CLEANOUT
- BALL VALVE
- FLOOR DRAIN

GENERAL SYMBOLS

- DETAIL REFERENCE
  - DETAIL NUMBER
  - SHEET NUMBER
- ELEVATION REFERENCE
  - DETAIL NUMBER
  - SHEET NUMBER
- SECTION CUT
  - DETAIL NUMBER
  - SHEET NUMBER
- KEYED PLAN NOTE
- REVISION NOTE
- ELEVATION
- CONNECT TO EXISTING. FIELD VERIFY LOCATION & MATERIAL OF EXISTING

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BRIDGEPORT APARTMENTS

REMODEL, REHABILITATION APARTMENTS

KANSAS CITY, MISSOURI

04/24/2026

STATE OF KANSAS — TIMOTHY S. MEYER — NUMBER E-24720 — REGISTERED PROFESSIONAL ENGINEER

DATE: 04-24-2026

JOB: 21-3157

SHEET: M0.1

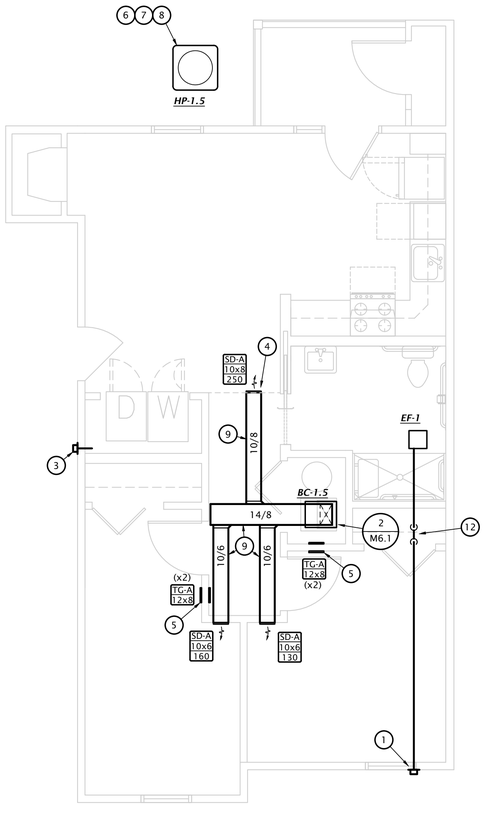
(#) MECHANICAL PLAN NOTES BY SYMBOL

1. ROUTE 4"Ø EXHAUST DUCT TO MANUFACTURER'S WALL CAP WITH BACKDRAFT DAMPER, COORDINATE EXACT ROUTING WITH EXISTING STRUCTURE. ENSURE TERMINATION IS A MINIMUM OF 3'-0" FROM ANY OPENING INTO BUILDING.
2. PROVIDE UL LISTED DRYER BOX EQUAL TO IN-O-VATE TECHNOLOGIES IN WALL INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ROUTE 4"Ø DRYER EXHAUST DUCT TO WALL CAP. MAXIMUM ALLOWABLE DUCT LENGTH = 35' WITH THREE 90° ELBOWS. PROVIDE PERMANENT LABEL IDENTIFYING EQUIVALENT LENGTH OF DRYER DUCT INSTALLED PER IMC 504.

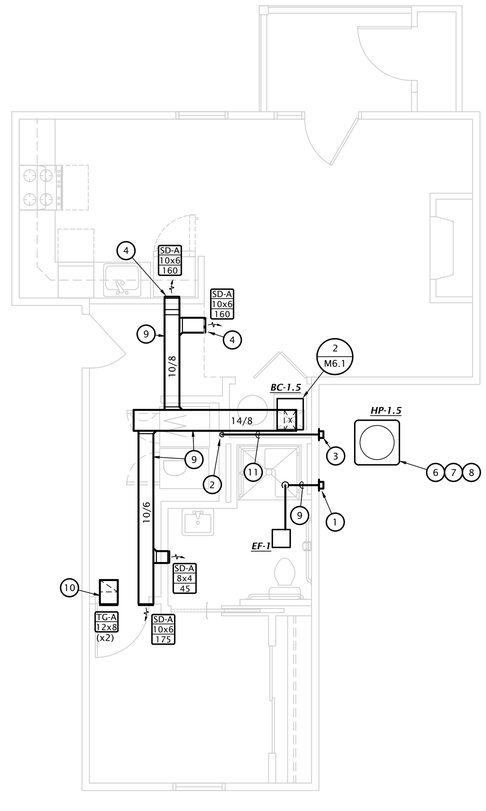
   NOTE: ANNULAR SPACE AROUND DUCT IS TO BE SEALED AND ALL PENETRATIONS OF FLOOR AND CEILINGS WITH U.L. LISTED FIRE STOPPING SYSTEM.
3. PROVIDE 4"Ø DRYER WALL CAP WITH BACKDRAFT DAMPER.
4. TERMINATE SUPPLY GRILLE AT SIDEWALL OF SOFFIT. COORDINATE EXACT SOFFIT LOCATIONS WITH ARCHITECT.
5. INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL. MOUNT GRILLE 6" BELOW CEILING IN HALL AND 6" AFF IN BEDROOM, LINE STUD CAVITY WITH SHEET METAL DUCTWORK.
6. ROUTE REFRIGERANT PIPING FROM CONDENSING UNIT TO MATCHING BLOWER COIL CONCEALED IN WALLS AND ABOVE CEILINGS. PENETRATE EXTERIOR WALL 18" A.F.G.
7. MOUNT CONDENSING UNIT ON LEVEL 3-1/2" THICK CONCRETE PAD. COORDINATE WITH G.C.
8. PROVIDE MINIMUM CLEARANCE AROUND HEAT PUMP AS RECOMMENDED BY MANUFACTURER. PROVIDE ADEQUATE SPACING FOR FUTURE REPLACEMENT OF ADJACENT CONDENSING UNIT NOT IN SCOPE OF WORK.
9. ROUTE DUCTWORK IN SOFFIT. COORDINATE LOCATIONS OF SOFFITS WITH ARCHITECT.
10. INSTALL TRANSFER GRILLES ON OPPOSITE SIDES OF WALL ABOVE BEDROOM DOOR. MOUNT GRILLE ON WALL ABOVE DOOR IN BEDROOM AND IN SOFFIT IN HALLWAY. CONNECT WITH FULL SIZED DUCT.
11. ROUTE DUCT AS HIGH AS POSSIBLE IN BACK OF MECHANICAL CLOSET.
12. ROUTE DUCT BELOW STRUCTURAL BEAM IN SOFFIT. COORDINATE WITH ARCHITECT AND G.C.

INSTALLATION SHALL COMPLY WITH PROVITIONS OF 2021 IECC

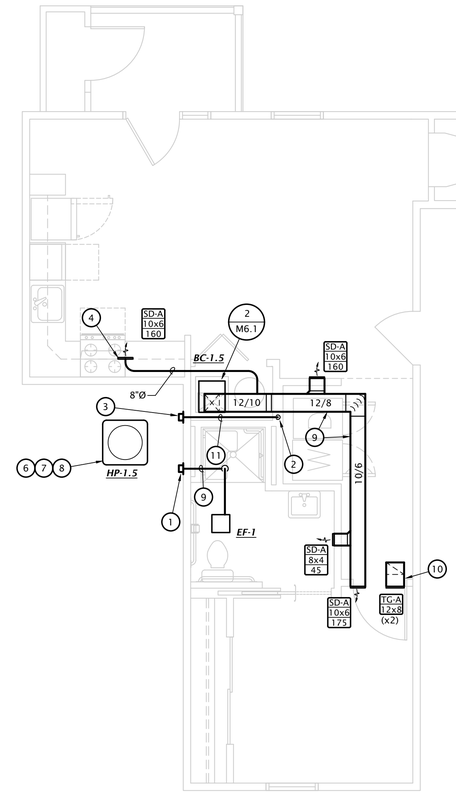
SEE M1.1 FOR NOTES BY SYMBOL



3 UNIT TYPE 'C' HVAC PLAN
1/4" = 1'-0"



2 UNIT TYPE 'B' HVAC PLAN
1/4" = 1'-0"



1 UNIT TYPE 'A' HVAC PLAN
1/4" = 1'-0"

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04/24/2026
STATE OF MISSOURI
ZACHARY TODD SMITH
NUMBER E-24720
REGISTERED PROFESSIONAL ENGINEER

DATE: 04-24-2026
JOB: 21-3157
SHEET: M1.1

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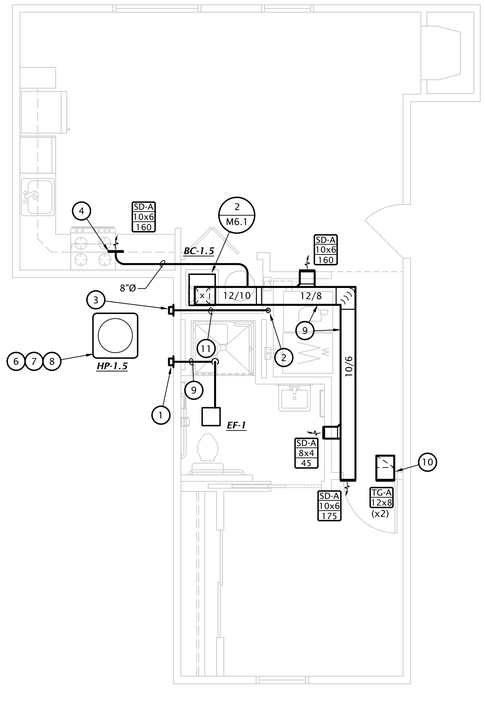
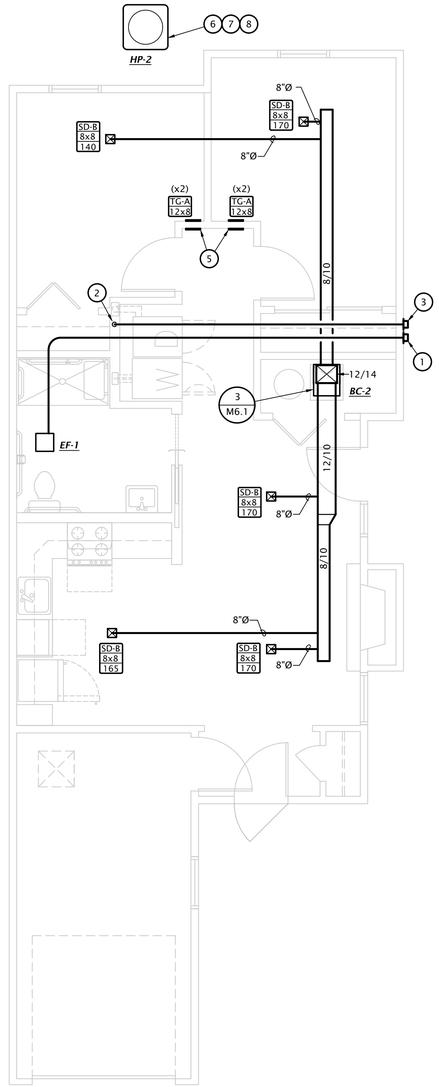
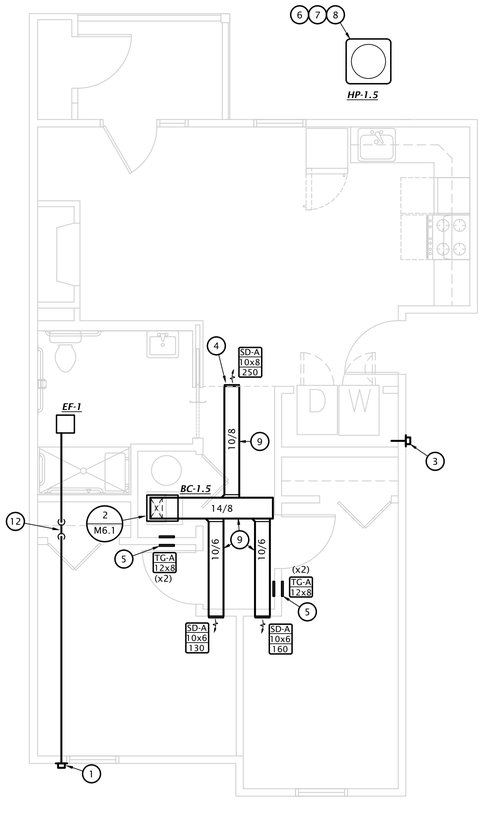


