

GENERAL ELECTRICAL DEMOLITION NOTES

1. REMOVE ALL NM, BX, MC, AC AND OTHER CABLE SYSTEMS AND WIRING FOR ALL ABANDONED CIRCUITS.
2. REMOVE ALL ABANDONED CONDUITS ABOVE LAY-IN CEILINGS, EXPOSED CONDUITS, FLEXIBLE CONDUITS, SURFACE RACEWAY, SURFACE MOUNTED OUTLET/JUNCTION BOXES AND EQUIPMENT UNLESS NOTED OTHERWISE.
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.
4. WHERE ABANDONED OUTLET AND JUNCTION BOXES ARE RECESSED FLUSH IN WALLS, FLOORS AND HARD CEILINGS THAT ARE TO REMAIN, REMOVE ALL WIRING AND WIRING DEVICES AND PROVIDE BLANK STAINLESS STEEL COVERPLATES FOR BOXES 6"x6" AND SMALLER. REMOVE BOXES LARGER THAN 6"x6" AND PATCH SURFACE TO MATCH EXISTING. COORDINATE WITH ARCHITECT FOR FINAL DIRECTION.
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.
6. COORDINATE THE REMOVAL OF MECHANICAL AND PLUMBING EQUIPMENT WITH THE MECHANICAL AND PLUMBING CONTRACTORS. DISCONNECT AND REMOVE ELECTRICAL POWER AND CONTROL CIRCUITS FOR EQUIPMENT BEING REMOVED. REMOVE ALL ELECTRICAL EQUIPMENT ASSOCIATED WITH DEMOLISHED MECHANICAL AND PLUMBING EQUIPMENT (DISCONNECT SWITCHES, MOTOR STARTERS, RELAYS, ETC.).

# M/E DEMO PLAN NOTES BY SYMBOL

1. REMOVE AND REPLACE EXISTING PLUMBING FIXTURE, SEE NEW WORK PLANS FOR MORE INFORMATION.
2. REMOVE EXISTING LIGHT FIXTURES, RE-USE EXISTING CIRCUITRY FOR NEW LIGHT FIXTURE. SEE NEW WORK PLANS FOR MORE INFORMATION.
3. REMOVE EXISTING EXHAUST FAN. RE-USE EXISTING EXHAUST DUCT AND CIRCUITRY FOR NEW EXHAUST FAN. SEE NEW WORK PLANS FOR MORE INFORMATION.
4. EXISTING ELECTRICAL LOAD CENTER, SEE NEW WORK PLANS FOR MORE INFORMATION.
5. EXISTING AIR DEVICES AND ASSOCIATED MECHANICAL INSTALLATION TO REMAIN. IF REQUIRED FOR NEW WORK, REMOVE EXISTING AIR DEVICE IN CEILING/SOFFIT AND RE-INSTALLED IN SAME LOCATION. COORDINATE REQUIREMENTS WITH G.C. CLEAN, REPAIR AND RESTORE EXISTING AIR DEVICES TO LIKE NEW CONDITION PRIOR TO RE-USE, OR REPLACE TO MATCH EXISTING.
6. DISCONNECT GAS FROM EXISTING RANGE TO BE REPLACED. EXISTING NATURAL GAS ROUGH-IN TO REMAIN FOR NEW RANGE. SEE NEW WORK PLANS FOR MORE INFORMATION.
7. DISCONNECT EXISTING PLUMBING AND ELECTRICAL CONNECTIONS TO DISHWASHER TO BE REPLACED. SEE NEW WORK PLANS FOR MORE INFORMATION.
8. DISCONNECT EXHAUST DUCT FROM HOOD TO BE REMOVED. EXISTING DUCT TO REMAIN FOR RE-USE. SEE NEW WORK PLANS FOR MORE INFORMATION.
9. FURNACE, EVAPORATOR COIL, AND CONDENSING UNIT TO BE REMOVED AND REPLACED IN KIND PER SCOPE OF WORK SCHEDULE. SEE NEW WORK PLANS FOR MORE INFORMATION.