2 UNIT TYPE 'O' HVAC PLAN
1/4" = 1'-0"



2 UNIT TYPE 'E' HVAC PLAN
1/4" = 1'-0"



1 UNIT TYPE 'D' HVAC PLAN
1/4" = 1'-0"

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NOTE:
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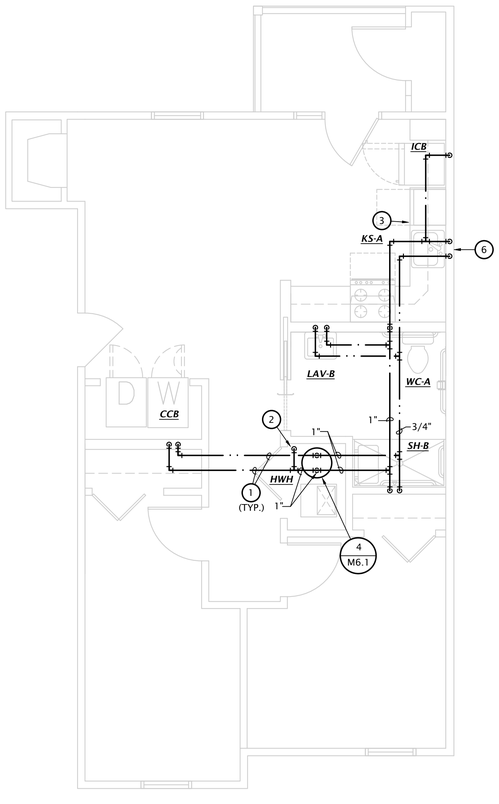
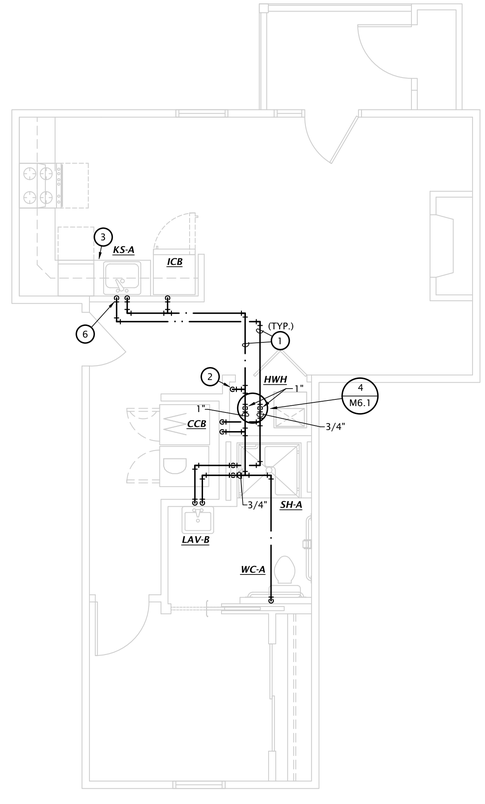
(#) PLUMBING NOTES BY SYMBOL

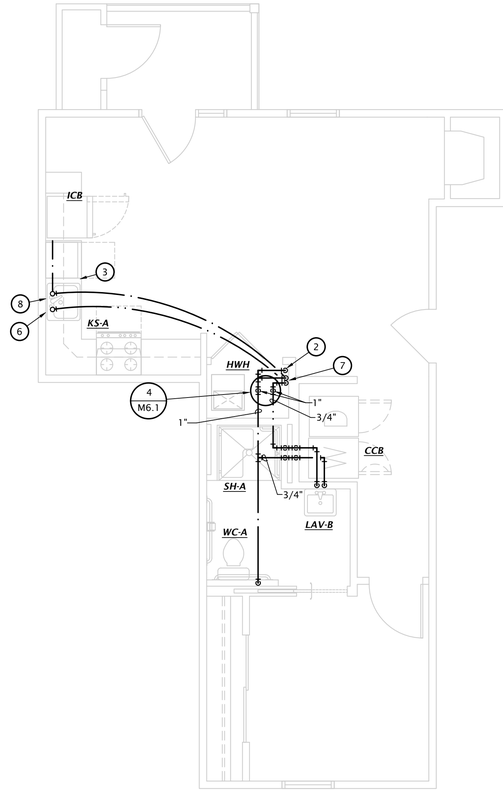
1. DOMESTIC WATER PIPING OCCURS BETWEEN FIRST AND SECOND FLOOR.
2. RE-ROUTE EXISTING 1" WATER SERVICE TO LOCATION INDICATED IN NEW MECHANICAL CLOSET. MODIFY EXISTING WATER SERVICE PIPING AS REQUIRED. FIELD VERIFY EXISTING WATER SERVICE SIZE AND LOCATION. PROVIDE FULL-OPEN SHUT-OFF VALVE FOR EACH APARTMENT. COORDINATE ALL REQUIRED CUTTING AND PATCHING OF EXISTING CONSTRUCTION WITH G.C.
3. PROVIDE 1/2" VALVED HW BRANCH BELOW SINK AND CONNECT DISHWASHER. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.
4. PROVIDE 1" CONNECTION TO COLD WATER MANIFOLD AND HOT WATER MANIFOLD. ROUTE 1/2" PEX BRANCHES FROM DOMESTIC WATER MANIFOLDS TO EACH PLUMBING FIXTURES BELOW SLAB. DO NOT USE JOINTS BELOW GRADE. SEE DETAIL 1:M6.1.
5. ROUTE FIXTURE BRANCHES BELOW SLAB TO DOMESTIC WATER MANIFOLDS AT MECHANICAL CLOSET. DO NOT USE JOINTS BELOW SLAB. COORDINATE CUTTING AND PATCHING OF EXISTING CONSTRUCTION WITH ARCH. AND G.C.
6. PROVIDE 1/2" VALVED HW BRANCH BELOW SINK AND CONNECT DISHWASHER. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.
7. ROUTE 1/2" PEX FIXTURE BRANCHES FROM MECHANICAL CLOSET BELOW SLAB TO SINK 'KS'. DO NOT ROUTE WATER PIPING IN EXTERIOR WALL. DO NOT USE JOINTS BELOW SLAB. COORDINATE CUTTING AND PATCHING OF EXISTING CONSTRUCTION WITH ARCH. AND G.C.
8. PROVIDE 1/2" VALVED CW BRANCH BELOW SINK TO 'ICB'. ROUTE PIPING ALONG BACK OF CABINETRY, COORDINATE EXACT ROUTING WITH G.C.
9. REFERENCE SCOPE OF WORK.



3 UNIT TYPE 'C' DOMESTIC WATER PLAN
1/4" = 1'-0"



2 UNIT TYPE 'B' WATER PLAN
1/4" = 1'-0"



1 UNIT TYPE 'A' WATER PLAN
1/4" = 1'-0"

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3. PROVIDE 1/2" VALVED HW BRANCH BELOW SINK AND CONNECT DISHWASHER. COORDINATE EXACT REQUIREMENTS WITH DISHWASHER PROVIDED.
4. PROVIDE 1" CONNECTION TO COLD WATER MANIFOLD AND HOT WATER MANIFOLD. ROUTE 1/2" PEX BRANCHES FROM DOMESTIC WATER MANIFOLDS TO EACH PLUMBING FIXTURES BELOW SLAB. DO NOT USE JOINTS BELOW GRADE. SEE DETAIL 1:M6.1.
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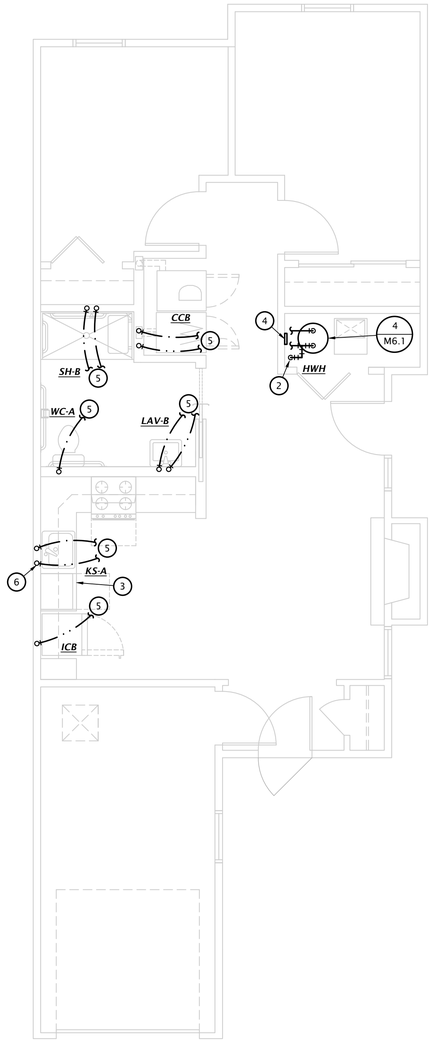
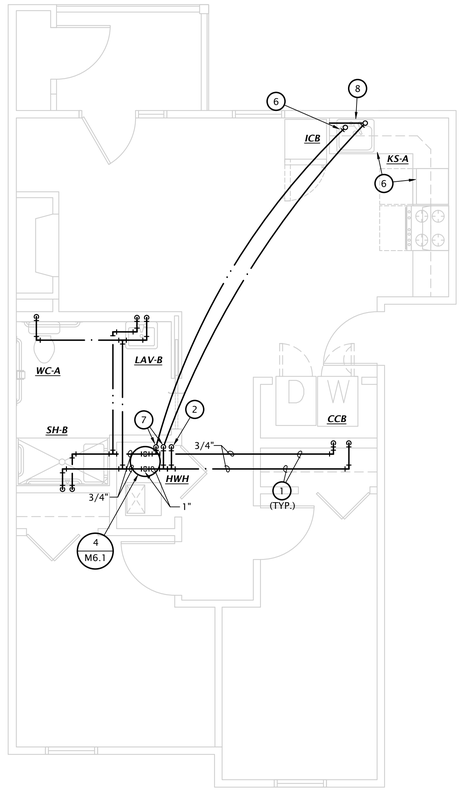
9. REFERENCE SCOPE OF WORK.



(2) UNIT TYPE 'E' WATER PLAN
1/4" = 1'-0"



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NOTE:
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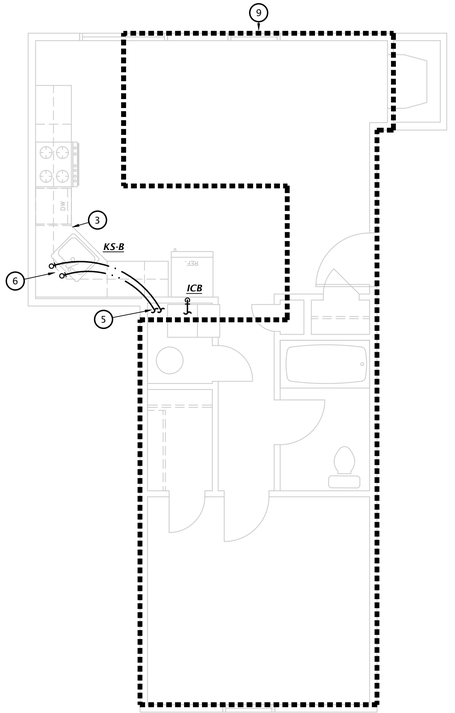
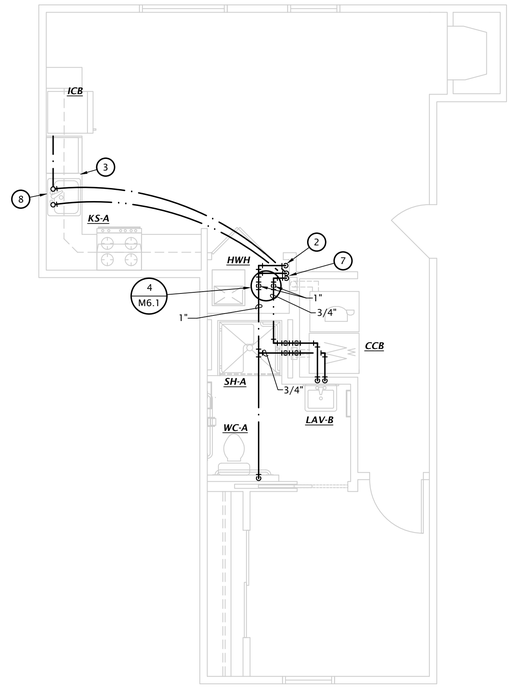
9. REFERENCE SCOPE OF WORK.



(2) UNIT TYPE 'P' WATER PLAN
1/4" = 1'-0"



(1) UNIT TYPE 'O' WATER PLAN
1/4" = 1'-0"

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JONES GILLAM RENZ

BRIDGEPORT APARTMENTS
REMODEL, REHABILITATION APARTMENTS
KANSAS CITY, MISSOURI

04/24/2026
STATE OF MISSOURI
JUSTIN T. RENZ
NUMBER E-24720
REGISTERED PROFESSIONAL ENGINEER

DATE: 04-24-2026
JOB: 21-3157
SHEET: M1.5

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	ESP (" wg)	POWER	VOLTS/ PHASE	NOTES
EF-1	BROAN	XB80	80	0.4"	6 W	120 / 1	1,2,3,4, 5,6,7

NOTES:

1. Fixture shall be Energy Star listed.
2. Fixture shall operate at <1 SONE
3. Provide integral disconnect.
4. Provide manufacturer's wall cap, see plans.
5. Provide integral backdraft damper.
6. Provide with manufacturer's ceiling radiation damper.
7. Fixture occurs in each tenant unit.

FOR EACH STANDARD NON-ADA UNITS PROVIDE ALTERNATE PRICING TO REPLACE EXISTING CONDENSING UNIT AND BLOWER COIL AS FOLLOWS:

- AT EACH APARTMENT UNIT PROVIDE HP-1.5 & BC-1.5
- AT EACH DUPLEX UNIT PROVIDE HP-2 & BC-2

MODIFY EXISTING MECHANICAL AND ELECTRICAL INSTALLATION AS REQUIRED FOR UNIT REPLACEMENT. FIELD VERIFY EXACT REQUIREMENTS.

FOR STANDARD NON-ADA UNITS BID AS FOLLOWS:

BASE BID

1) REPLACE FOLLOWING PLUMBING FIXTURES AND ASSOCIATED ROUGH-IN:
- LAVATORY 'LAV-C'
- KITCHEN SINK 'KS-B'
- ICE MAKER CONNECTION BOX 'ICB'

2) REPLACE TRIM ONLY FOR EXISTING BATHTUB AND/OR SHOWER WITH TRIM SCHEDULED FOR 'BT-A' AND 'SH-C'.

3) EXISTING CLOTHES WASHER CONNECTIONS TO REMAIN.

ALTERNATE BID

- PROVIDE ALTERNATE PRICING TO REPLACE THE FOLLOWING FIXTURES FOR EACH STANDARD NON-ADA APARTMENT:
- WATER CLOSET 'WC-A'
- BATHTUB AND/OR SHOWER 'BT-A' AND 'SH-C'

CONDENSING UNIT SCHEDULE

MARK	MANUF.	MODEL	NOMINAL TONS	SUPPLY CFM	COOLING CAPACITY					ELECTRICAL		
					OA DB	ENT AIR DB/WB	SENS MBH	TOT MBH	MIN SEER	MCA	MOCP	V/PH
HP-1.5	GOODMAN	GLZS4BH1810	1.5	610	105	75/63	15.7	15.7	14	11.2	15	240/1
HP-2	GOODMAN	GLZS4BH2410	2	800	105	75/63	16.77	20.7	14	11.2	15	240/1

Notes:

1. Refrigerant lines shall be field fabricated. Coordinate line sizing requirements with equipment manufacturer for length of run for each apartment. Provide suction accumulators, etc. as required.
2. Units shall be Energy Star Certified.
3. Provide with R32 or R454b refrigerant.

BLOWER COIL SCHEDULE

MARK	MANUF.	MODEL	FAN			HEATING KW	V/Ph	MOTOR FLA	MCA	MOCP
			CFM	ESP	SPEED					
BC-1.5	GOODMAN	AMST24BU1300	540	0.4	LOW	4.5	240/1	5.8	30.8	35
BC-2	GOODMAN	AMST24BU1300	815	0.4	LOW	8	240/1	5.8	49.7	50

Notes:

1. Single point connection required, coordinate the exact electrical requirements of equipment provided with E.C.
2. Provide with manufacturer's fan coil filter cabinet accessory at return air end with MERV 8 filter
3. Provide with 7-day programmable thermostat.
4. Electric heat is backup only and shall not operate simultaneous with heat pump.

AIR DEVICE SCHEDULE

MARK	MANUFACTURER	MODEL	APPLICATION				FINISH	MOUNTING	DAMPER	DESCRIPTION	NOTES
			SUPPLY	RETURN	EXHAUST	TRANSFER					
SD-A	HART & COOLEY	A618	•				WHITE	SURFACE	YES	Aluminum, straight blade vertical fin register with opposed blade damper	1,2,3
SD-B	HART & COOLEY	684	•				WHITE	SURFACE	YES	Steel, 4-way register with damper	1,2,3,5
RG-A	HART & COOLEY	650		•			WHITE	SURFACE	NO	Single deflection, steel, louvered face return grille	1,2,3,4
TG-A	HART & COOLEY	650				•	WHITE	SURFACE	NO	Single deflection, steel, louvered face return grille	1,2,3,4

NOTES:

1. Provide mounting frame as required for ceiling type.
2. Maximum NC shall be 25.
3. Paint objects visible through grilles with flat black paint.
4. Neck size shall be same as face.
5. Provide round to square neck adapter as required for runout size indicated on plans.

APARTMENT PLUMBING FIXTURE SCHEDULE

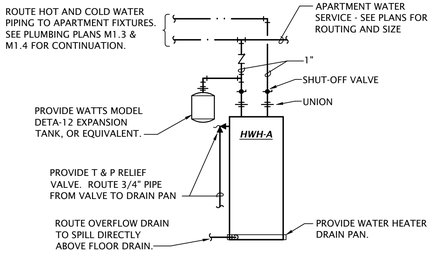
MARK	MANUFACTURER	DESCRIPTION	TRIM		ROUGH-IN SIZES				NOTES
			MANUFACTURER	DESCRIPTION	WASTE	VENT	CW	HW	
WC-A	KOHLER	Model #K-3658-(RA)-0 "Highline Classic" ADA compliant flush tank water closet, white vitreous china, two piece, 12" rough-in, elongated 16-1/2" high bowl, siphon jet flushing action, 1.28 GPF, polished chrome actuator. Coordinate location of trip lever with installation.	KOHLER	#K-4636-0 white, closed front plastic seat with slow closing lid.	3"	2"	1/2"	---	1
LAV-A	KOHLER	Model 2196-4-0 self-rimming lavatory, white vitreous china, 20"W x 17", faucet holes on 4" centers.	KOHLER	#K-394-4-2 two handle faucet with pop-up drain and nickel finish.	2"	1-1/2"	1/2"	1/2"	1,2,3
LAV-B	KOHLER	Model 2005-0 wall hung lavatory, white vitrous china, 18-1/4"W x 17-1/4", faucet holes on 4" centers.	KOHLER	#K-394-4-2 two handle faucet with pop-up drain and nickel finish.	2"	1-1/2"	1/2"	1/2"	1,2,3
LAV-C	KOHLER	Model 2196-4-0 self-rimming lavatory, white vitreous china, 20"W x 17", faucet holes on 4" centers.	KOHLER	#K-394-4-2 two handle faucet with pop-up drain and nickel finish.	2"	1-1/2"	1/2"	1/2"	2
KS-A	JUST	Model SL-ADA-2225-A-GR single compartment 18 GA stainless steel sink, self rimming, 22"x16"x5"D inside, fully undercoated, faucet holes as required, and drain hole center rear.	KOHLER IN-SINK-ERATOR	#K-780 single handle pull down kitchen sink faucet with chrome finish, single hole installation. Provide basket strainer. Badger 5 ½ HP garbage disposal with dishwasher waste connection.	2"	1-1/2"	1/2"	1/2"	1,2,4,5
KS-B	JUST	Model SL-2225-A-GR single compartment 18 GA stainless steel sink, self rimming, 22"x16"x8"D inside, fully undercoated, faucet holes as required.	KOHLER IN-SINK-ERATOR	#K-780 single handle pull down kitchen sink faucet with chrome finish, single hole installation. Provide basket strainer. Badger 5 ½ HP garbage disposal with dishwasher waste connection.	2"	1-1/2"	1/2"	1/2"	2,4
BT-A	AQUARIUS	Model G 6063 TS reinforced fiberglass tub/shower, 60"W x35-3/4"D x76-1/2"H, with integral soap/toiletry shelves, right or left hand rough-in as required, white finish.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10582-4 bath and shower valve trim. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	2
SH-A	AQUARIUS	Model 'G-3682BF RFF' reinforced fiberglass ADA shower, 36"W x36"D x76-1/2"H, with integral soap/toiletry shelves and grab bars in accordance with ADA requirements, fold-up seat, right or left hand rough-in as required, white finish. Provide with collapsible dam.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10584-4 valve trim, #K-355 wall supply elbow, #K-9514 60" hose, #K-10549 hand shower, and #K-8524/K-349 slide bar. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	1
SH-B	AQUARIUS	Model G-6233-BF-.75 reinforced fiberglass ADA roll-in shower, 60"W x33"D x73-3/4"H, with integral soap/toiletry shelves and grab bars in accordance with ADA requirements, fold-up seat, right or left hand rough-in as required, white finish. Provide with collapsible dam.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10584-4 valve trim, #K-355 wall supply elbow, #K-9514 60" hose, #K-10549 hand shower, and #K-8524/K-349 slide bar. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	1
SH-C	AQUARIUS	Model G-3679-SH reinforced fiberglass shower, 36"W x36"D x77-3/4"H, with integral soap/toiletry shelves, white finish.	KOHLER	#K-304 pressure balancing valve with integral temperature limits and stops, #K-TS10583-4 shower valve trim. Entire assembly shall have nickel finish. Max. 2 GPM.	2"	1-1/2"	1/2"	1/2"	1
CCB	WATER-TITE	Model W4700 recessed washing machine box with 2"PVC/ABS drain coupling and knockout test cap. Two brass 1/4 turn adaptor ball valves with hammer arresters, sweat connection.			2"	2"	1/2"	1/2"	
ICB	OATEY	Model 3848X fire rated ice maker connection box with 1/4 turn ball valve.			---	---	1/2"	---	
FD	WADE	Model 1102STD5 floor drain with satin nickel bronze strainer. Provide trap protection device equal to ProSet Trapguard.			2"	1-1/2"	---	---	
HWH	A.O. SMITH	Model ENT-30, 30 gallon electric water heater, (2) non simultaneous 4500 watts, 240 volts heating elements, 21 GPH recovery @ 90˚F temp rise. Supplied with temperature & pressure relief valve and brass drain valve.							

GENERAL:

- Provide fixtures with all trim necessary for complete installation.
- All toilets, lavatory faucets, showerheads, and kitchen faucets shall have EPA's WaterSense label.

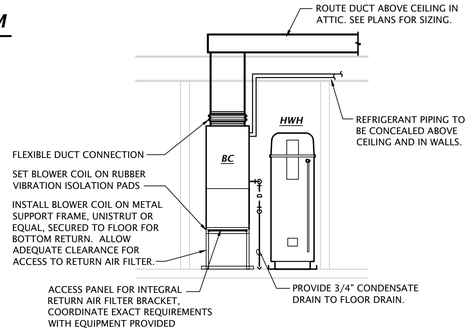
NOTES:

1. In areas open to the public, fixture and installation to meet requirements of Americans with Disabilities Act. In apartments, fixture and installation to meet requirements of the Fair Housing Act.
2. Provide Dearborn supplies with stops and escutcheon plate, 1-1/4" cast brass p-trap.
3. Insulate water and waste piping below lavatory. Utilize insulation kit equivalent to LavGuard by Truebro.
4. Trim shall be provided with polished chrome finish.
5. Insulate water and waste piping below sink. Utilize insulation kit equivalent to LavGuard by Truebro. Provide Plumberex model #3071WD-N waste disposal cover.