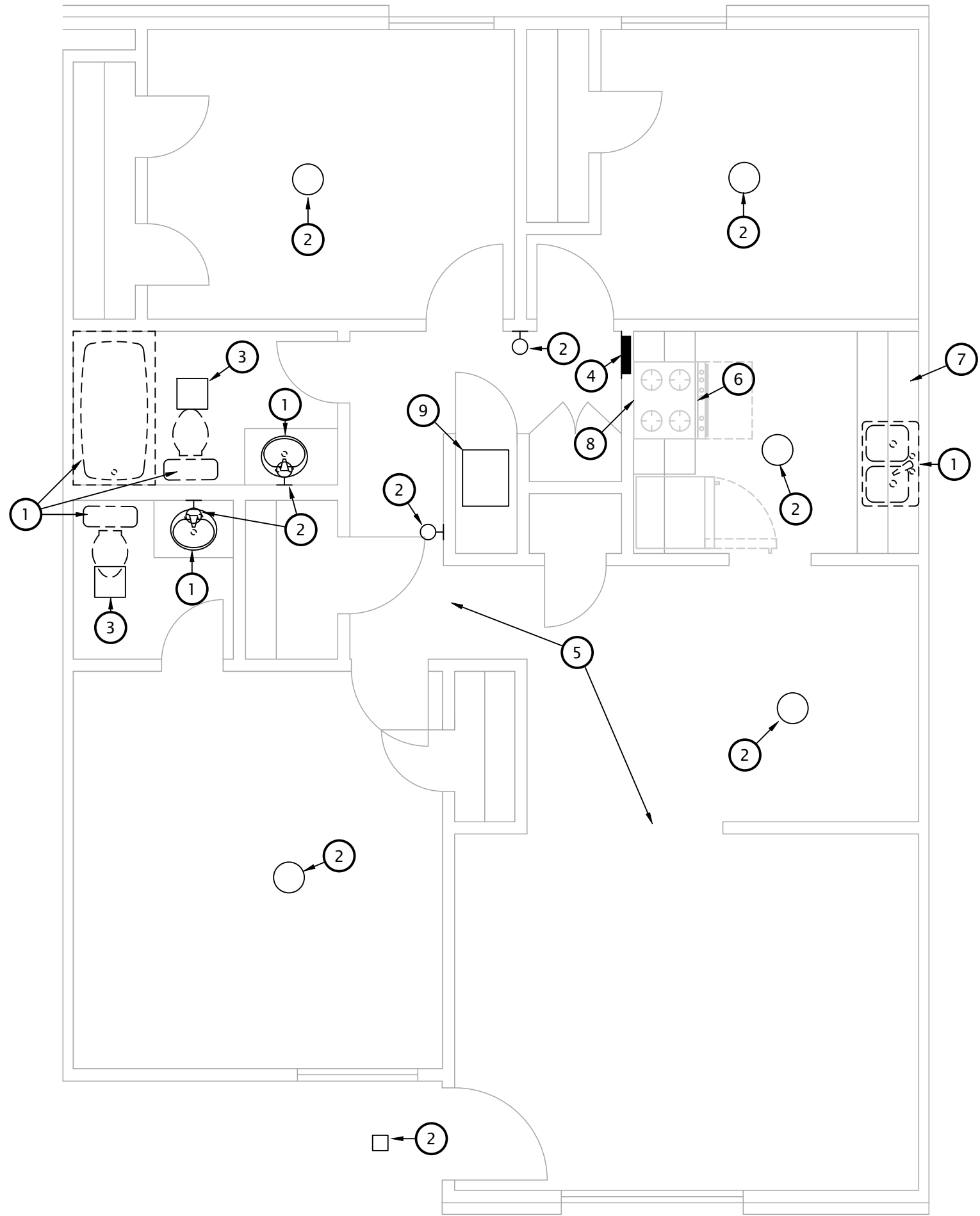
GENERAL DEMOLITION NOTES

1. REMOVE MECHANICAL AND ELECTRICAL INSTALLATION FROM PROJECT AREA. AS REQUIRED FOR NEW WORK. COORDINATE WITH OWNER AND G.C.
2. SERVICES TO ITEMS NOT REMOVED AS PART OF THIS WORK SHALL BE RESTORED UPON COMPLETION OF THIS WORK TO FULLY OPERATIONAL CONDITION.
3. NOT ALL ITEMS REQUIRED TO BE DEMOLISHED MAY BE INDICATED ON DRAWINGS. ALL DEMOLITION OF AFFECTED SPACE SHALL BE PERFORMED AS IF INDICATED.
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.

GENERAL MECHANICAL DEMOLITION NOTES

1. ALL PIPING TAKEN OUT OF SERVICE SHALL BE REMOVED. WHERE PIPING TO BE REMOVED IS CONNECTED TO EXISTING PIPING TO REMAIN, PIPING SHALL BE REMOVED BACK TO MAIN AND CAPPED, UNLESS INDICATED OTHERWISE.
2. WHERE PIPING TAKEN OUT OF SERVICE IS LOCATED BELOW SLAB AND IS UNABLE TO BE REMOVED, CAP BELOW SLAB.
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.