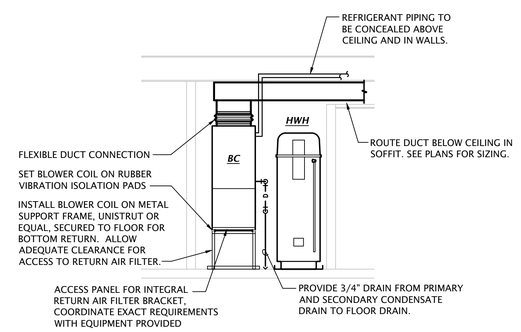
4 APARTMENT WATER HEATER PIPING DIAGRAM

NO SCALE



3 BLOWER COIL DETAIL - ATTIC ABOVE

Not to Scale



2 BLOWER COIL DETAIL - APARTMENT ABOVE

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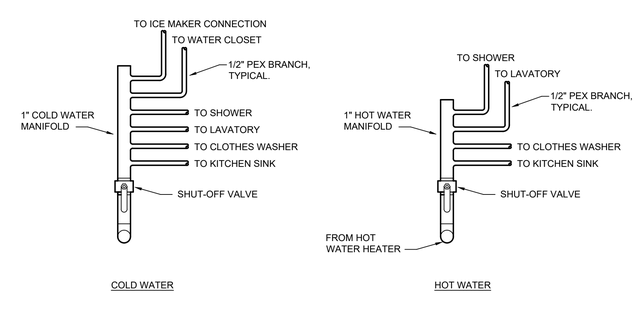

1 DOMESTIC WATER MANIFOLD DETAILS

NO SCALE

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Project 26032 Apr. 2026

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BRIDGEPORT APARTMENTS

REMODEL, REHABILITATION APARTMENTS

KANSAS CITY, MISSOURI

04/24/2026

STATE OF MISSOURI — TIMOTHY G. LUEBBERT — NUMBER E-24720 — REGISTERED PROFESSIONAL ENGINEER

DATE: 04-24-2026

JOB: 21-3157

SHEET: M6.1

DIVISION 16 - ELECTRICAL

SECTION 16010 - GENERAL ELECTRICAL REQUIREMENTS

16010.01 The drawings and general provisions of the Contract, including General Conditions, Supplementary General Conditions, and General Requirements apply to the work specified in Division 16 - ELECTRICAL.

16010.02 The Electrical Contract includes all labor, material and equipment required for the complete electrical systems as shown and specified.

16010.03 This contractor is responsible for reviewing ALL drawings to determine extent of coordination required with other trades. Additional offsets, bends, and materials will not be accepted as a result of un-coordinated work.

16010.04 This contractor is required to perform work in a professional and quality workman like manner. This includes, but is not limited to:
a. Make vertical elements plumb and horizontal elements level unless noted otherwise.
b. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless noted otherwise.
c. Protect work from damage and water during construction. Replace all equipment/material damaged or exposed to water during construction.
d. Clean equipment, interior and exterior, at completion of construction and remove all temporary labels, stains and foreign substances.

16010.05 Each major component of equipment shall have the manufacturer's name, address, model number, and U.L. label securely affixed in a conspicuous place.

16010.06 All equipment of one type (such as panelboards, switches, wiring devices, etc.) shall be the product of one manufacturer, unless specified otherwise.

16010.07 Where the quality of required material is not specified, the Contractor shall furnish a first class standard item as approved by the Architect/Engineer.

16010.08 The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate for the context of requirements. Refer uncertainties to Architect for a decision before proceeding. Where the quality of required material is not specified, the Contractor shall furnish a first class standard item as approved by the Architect/Engineer.

16010.09 Manufacturer's names are intended to establish type and quality of items to be provided via the contract. The materials, products, and equipment described in the specifications or on the drawings establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution. Listing of these manufacturers shall in no way be construed as a device intended to limit the bidders to those specifically listed.

16010.10 Install all equipment in strict accordance with the manufacturer's recommendations and the shop drawings approved by the Engineer.

16010.11 All work under this contract shall conform to the requirements of the 2017 National Electrical Code (NFPA 70) and all applicable local, state, and federal code requirements. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

16010.12 Periodically during construction and prior to Owner acceptance of the building, Contractor shall remove from the premises and dispose of all packing material and debris associated with the Work specified under this Division.

16010.13 Before submitting bid, the Contractor shall visit the actual location of the job and shall fully understand the scope of the work to be done and the condition under which it is to be performed.

16010.14 Electrical Contractor shall coordinate requirements for electrical service with utility company and Owner, and facilitate installation of such equipment by providing additional electrical installation where required.

16010.15 Procure and pay for all permits and service charges required as related to this Work.

16010.16 Notify the Engineer of errors, discrepancies, or omissions in the drawings and specifications before construction or fabrication of affected work, or failing such notice, be responsible for correction of such work without cost to the Owner, Architect, or Engineer.

16010.17 Where fire rated construction is penetrated by this Work, fire seal at penetrations with UL listed fire sealing system. Refer to Architectural drawings and specifications.

16010.18 Provide Shop Drawings for the following electrical equipment. Refer to Division 1 specifications for submittal process. Electrical equipment listed below shall not be ordered or installed until shop drawings have been submitted and reviewed. Shop Drawings shall include product data indicating performance, dimensions, finish/color and configuration. Include all accessories and installed components.
Panelboards; Load Centers; Light Fixtures (provided by Contractor); Wiring Devices; Lighting Control Devices; Disconnect Switches; Fire Alarm

SECTION 16030 - ELECTRICAL CONNECTIONS

16030.01 The Electrical Contractor shall provide all conduit and wiring and shall connect complete and ready for operation all electrical motors and equipment in the other contracts. The other contractors shall furnish to the Electrical Contractor all switches, electrical controls, capacitors and other accessories required. Installation of all motors, equipment, etc., shall be made by the Contractor furnishing the equipment, except where otherwise indicated.

16030.02 The Electrical Contractor shall provide disconnect switches as shown and where otherwise required to comply with applicable electrical codes.

SECTION 16060 - GROUNDING

16060.01 The entire electrical system, including all special power systems, shall be grounded in accordance with the National Electrical Code.

16060.02 Equipment grounding conductors shall be installed in all conduits. The conduit system shall not be used as the sole means of grounding.

SECTION 16110 - RACEWAYS

16110.01 Provide the conduits and raceways as specified and indicated on the plans.

16110.02 All exterior above grade raceways shall be Galvanized Rigid Metal Conduit (RMC) or Intermediate Metal Conduit (IMC) with threaded couplings and fittings.

16110.03 All exterior below grade conduits and conduits installed below floor slab-on-grade shall be Schedule 40 PVC, Galvanized Rigid Metal Conduit (RMC), or High Density Polyethylene Conduit (HDPE). When utilizing PVC or HDPE, transition to Galvanized RMC before turning up and penetrating finished grade or floor slab.

16110.04 All interior dry location raceways shall be thinwall Electrical Metallic Tubing (EMT) with compression or setscrew couplings and fittings.

SECTION 16110 - RACEWAYS (CONTINUED)

16110.05 Flexible Metal Conduit (FMC) may be used for final connections to light fixtures and vibrating equipment in lengths not to exceed 6'-0" and where fished through existing wall construction. Utilize Liquid Tight Flexible Metal Conduit (LFMC) where exposed to moisture.

16110.06 Single conduits shall be used for all circuits, but more than one circuit may be carried in each conduit, provided the number of conductors and size of conductors are proportioned in accordance with the rules of the NEC, and conduits are of ample size to allow for removal and replacement of conductors when necessary. Do not exceed 40% fill.

16110.07 Where conduit is carried in walls, it shall be thoroughly bedded and not visible. In placing conduits, they shall be so located as to not weaken or injure the construction of the building in any way, and the installation of these shall be approved by the Architect.

16110.08 Joints must be made so the ends of the pipes come together in the center of the coupling.

16110.09 All conduit shall be run parallel or perpendicular to the building surfaces.

16110.10 All empty conduit systems shall be provided with suitable pull strings.

SECTION 16120 - WIRE AND CABLES

16120.01 Provide the wire as specified and the circuiting as shown on the drawings.
16120.02 All wire and cable shall be copper, #12 awg, unless noted otherwise. Conductors #8 and smaller shall be solid. All wire shall be Code Type THWN or THHN, unless noted otherwise, and shall be Rome, General Cable, Crescent, Southwire, or General Electric. Where approved by owner, feeders may be compact aluminum. Increase size to provide ampacity equivalent to that of copper conductors shown.

16120.03 All wiring, except control, special systems and low voltage wiring shall be in conduit, unless noted otherwise.

16120.04 The circuiting of all light and receptacle outlets has been shown on the plans, and the Contractor shall follow this circuiting layout.

16120.05 Circuitry sizes shown are minimum, and allowances shall be made to limit voltage drop. Circuits over 75' long shall be increased by one wire size, circuits over 150' long shall be increased by two wire sizes.

16120.06 Machine or power pulling of cables into raceways shall be accomplished such that pulling stresses shall not exceed those recommended by the manufacturer.

16120.07 All cables shall be lubricated with "Polywater," or equally effective cable lubricating material.

16120.08 Wiring for individual dwelling units may be Type NM or BX cable, installed in accordance with the NEC.

SECTION 16130 - ELECTRICAL BOXES AND FITTINGS

16130.01 Provide all electrical pull, junction and outlet boxes as specified and shown on the drawings, as well as those required for a complete and code acceptable installation.

16130.02 Junction and pull boxes shall be galvanized metal of the knockout type, and shall be provided throughout in accessible locations.

16130.03 All outlet boxes for light fixtures, receptacles, and wall switches in dry locations shall be of the Steel City, or equal, galvanized knockout type. Lighting fixture outlet boxes in ceiling shall be not less than 4" square of the knockout type. Gangable type boxes shall be used in all gypboard surfaces. Plug unused openings in all boxes.

16130.04 Install boxes for switch and receptacle outlets at the locations shown on the drawings, allowing for relocation of up to 4 feet in any direction if so directed prior to rough-in, without additional cost to the Owner. Boxes shall be flush mounted on all walls for concealed work in occupied/finished areas.

16130.05 Electrical boxes located in 1-hour fire rated walls shall be installed as follows:
a. Boxes shall be U.L. listed for use in fire rated assemblies.
b. Annular space around listed boxes shall not exceed 1/8".
c. Boxes on opposite sides of the fire rated wall shall comply with one of the following:
1. Be separated by the horizontal distance specified in the listing of the electrical box.
2. Be separated by fire blocking material in accordance with IBC section 717.2.1.
3. Protect both boxes with listed fire rated putty pads.

16130.06 Electrical boxes located in fire rated ceiling/floor assemblies shall:
a. Be steel construction and not exceed 16 square inches in area.
b. Annular space around ceiling boxes shall not exceed 1/8".
c. The aggregate area of ceiling boxes does not exceed 100 square inches for every 100 square feet of ceiling area.

SECTION 16140 - WIRING DEVICES

16143.01 Provide the wiring devices and cover plates as specified.

16143.02 Wiring Devices shall be as manufactured by Pass & Seymour, Leviton, Hubbell, Eaton, or approved equal. Devices shall be commercial specification grade, rated at 20 amps, 120 volts, unless specified otherwise. Coordinate device color with Architect. Devices shall be as follows:

a. Switches:	
1. 1-Pole (SPST) Switch	P&S #PS20AC1_
2. 2-Pole (DPST) Switch	P&S #PS20AC2_
3. 3-Way switch	P&S #PS20AC3_
4. 30A/3P Manual Motor Controller Switch	P&S #7813P
b. Wall Receptacles:	
1. Single Receptacle	P&S #5361_
2. Duplex Receptacle	P&S #PS5362_
3. Tamperproof Duplex Receptacle	P&S #TR63_
4. GFCI Duplex Receptacle	P&S #2095_

SECTION 16140 - WIRING DEVICES (CONTINUED)

16143.03 Terminations at wiring devices shall be made using screw terminals only. Use of "stab-in" connections is not acceptable.

16143.04 All flush-mounted wiring devices in finished areas shall be provided with stainless steel cover plates.

16143.05 Cover plates for wiring devices in surface-mounted boxes and unfinished areas shall be galvanized utility box covers, raised 1/4".

16143.06 Where more than one device is in a single location, utilize a one-piece multigang cover plate.

16143.07 Devices shall be set at the following elevations from the finished floor to the center of the box, unless otherwise indicated on the plans:

a. Light switches	48"
b. Convenience Receptacles	18"

SECTION 16412 - SAFETY SWITCHES

16412.01 Provide safety switches as specified and indicated on the plans. Safety switches shall be manufactured by Square D, Siemens, General Electric, or Eaton Cutler-Hammer.

16412.02 Safety switches shall be NEMA Type HD (heavy duty) and Underwriters Laboratories listed.

16412.03 All switches shall have switchblades, fully visible in the "OFF" position when the switch door is open. All current carrying parts shall be plated to resist corrosion and promote cool operation. Switches shall have removable arc suppressors where necessary to permit easy access to line side lugs. Lugs shall be front removable and U.L. listed for 75°C aluminum or copper wires. Switches shall be quick-make, quick-break, such that during normal operation of the switch, the operation of the contacts shall not be capable of being restrained by the operating handle after the closing or opening action of the contacts has started. The operating handle shall be an integral part of the box, not the cover. Provisions for padlocking the switch in the "OFF" position shall be provided. Switches shall have a dual cover interlock to prevent unauthorized opening of the switch door when the handle is in the "ON" position, and to prevent closing of the switch mechanism with the door open. The handle position shall indicate whether the switch is "ON" or "OFF."

16412.04 Switches shall be furnished with enclosures as indicated on the Drawings. If NEMA designation is not given, indoor enclosures shall be NEMA 1, outdoor enclosures shall be NEMA 3R.

SECTION 16442 - LOAD CENTERS

16442.01 Provide Square D, Siemens, General Electric, or Eaton Cutler-Hammer, 1-phase, 3-wire load centers with circuit breakers as scheduled.

16442.02 Provide load centers with equipment ground bars, surface mounted or recessed cabinets as scheduled, and U.L. label.

16442.03 Circuit breakers shall be snap-on, thermal-magnetic molded case type. Breakers shall be 1or 2-pole with an integral crossbar to assure simultaneous opening of all poles in multi-pole circuit breakers. Breakers shall have an over-center, trip-free, toggle-type operating mechanism with quick-make, quick-break action and positive handle indication. Handles shall have "ON," "OFF" and "TRIPPED" positions. Circuit breakers shall be UL listed in accordance with UL Standard 489 and shall have continuous current ratings as noted on the plans. Interrupting ratings shall be 10,000 rms symmetrical amps maximum at 240 V-ac.

16442.04 Panelboard bus structure and main lugs or main circuit breaker shall have current ratings as scheduled. Such ratings shall be established by heat rise tests, conducted in accordance with UL Standard 67. Bus structure shall be insulated. Bus bar connections to the branch circuit breakers shall be the "distributed phase" type. All current carrying parts of the bus structure shall be plated.

16442.05 The panelboard bus assembly shall be enclosed in a steel cabinet. The rigidity and gauge of steel to be as specified in UL Standard 50 for cabinets. Wiring gutter space shall be in accordance with UL Standard 67 for panelboards. The box shall be fabricated from galvanized steel or equivalent rust resistant steel. Each front shall include a door and have a flush, cylinder tumbler-type lock with catch and spring-loaded stainless steel door pull. All panelboard locks shall be keyed alike. Fronts shall have adjustable indicating trim clamps which shall be completely concealed when the doors are closed. Doors shall be mounted with completely concealed steel hinges. Fronts shall not be removable with door in the locked position. A circuit directory frame and card with a clear plastic covering shall be provided on the inside of the door.

16442.06 Inside each panel door, provide an approved typewritten schedule card showing what each circuit feeds. Provide each panelboard with an engraved plastic laminate nameplate with black background and 1/4" white letters to designate panel name.

SECTION 16510 - LIGHT FIXTURES

16510.01 Provide the light fixtures as specified and scheduled on plans. Material, equipment or services necessary to complete the installation of these fixtures, but not specifically mentioned shall be furnished as though specified.

16510.02 UL or CSA US Listing: Light fixtures shall be manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL 8750 or others as they may be applicable. A listing shall be provided for each fixture type, and the appropriate label or labels shall be affixed to each fixture in a position concealing it from normal view.

16510.03 Approved Manufacturers: Provide products of firms regularly engaged in the manufacture of light fixtures of types and ratings required, whose products have been in satisfactory use in similar service for not less than 5 years. The manufacturer of the lighting fixtures shall comply with the provisions of the appropriate code and standards.

16510.04 LED FIXTURES - Comply with UL 1598. Test according to IESNA LM 80-08, where life expectancy is specified. Provide luminaires with the following characteristics unless otherwise noted:
a. Life: 50,000 hours minimum interior/100,000 hours minimum exterior
b. Efficacy: 90 lumens/watt
c. CRI: 80 minimum interior/70 minimum exterior
d. MacAdam ellipse: 4-step minimum per ANSI recommendations

16510.05 LED's shall be manufactured by, Nichia, Samsung, LG, Osram, Philips or Cree.
a. Individual LEDs shall be connected such that a catastrophic loss or the failure of one LED will not result in the loss of the entire luminaire
b. LED Boards shall be suitable for field maintenance or service from below the ceiling with plug-in connectors.

16510.06 LED drivers shall be manufactured by eldoLED, Osram, Philips or Cree. Drivers shall have <10% total harmonic distortion, minimum 95% power factor, and universal 120/277 volt operation.

16510.07 Light fixture manufacturers shall provide a warranty against loss of performance and defects in materials and workmanship for the fixtures for a period of 5 years after acceptance of the products. Warranty shall cover all components comprising the fixture.

END DIVISION 16 - ELECTRICAL

1 ELECTRICAL SPECIFICATIONS
NO SCALE

GENERAL SYMBOLS

DETAIL REFERENCE
DETAIL NUMBER
SHEET NUMBER
ELEVATION REFERENCE
DETAIL NUMBER
SHEET NUMBER
SECTION CUT
DETAIL NUMBER
SHEET NUMBER
KEYED PLAN NOTE
REVISION NOTE
ELEVATION
CONNECT TO EXISTING. FIELD VERIFY LOCATION & MATERIAL OF EXISTING

CIRCUIT AND RACEWAY SYMBOLS

CIRCUIT DESIGNATION:
TOP INDICATES PANEL OF CIRCUIT ORIGIN
BOTTOM INDICATES CIRCUIT NUMBER
HOMERUN - WIRING TO PANEL OF CIRCUIT ORIGIN
PARTIAL HOMERUN - WIRING TO PANEL OF CIRCUIT ORIGIN
CONDUIT CONCEALED IN WALL OR ABOVE CEILING
CONDUIT BELOW GRADE OR EMBEDDED IN CONCRETE
CONDUIT EXPOSED OVERHEAD
LINE VOLTAGE CIRCUIT CONDUCTORS
SHORT = HOT/TRACER/SWITCH LEG CONDUCTOR
LONG = NEUTRAL (GROUNDED) CONDUCTOR
CURVED = GROUNDING (BONDING) CONDUCTOR
GROUNDING CONNECTION

LIGHTING SYMBOLS

RECESSED DOWNLIGHT
WALL MOUNTED LUMINAIRE
CEILING MOUNTED LUMINAIRE
POLE MOUNTED AREA LIGHT

POWER SYMBOLS

SINGLE RECEPTACLE
DUPLEX RECEPTACLE
SPECIAL RECEPTACLE
= NEMA CONFIGURATION
SINGLE POLE WALL SWITCH
TWO POLE WALL SWITCH
THREE WAY WALL SWITCH
MOTOR HP RATED SWITCH WITHOUT OVERLOAD PROTECTION
JUNCTION BOX
DISCONNECT SWITCH
BRANCH CIRCUIT PANELBOARD, FLUSH MOUNTED

TELECOMMUNICATIONS SYMBOLS

CATEGORY 6 PHONE OUTLET - 8 POSITION EIA/TIA-5688, TYPE INDICATED
COMBO TYPE 'F' COAX TV OUTLET/CATEGORY 6 DATA OUTLET

SYMBOL MODIFYING DESIGNATORS

CLG	CEILING MOUNTED • FLUSH MOUNTED IN SUSPENDED CEILINGS • SURFACE MOUNTED TO STRUCTURE ABOVE IN OPEN CEILINGS
CT	MOUNT BOTTOM OF DEVICE AT 6" ABOVE COUNTERTOP
GFI	GROUND FAULT CIRCUIT INTERRUPTING DEVICE
NL	NIGHTLIGHT WIRED TO UNSWITCHED HOT CONDUCTOR
WP	PROVIDE WEATHERPROOF ENCLOSURE FOR DEVICE
XX"	MOUNTING HEIGHT OF DEVICE ABOVE FINISHED FLOOR

ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISH FLOOR
C	CONDUIT
CATV	COMMUNITY ANTENNA TELEVISION
CT	CURRENT TRANSFORMER
FMC	FLEXIBLE METALLIC CONDUIT
G	GROUNDING (BONDING) CONDUCTOR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
kcmil	THOUSAND CIRCULAR MILLS
MLO	MAIN LUG ONLY
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
PH or Φ	PHASE
PVC	POLYVINYL CHLORIDE CONDUIT
RCPT	RECEPTACLE
TYP	TYPICAL
UG	UNDERGROUND
U.L.	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
V	VOLT (ALTERNATING CURRENT)
VA	VOLTAMPERE
W	WATT(S)

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BRIDGEPORT APARTMENTS
REMODEL, REHABILITATION AND ADDITION APARTMENTS
KANSAS CITY, MISSOURI