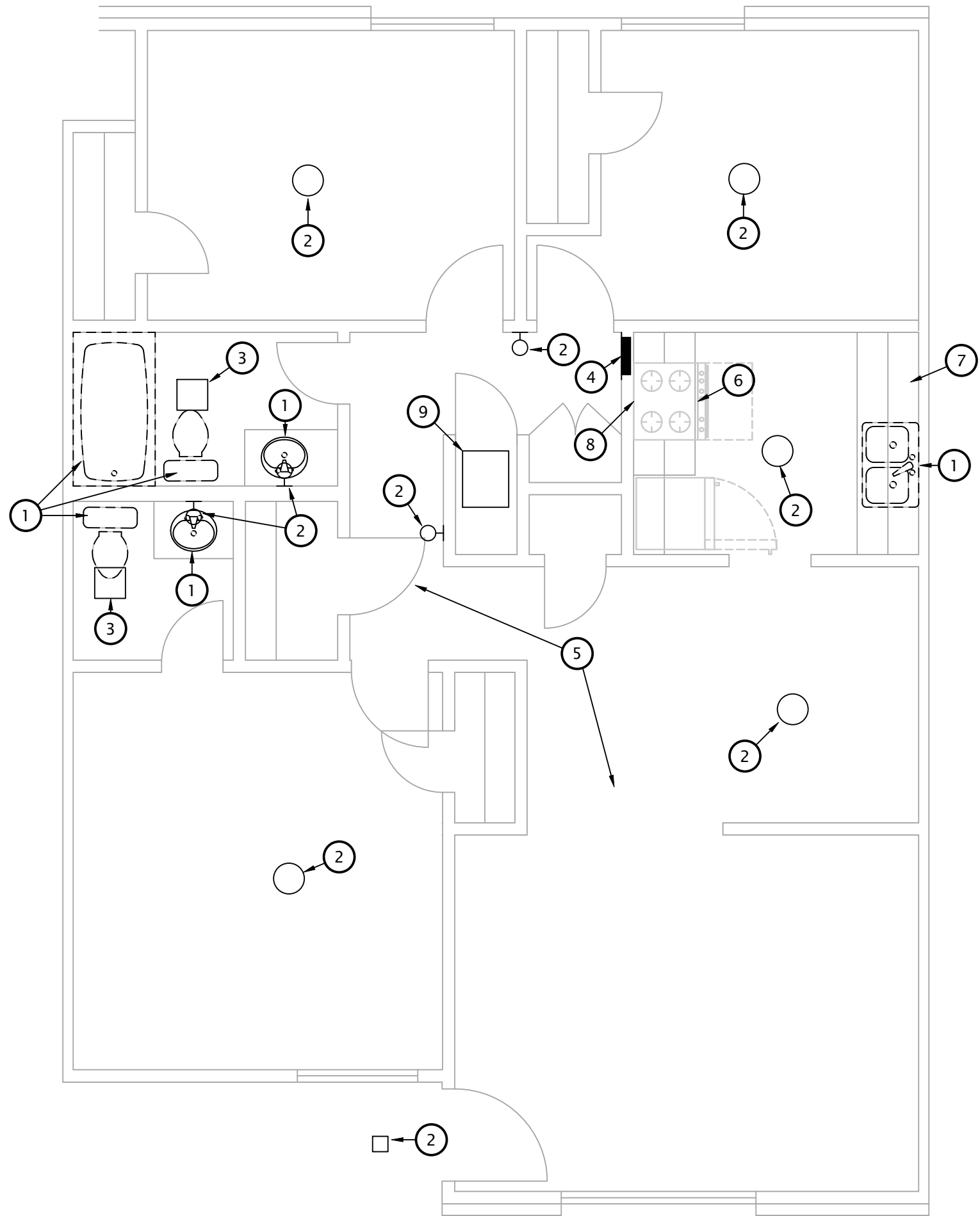
NOTE: ALL UNITS SHOWN AS TYPICAL,  
REFER TO SCOPE OF WORK SCHEDULE  
FOR SPECIFIC UNIT EXTENT OF WORK.



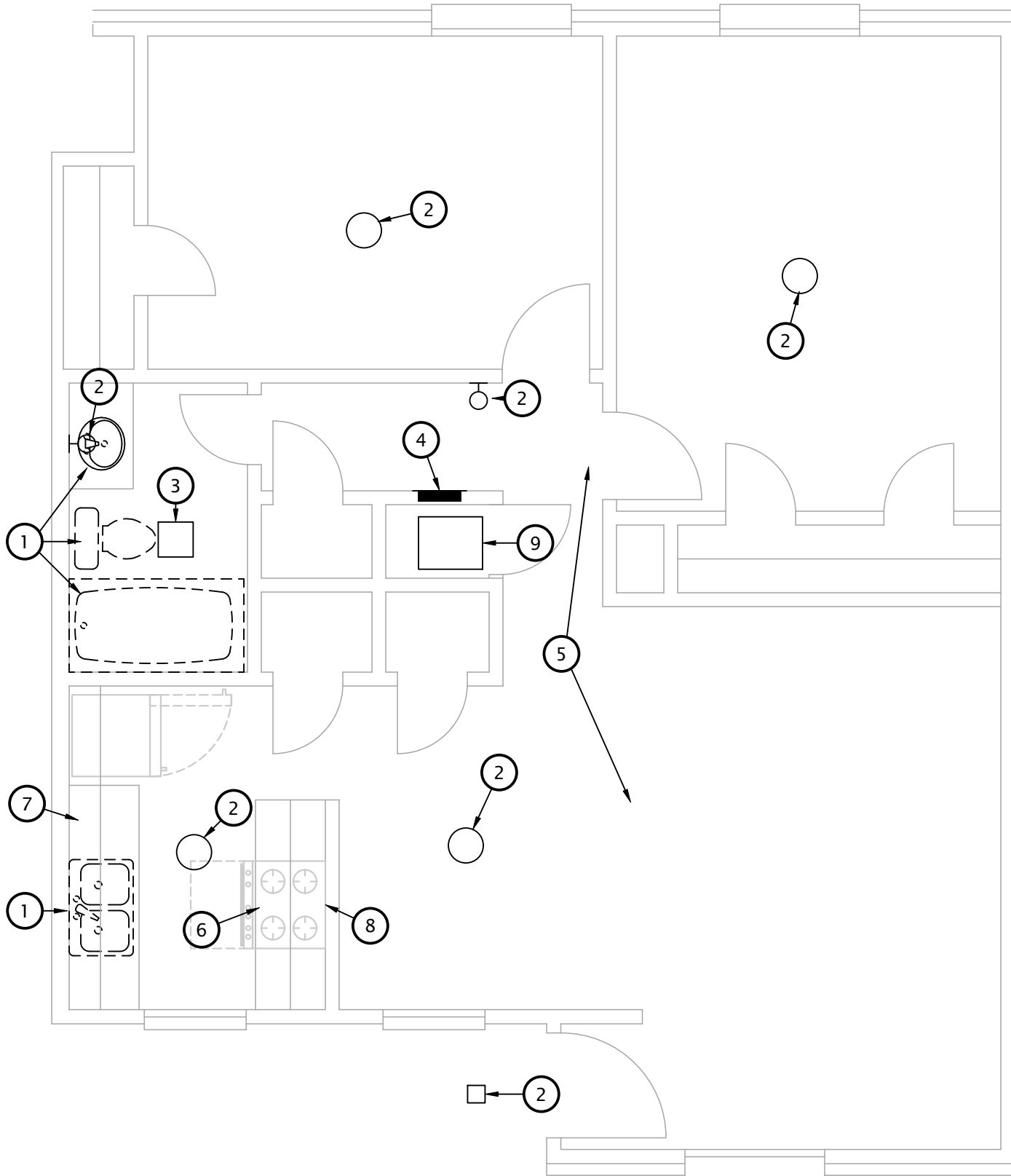
5 UNIT E - M/E DEMO PLAN  
1/4" = 1'-0"