04/24/2026
STATE OF MISSOURI
TIMOTHY G. TRUEMPER
NUMBER E-24720
REGISTERED PROFESSIONAL ENGINEER

DATE: 04–24–2026
JOB: 21–3157
SHEET: E0.1

(#) ELECTRICAL PLAN NOTES BY SYMBOL

1. CONNECT EXHAUST FAN/LIGHT PROVIDED BY MECHANICAL CONTRACTOR.
2. SWITCH CLOSEST TO THE DOOR SHALL CONTROL ALL LIGHTS IN BATHROOM, AND THE OTHER SWITCH SHALL CONTROL THE EXHAUST FAN.
3. CEILING MOUNTED SMOKE ALARM IN APARTMENTS TO BE 120VAC WITH 9V BATTERY BACKUP, INTERCONNECTED TO OTHERS IN SAME APARTMENT. DEVICE SHALL HAVE CARBON MONOXIDE DETECTOR AND PHOTOELECTRIC TYPE SMOKE DETECTOR WITH SOUNDER HORN HAVING AN 85dB OUTPUT AT 10', SHALL HAVE A SINGLE BUTTON FOR TEST/SILENCE AND LED INDICATOR LIGHTS, AND SHALL BE UL 217 LISTED. BRK #SC7010B OR EQUAL.
4. COORDINATE EXACT CATV AND PHONE OUTLET REQUIREMENTS AND FINAL LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.
5. PROVIDE 50A/2P MANUAL MOTOR CONTROLLER SWITCH AND MAKE FINAL CONNECTION TO BLOWER COIL.
6. SWITCHED RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL.
7. PROVIDE 120V CONNECTION TO RANGE HOOD. PROVIDE SWITCH FOR CONTROL OF RANGE HOOD. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDED.
8. PROVIDE RECEPTACLE BELOW COUNTER FOR CORD AND PLUG CONNECTION OF DISHWASHER. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED.
9. PROVIDE PRESET SLIDE DIMMER COMPATIBLE WITH ASSOCIATED LIGHT FIXTURES.
10. PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED GUESTS. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. INSTALL HORN/STROBE APPLIANCE AT 80" AFF PER ADA. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLATE AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 1, SHEET E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ "DOOR".
11. PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL ACCESSIBLE APARTMENTS AND ALSO AT APARTMENTS DESIGNATED FOR HEARING-IMPAIRED. REFER TO ARCH DRAWINGS FOR APPLICABLE ROOMS. REFER TO DETAIL 1, SHEET E6.1.
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13. EXISTING RECEPTACLES ON EXISTING WALLS MAY REMAIN. WHERE EXISTING RECEPTACLES DO NOT MEET NEC SPACING REQUIREMENTS, PROVIDE RECEPTACLES AS INDICATED.
14. PROVIDE 30A/2P NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE AND MAKE FINAL CONNECTION TO EQUIPMENT.
15. PROVIDE 30A/2P SNAP SWITCH AND MAKE FINAL CONNECTION TO ELECTRIC WATER HEATER.
16. PROVIDE 30A/2P MANUAL MOTOR CONTROLLER SWITCH AND MAKE FINAL CONNECTION TO BLOWER COIL.
17. PROVIDE NEW PANEL, SEE SCHEDULE. PROVIDE (3)#1/0,#6 GROUND TO EXISTING METER/SERVICE DISCONNECT. EXISTING FEEDER MAY BE REUSED IF APPROPRIATELY SIZED AND OF SUFFICIENT LENGTH TO REROUTE WITHOUT SPLICING.
18. PROVIDE TIMER SWITCH EQUAL TO AIR CYCLER 'SMART EXHAUST' FOR CONTROL OF EXHAUST FAN. SET SWITCH PER MANUFACTURER'S INSTRUCTIONS TO OPERATE FAN AS INDICATED BELOW:
    UNIT TYPES A/B: 23 MINUTES PER HOUR
    UNIT TYPES C/D/E: 34 MINUTES PER HOUR
19. CONNECT TO EXISTING UN-SWITCHED LIGHTING CIRCUIT IN THIS AREA.
20. REFERENCE SCOPE OF WORK.
21. REINSTALL EXTERIOR WALL PACK RETAINED FROM DEMOLITION.

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Project 26032 **Apr. 2026**

GENERAL NOTE:

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- INSTALLATION SHALL COMPLY WITH PROVISIONS OF 2021 IECC

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- PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER AT ALL APARTMENTS. INSTALL HORN/STROBE APPLIANCE AT 80" AFF PER ADA. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLATE AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 1, SHEET E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ "DOOR". CONNECT TO UNSWITCHED 120V CIRCUIT.
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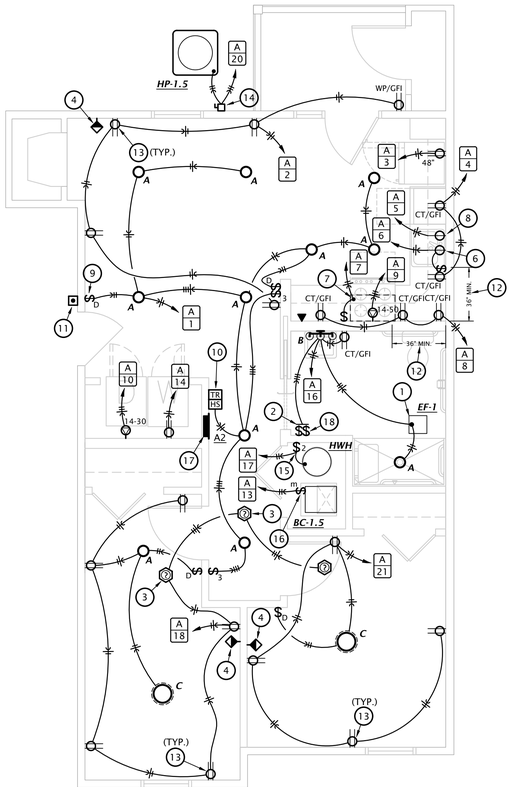
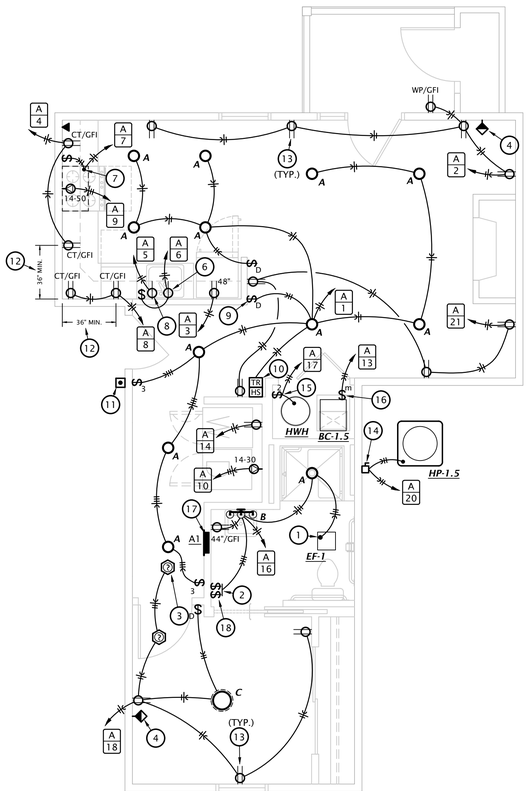


(3) UNIT TYPE 'C' ELECTRICAL PLAN
1/4" = 1'-0"



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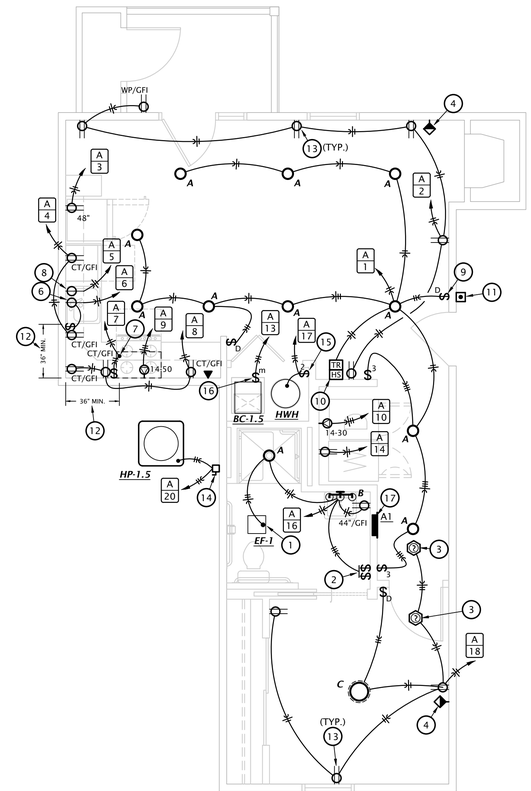
1/4" = 1'-0"



(1) UNIT TYPE 'A' ELECTRICAL PLAN
1/4" = 1'-0"

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1722 Main Street,
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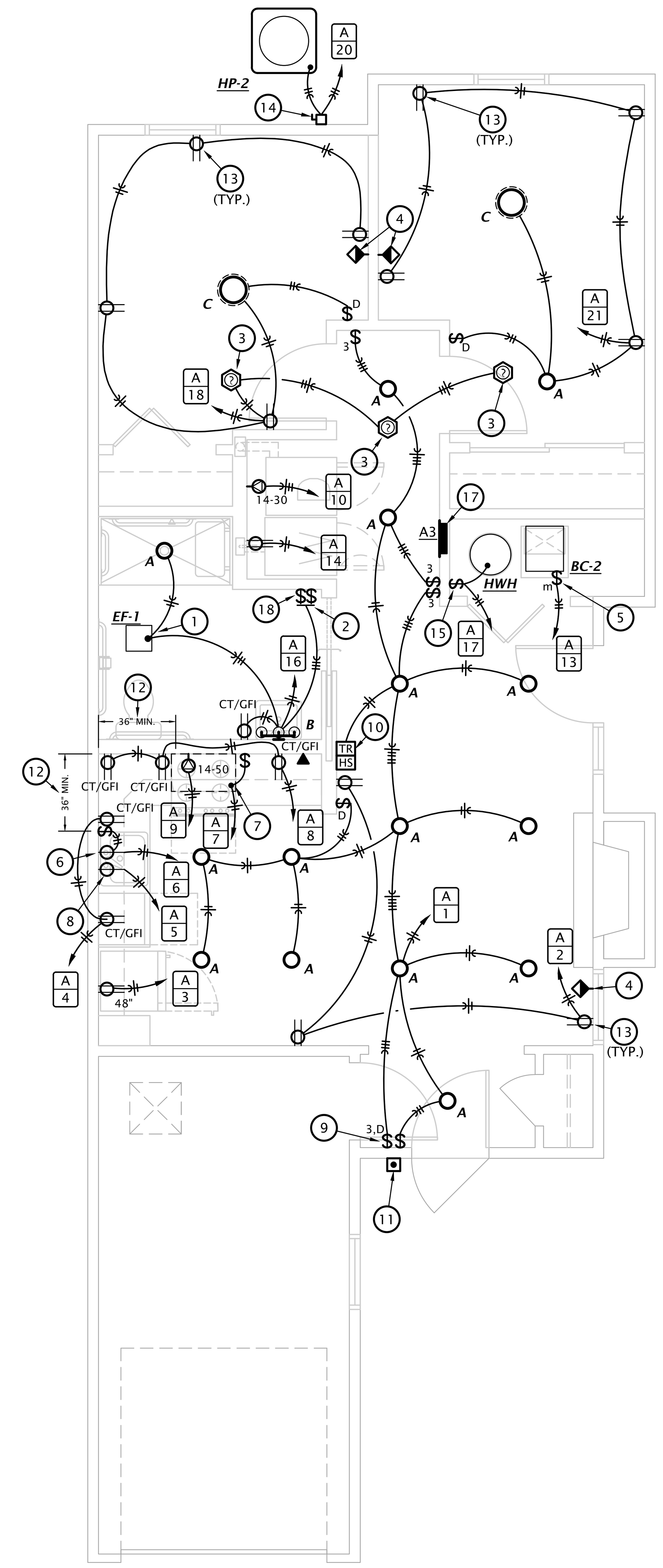
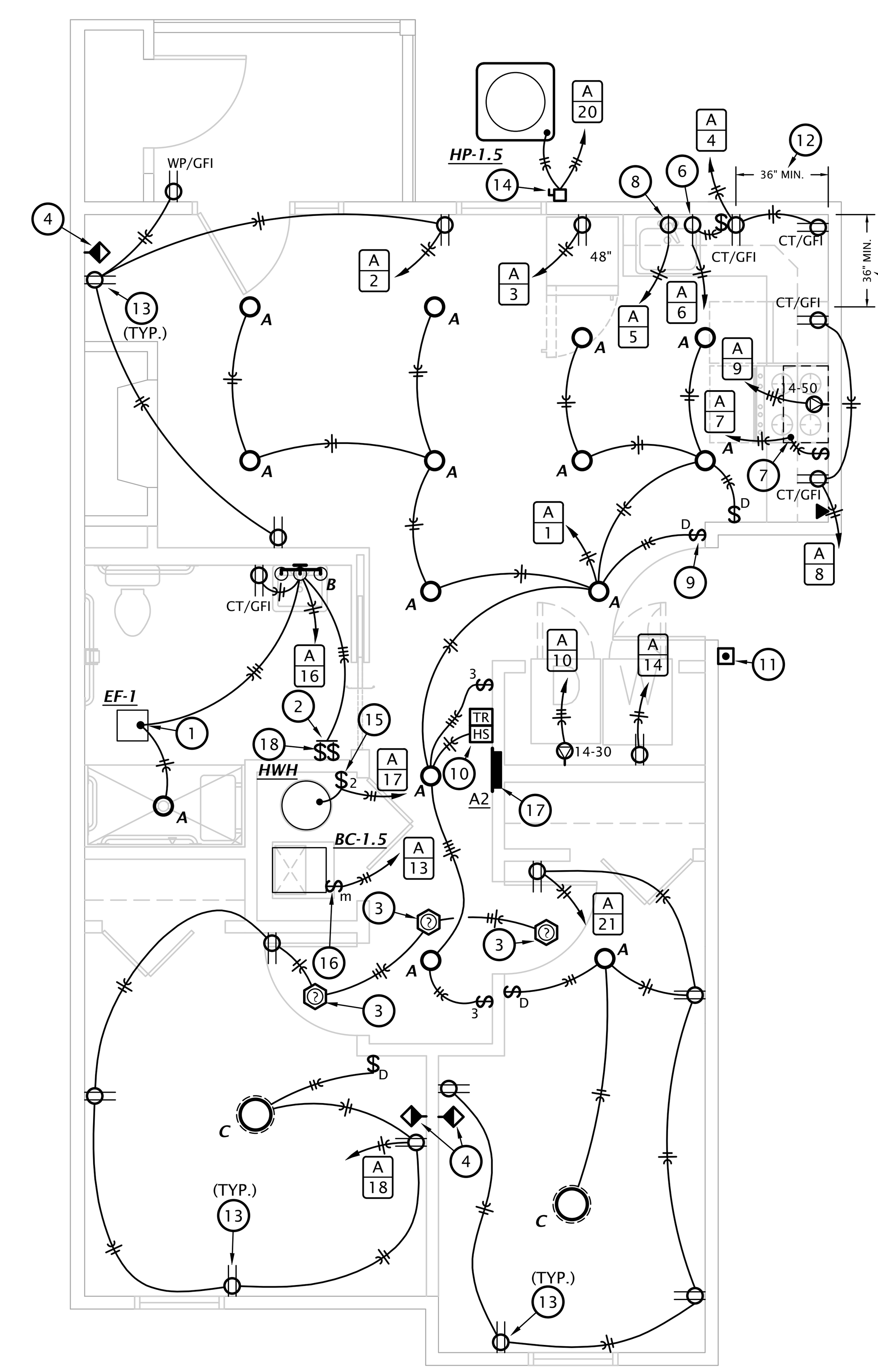
SEE E1.1 FOR NOTES AND NOTES BY SYMBOL



2 UNIT TYPE 'E' ELECTRICAL PLAN
1/4" = 1'-0"



1 UNIT TYPE 'D' ELECTRICAL PLAN
1/4" = 1'-0"

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04/24/2026
NUMBER E-24720

DATE: 04-24-2026
JOB: 21-3157
SHEET:

E1.2

ELECTRICAL PLAN NOTES BY SYMBOL

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19. CONNECT TO EXISTING UN-SWITCHED LIGHTING CIRCUIT IN THIS AREA.
20. REFERENCE SCOPE OF WORK.
21. REINSTALL EXTERIOR WALL PACK RETAINED FROM DEMOLITION.

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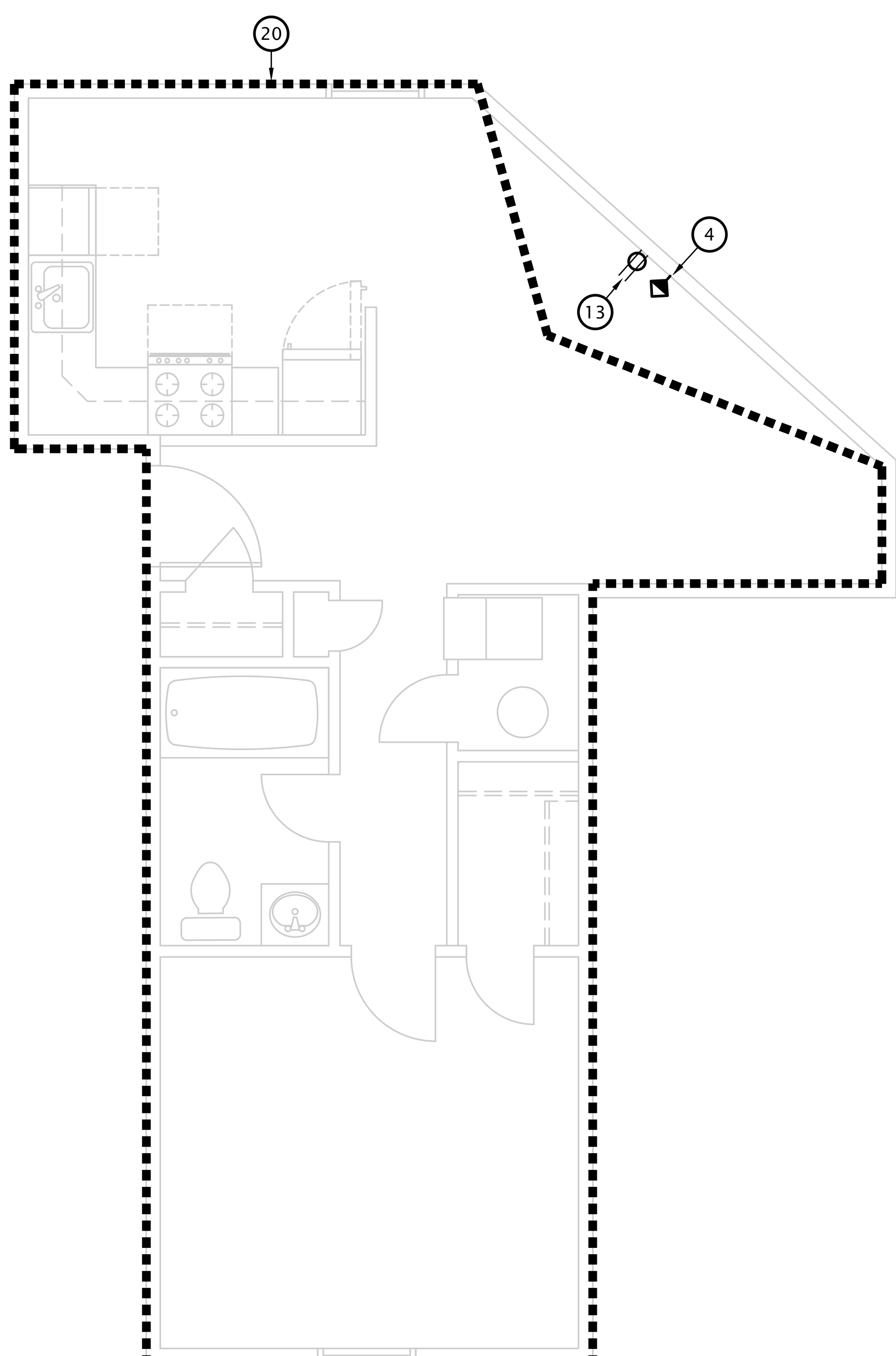
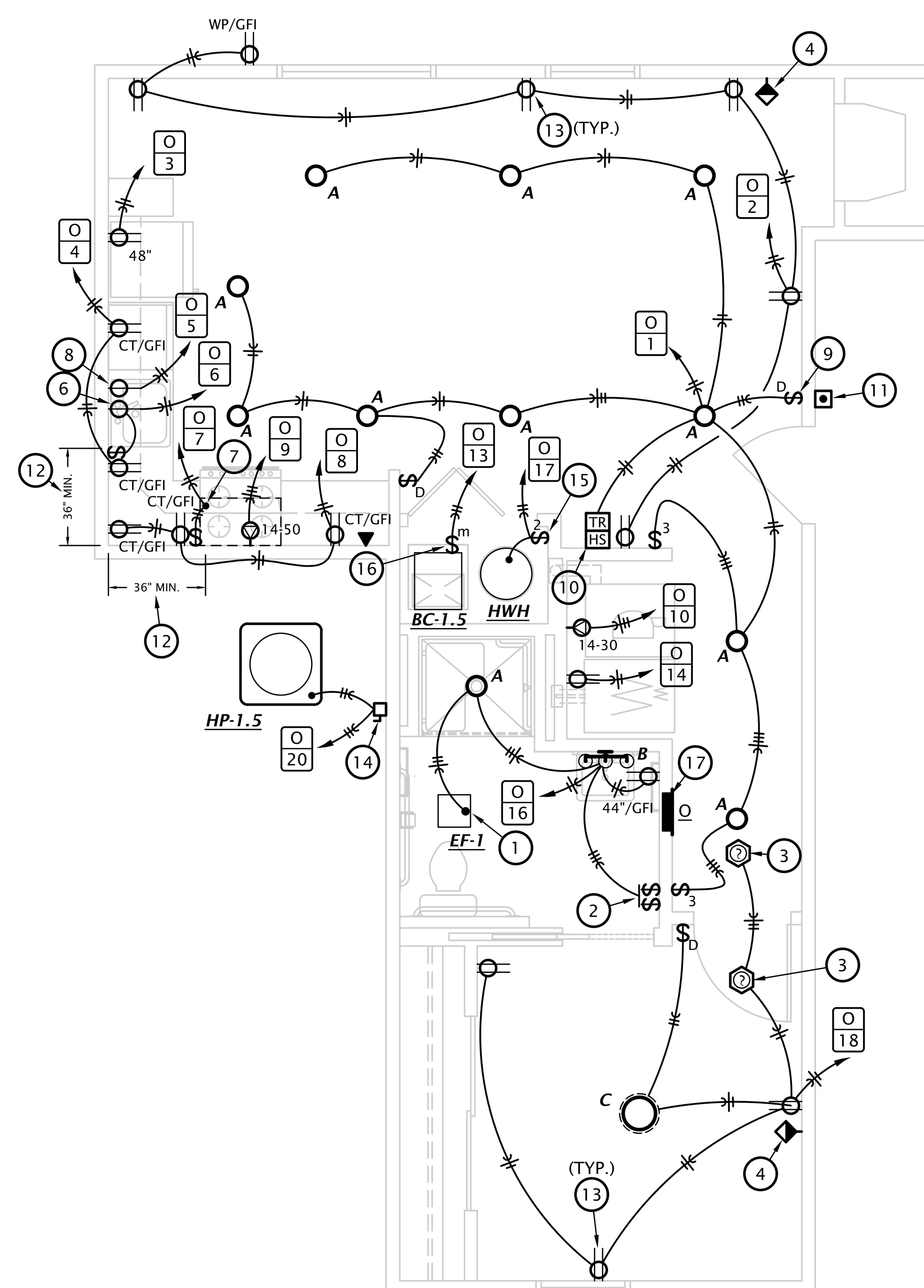