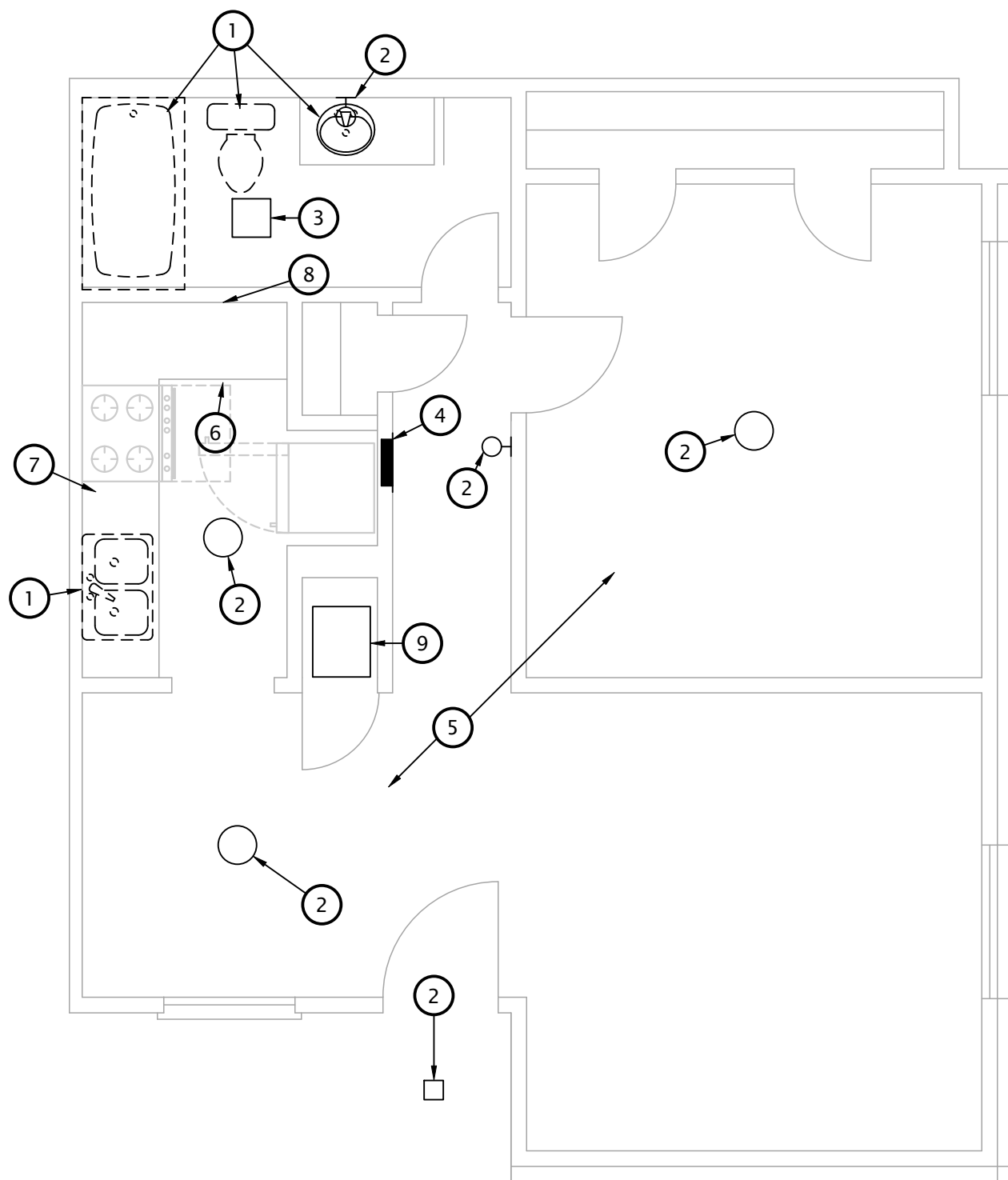
4 UNIT D - M/E DEMO PLAN  
1/4" = 1'-0"