3 UNIT TYPE 'N' ELECTRICAL PLAN
1/4" = 1'-0"



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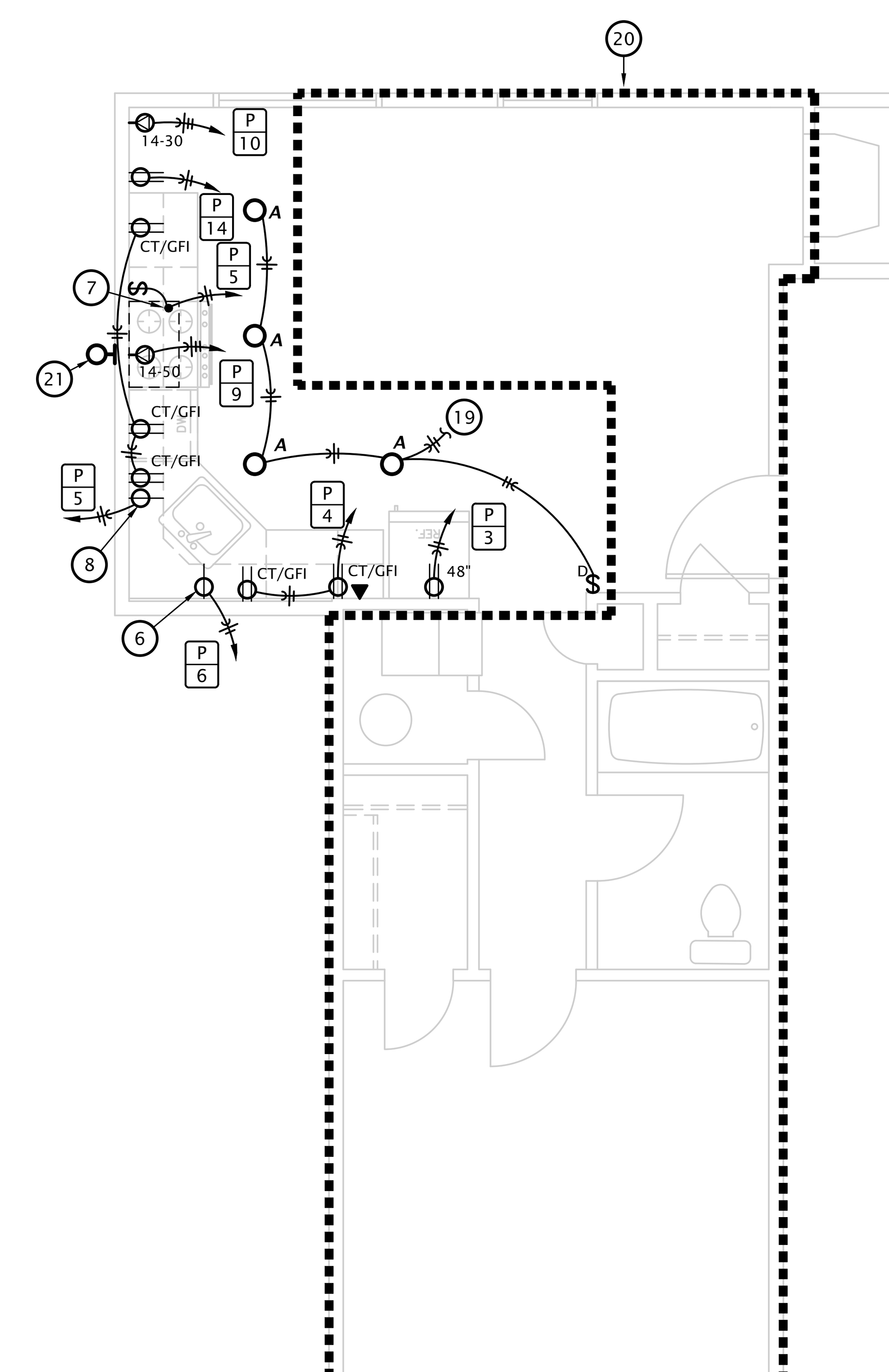

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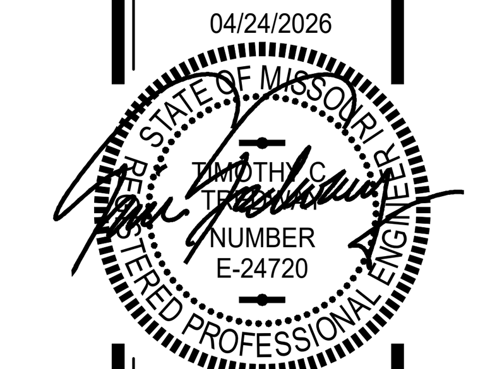


DATE: 04-24-2026
JOB: 21-3157
SHEET:
E1.3

[#] PANEL SCHEDULE NOTES BY SYMBOL

1. CIRCUIT SHALL BE PROTECTED BY AFCI TYPE BREAKER.
2. CIRCUIT SHALL BE PROTECTED BY COMBINATION AFCI/GFCI TYPE BREAKER.
3. CIRCUIT SHALL BE PROTECTED BY GFCI TYPE BREAKER.
4. CIRCUIT ONLY APPLICABLE FOR TYPE 'B' UNITS. FOR TYPE 'A' UNITS LEAVE CIRCUIT AS A BLANK SPACE.

Designation: A1 **Manufacturer:** Square D 'NQ'
Location: Hall **Bus Amps:** 125
Voltage: 240/120V-1Ph-3W **MCB Amps:** MLO
Enclosure: NEMA 1 **AIC Rating:** 10 kAIC
Mounting: Recessed **Other:** Integral Surge Protection

	Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	1	LTG - LIVING ROOM/HALL	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - LIVING ROOM	2
2	3	RCPT - REFRIGERATOR	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	4
2	5	RCPT - DISHWASHER	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - GARBAGE DISPOSAL	6
2	7	KITCHEN HOOD	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	8
	9	STOVE	3#6,#10G.	50 / 2	30 / 2	3#10,#10G	DRYER	10
	11							12
	13	'BC-1.5'	3#8,#10G.	35 / 2	20 / 1	2#12,#12G	WASHING MACHINE	14
	15				20 / 1	2#12,#12G	BATHROOM LIGHTS/RCPT	16
	17	'HWH'	2#10,#10G.	30 / 2	20 / 1	2#12,#12G	RECEPTS - BEDROOM	18
	19				15 / 2	2#12,#12G	'HP-1.5'	20
1 4	21	RCPT - LIVING ROOM/ENTRY	2#12,#12G	20 / 1				22
	23	SPACE ONLY	---	---	---	---	SPACE ONLY	24

PANEL IS TYPICAL FOR APARTMENTS TYPES: 'A' & 'B'

Designation: A2 **Manufacturer:** Square D 'NQ'
Location: Hall **Bus Amps:** 125
Voltage: 240/120V-1Ph-3W **MCB Amps:** MLO
Enclosure: NEMA 1 **AIC Rating:** 10 kAIC
Mounting: Recessed **Other:** Integral Surge Protection

	Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	1	LTG - LIVING ROOM/HALL	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - LIVING ROOM	2
2	3	RCPT - REFRIGERATOR	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	4
2	5	RCPT - DISHWASHER	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - GARBAGE DISPOSAL	6
2	7	KITCHEN HOOD	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	8
	9	STOVE	3#6,#10G.	50 / 2	30 / 2	3#10,#10G	DRYER	10
	11							12
	13	'BC-1.5'	3#8,#10G.	35 / 2	20 / 1	2#12,#12G	WASHING MACHINE	14
	15				20 / 1	2#12,#12G	BATHROOM LIGHTS/RCPT	16
	17	'HWH'	2#10,#10G.	30 / 2	20 / 1	2#12,#12G	RECEPTS - BEDROOM 2	18
	19				15 / 2	2#12,#12G	'HP-1.5'	20
1	21	RECEPTS - BEDROOM 2	2#12,#12G	20 / 1				22
	23	SPACE ONLY	---	---	---	---	SPACE ONLY	24

PANEL IS TYPICAL FOR APARTMENTS: 'C' & 'D'

Designation: A3 **Manufacturer:** Square D 'NQ'
Location: Hall **Bus Amps:** 125
Voltage: 240/120V-1Ph-3W **MCB Amps:** MLO
Enclosure: NEMA 1 **AIC Rating:** 10 kAIC
Mounting: Recessed **Other:** Integral Surge Protection

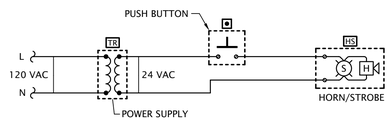
	Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	1	LTG - LIVING ROOM/HALL	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - LIVING ROOM	2
2	3	RCPT - REFRIGERATOR	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	4
2	5	RCPT - DISHWASHER	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - GARBAGE DISPOSAL	6
2	7	KITCHEN HOOD	2#12,#12G	20 / 1	20 / 1	2#12,#12G	RCPT - KITCHEN COUNTERTOP	8
	9	STOVE	3#6,#10G.	50 / 2	30 / 2	3#10,#10G	DRYER	10
	11							12
	13	'BC-2'	3#6,#10G.	50 / 2	20 / 1	2#12,#12G	WASHING MACHINE	14
	15				20 / 1	2#12,#12G	BATHROOM LIGHTS/RCPT	16
	17	'HWH'	2#10,#10G.	30 / 2	20 / 1	2#12,#12G	RECEPTS - BEDROOM 1	18
	19				15 / 2	2#12,#12G	'HP-2'	20
1	21	RECEPTS - BEDROOM 2	2#12,#12G	20 / 1				22
	23	SPACE ONLY	---	---	---	---	SPACE ONLY	24

PANEL IS TYPICAL FOR APARTMENTS TYPE 'E'
NOTE :
- PROVIDE PANEL SPACE FOR EXISTING TO REMAIN GARAGE CIRCUITS, FIELD VERIFY LOCATION AND QUANTITY. CONNECT TO NEW PANEL.

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	LAMP / LED DATA		BALLAST/DRIVER	MOUNTING	FINISH	DESCRIPTION
			WATT/LUMENS	COLOR				
A	HALO	SMD6R-6-930-WH	9.6W LED 750 LUMENS	3000˚K	INTEGRAL DRIVER	SURFACE	BRONZE	6" ROUND SURFACE MOUNT DOWNLIGHT
B	SEAGULL	4423003EN3-710	(3) 9.5W LED	3000˚K	INTEGRAL DRIVER	WALL AT 7'-0"	BURNT SIENNA	3-LAMP LED VANITY LIGHT
C	LITHONIA	FMML13830DDBT	28W LED 1900 LUMENS	3000˚K	INTEGRAL DRIVER	SURFACE	BRONZE	13" ROUND FLUSH MOUNT DOWNLIGHT
D	LITHONIA	TWX1-LED-P1-40K-MVOLT-PE-DDVXD	11W LED 1600 LUMENS	4000˚K	STANDARD	WALL	BRONZE	DIE-CAST ALUMINUM HOUSING LED WALL PACK WITH INTEGRAL PHOTOCELL
F1	LITHONIA	DSX0-LED-P2-40K-T4M-MVOLT-HS-DDBXD	49W LED 5880 LUMENS	4000˚K	STANDARD	POLE	BRONZE	LED AREA LIGHT WITH IES TYPE IV DISTRIBUTION, HOUSE-SIDE SHIELD, AND INTEGRAL PHOTOCELL
F2	LITHONIA	DSX0-LED-P2-40K-T2M-MVOLT-HS-DDBXD	49W LED 6025 LUMENS	4000˚K	STANDARD	POLE	BRONZE	LED AREA LIGHT WITH IES TYPE II DISTRIBUTION, HOUSE-SIDE SHIELD, AND INTEGRAL PHOTOCELL

GENERAL:
- All interior LED fixtures shall be 3000°K corrected color temperature, min. 80 CRI.
- All exterior LED fixtures shall be 4000°K corrected color temperature, min. 70 CRI., and shall be fully downcast.
- All light fixtures shall be provided with universal drivers capable of operating at 120V or 208V UNO.
- All LED fixtures shall adhere to LM79 and LM80 standards.
- All apartment light fixtures shall be Energy Star certified.



DOOR ALARM BUZZER SYSTEM NOTES

1. PROVIDE DOOR ANNUNCIATOR SYSTEM COMPLETE WITH PUSH BUTTON, HORN/STROBE(S), POWER SUPPLIES AND ALL WIRING REQUIRED. HORN/STROBE SHALL ACTIVATE WHEN PUSH BUTTON IS DEPRESSED.
2. HORN/STROBE SHALL OPERATE AT 24VAC, HAVE A CLEAR LENS WITH 50cd STROBE AND HORN WITH 82dB AT 10', UL 1638 LISTED, EDWARDS #6536-G5. FLUSH MOUNT IN WALL AT 6'-8" AFF.
3. PUSH BUTTON SHALL BE WHITE WITH CHROME RIM, NON-ILLUMINATED, WITH N.O. MOMENTARY CONTACTS, RATED FOR 0.67 AMPS AT 24VAC, EDWARDS #620. PROVIDE WITH STAINLESS STEEL COVER PLATE, EDWARDS #147-10. MOUNT AT 48" AFF.
4. POWER SUPPLY SHALL BE A LOW VOLTAGE CLASS 2 TRANSFORMER WITH 120VAC PRIMARY AND 24VAC SECONDARY, 20VA, EDWARDS #598. FLUSH MOUNT IN 2-GANG WALL BOX WITH BLANK COVER PLATE, DIRECTLY ABOVE HORN/STROBE.
5. LOW VOLTAGE CLASS 2 CABLING SHALL BE MINIMUM 18 AWG UNSHIELDED.

1 APARTMENT DOORBELL WIRING SCHEMATIC
No Scale

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BRIDGEPORT APARTMENTS
REMODEL, REHABILITATION APARTMENTS
KANSAS CITY, MISSOURI

04/24/2026
STATE OF MISSOURI
TIMOTHY G. TRUEBLOOD
NUMBER E-24720
REGISTERED PROFESSIONAL ENGINEER

DATE: 04–24–2026
JOB: 21–3157
SHEET: E6.1