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



2 UNIT B - M/E DEMO PLAN  
1/4" = 1'-0"

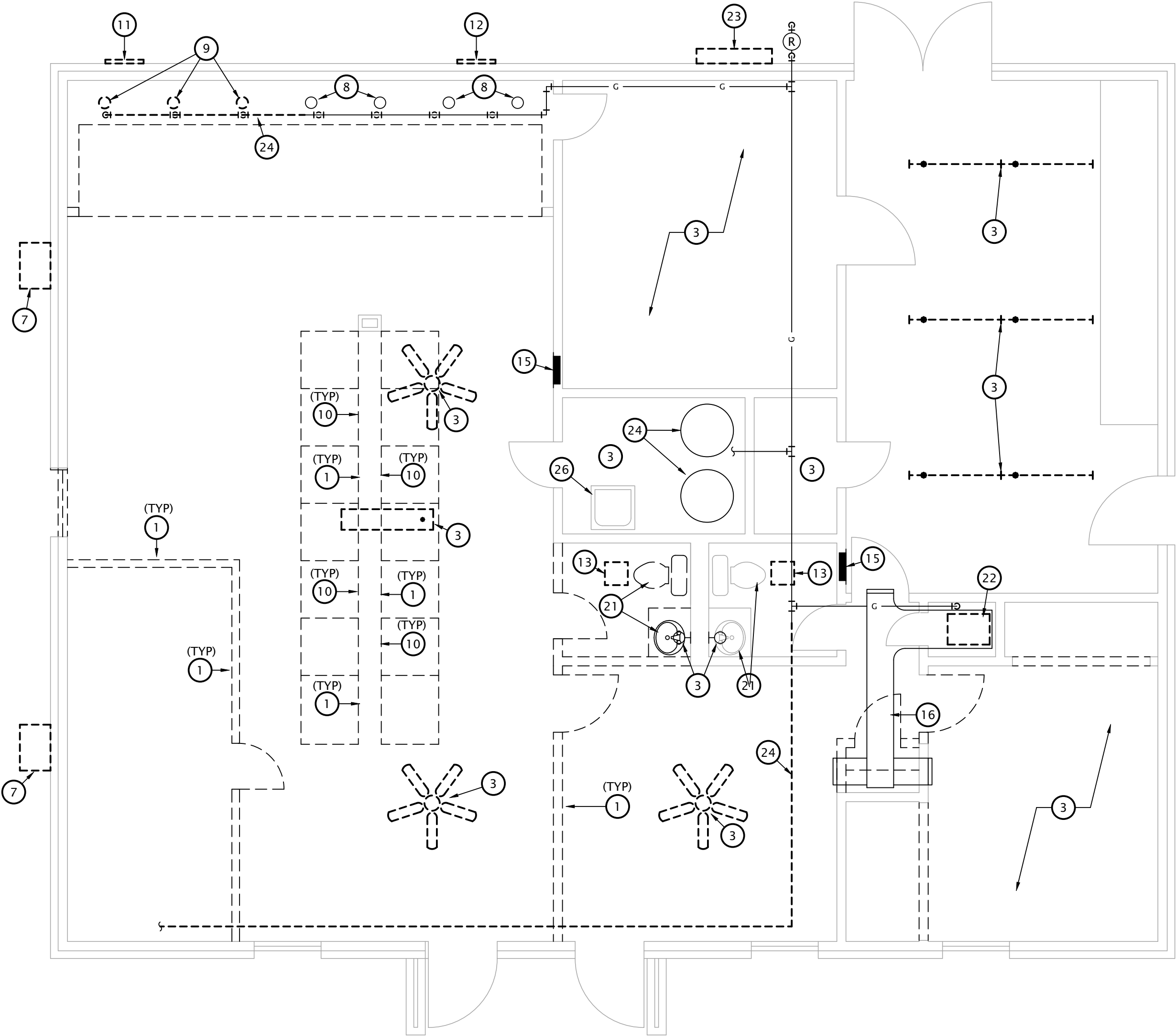


1 UNIT A - M/E DEMO PLAN  
1/4" = 1'-0"

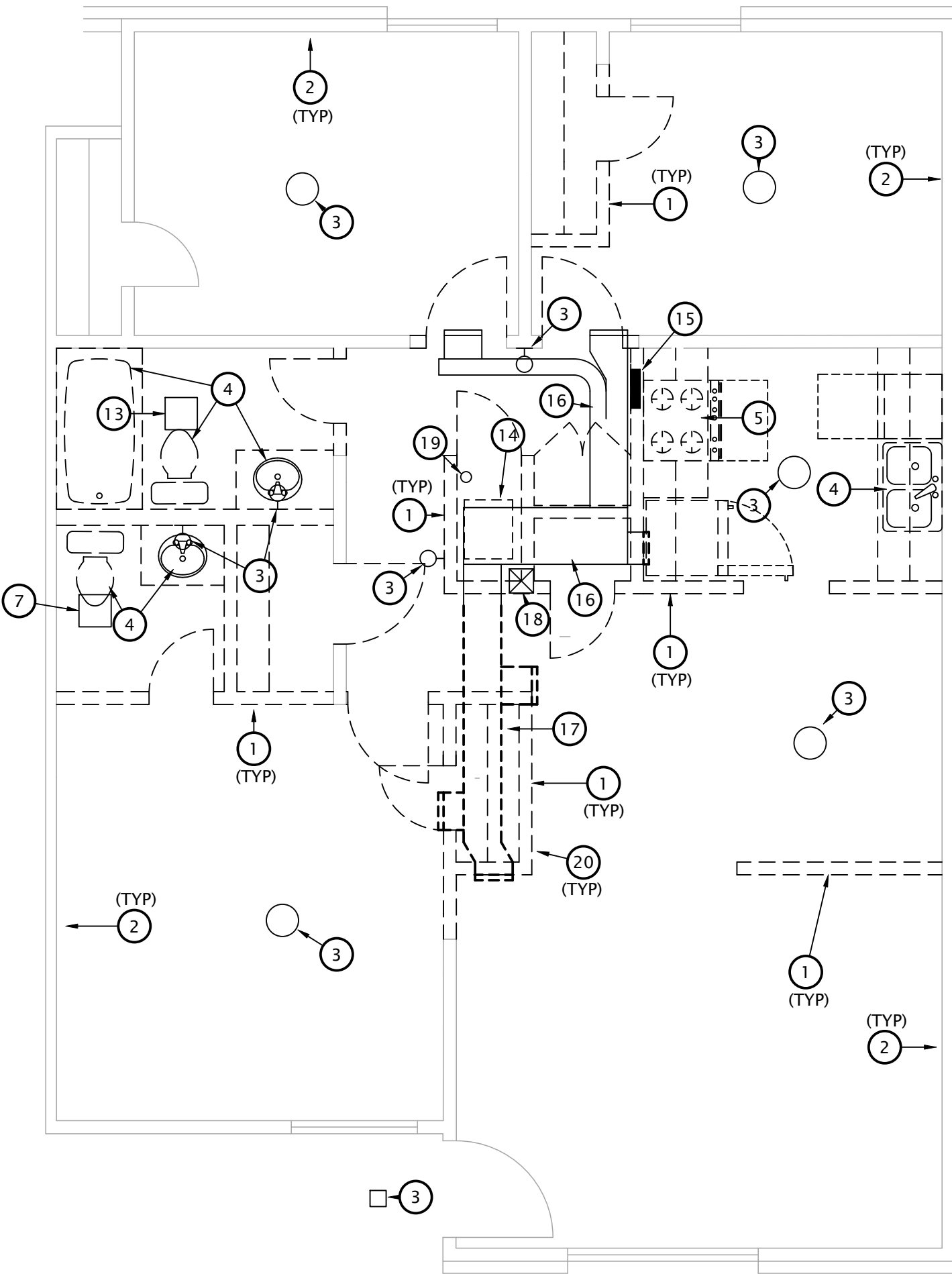
SEE GENERAL DEMOLITION NOTES ON ME1.1.

# M/E DEMO PLAN NOTES BY SYMBOL

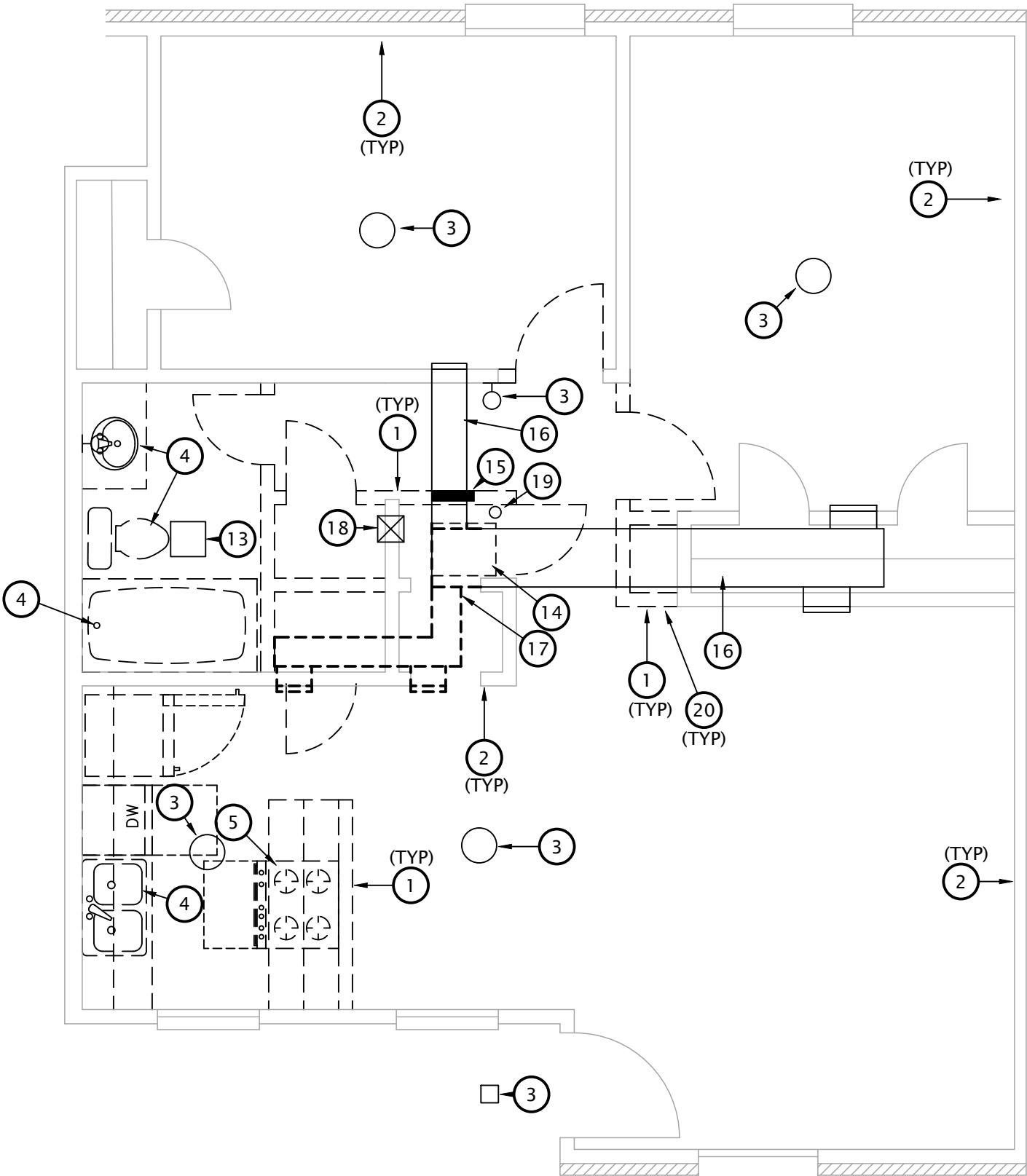
1. REMOVE ALL ELECTRICAL DEVICES AND ASSOCIATED CIRCUITRY IN WALLS TO BE DEMOLISHED. FIELD VERIFY EXACT LOCATION OF EXISTING.
2. ELECTRICAL DEVICES IN WALLS NOT DEMOLISHED TO BE RE-USED WHERE PLACEMENT MEETS NEC SPACING REQUIREMENTS. SEE NEW WORK PLANS FOR MORE INFORMATION.
3. REMOVE ALL EXISTING LIGHT FIXTURES AND CEILING FANS. REMOVE ASSOCIATED CIRCUITRY WHERE REQUIRED, SEE NEW WORK PLANS FOR MORE INFORMATION.
4. REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED INSTALLATION, SEE NEW WORK PLANS FOR MORE INFORMATION.
5. REMOVE RANGE, RANGE HOOD AND ALL ASSOCIATED MECHANICAL AND ELECTRICAL INSTALLATION. SEE NEW WORK PLANS FOR MORE INFORMATION.
6. REMOVE RANGE, RANGE HOOD. ASSOCIATED MECHANICAL AND ELECTRICAL INSTALLATION TO BE RE-USED, SEE NEW WORK PLANS FOR MORE INFORMATION.
7. REMOVE EXHAUST FAN AND ASSOCIATED MECHANICAL AND ELECTRICAL INSTALLATION. COORDINATE WALL PATCHING WITH ARCHITECT AND G.C.
8. (4) DRYER EXHAUST DUCT AND ROOF JACKS TO REMAIN. ENSURE IN GOOD CONDITION AND PROPER WORKING ORDER. THOROUGHLY CLEAN DUCT AND JACK BEFORE RE-USE. FIELD COORDINATE EXACT LOCATION WITH NEW WORK PLANS.
9. DRYER EXHAUST DUCT AND ROOF JACK TO BE REMOVED. COORDINATE PATCHING OF ROOF WITH ARCHITECT AND G.C.
10. REMOVE CLOTHES WASHER CONNECTION BOX AND ALL ASSOCIATED INSTALLATION.
11. REMOVE WALL LOUVER AND ASSOCIATED INSTALLATION, COORDINATE WALL PATCHING WITH ARCHITECT AND G.C.
12. REMOVE WALL LOUVER AND ASSOCIATED INSTALLATION, SEE NEW WORK PLAN FOR MORE INFORMATION.
13. REMOVE EXISTING EXHAUST FAN. RE-USE EXISTING EXHAUST DUCT FOR NEW EXHAUST FAN. SEE NEW WORK PLANS FOR MORE INFORMATION.
14. FURNACE, EVAPORATOR COIL, AND CONDENSING UNIT TO BE REMOVED AND REPLACED IN KIND PER SCOPE OF WORK SCHEDULE. SEE NEW WORK PLANS FOR MORE INFORMATION.
15. REMOVE ELECTRICAL PANEL, SEE NEW WORK PLAN FOR MORE INFORMATION.
16. SUPPLY AIR DUCT TO REMAIN, SEE NEW WORK PLAN FOR MORE INFORMATION.
17. SUPPLY AIR DUCT TO BE REMOVED, SEE NEW WORK PLAN FOR MORE INFORMATION.
18. COMBUSTION AIR DUCT TO BE BE MODIFIED FOR NEW MECHANICAL CLOSET LOCATION, SEE NEW WORK PLANS FOR MORE INFORMATION.
19. FURNACE FLUE TO BE MODIFIED FOR NEW FURNACE LOCATION, SEE NEW WORK PLANS FOR MORE INFORMATION.
20. REMOVE ALL PHONE, DATA, AND CATV DEVICES AND ASSOCIATED INSTALLATION IN WALL BEING DEMOLISHED, SEE NEW WORK PLANS FOR MORE INFORMATION.
21. REMOVE PLUMBING FIXTURE, SEE NEW WORK PLANS FOR MORE INFORMATION.
22. FURNACE, EVAPORATOR COIL, AND CONDENSING UNIT TO BE REMOVED.
23. REMOVE EXISTING ELECTRICAL SERVICE INSTALLATION, SEE NEW WORK PLANS FOR MORE INFORMATION.
24. REMOVE NATURAL GAS PIPING TO EQUIPMENT BEING REMOVED. SEE NEW WORK PLANS FOR MORE INFORMATION.
25. EXISTING WATER HEATERS AND ASSOCIATED INSTALLATION TO BE REMOVED. SEE NEW WORK PLANS FOR MORE INFORMATION.
26. EXISTING SINK TO REMAIN.



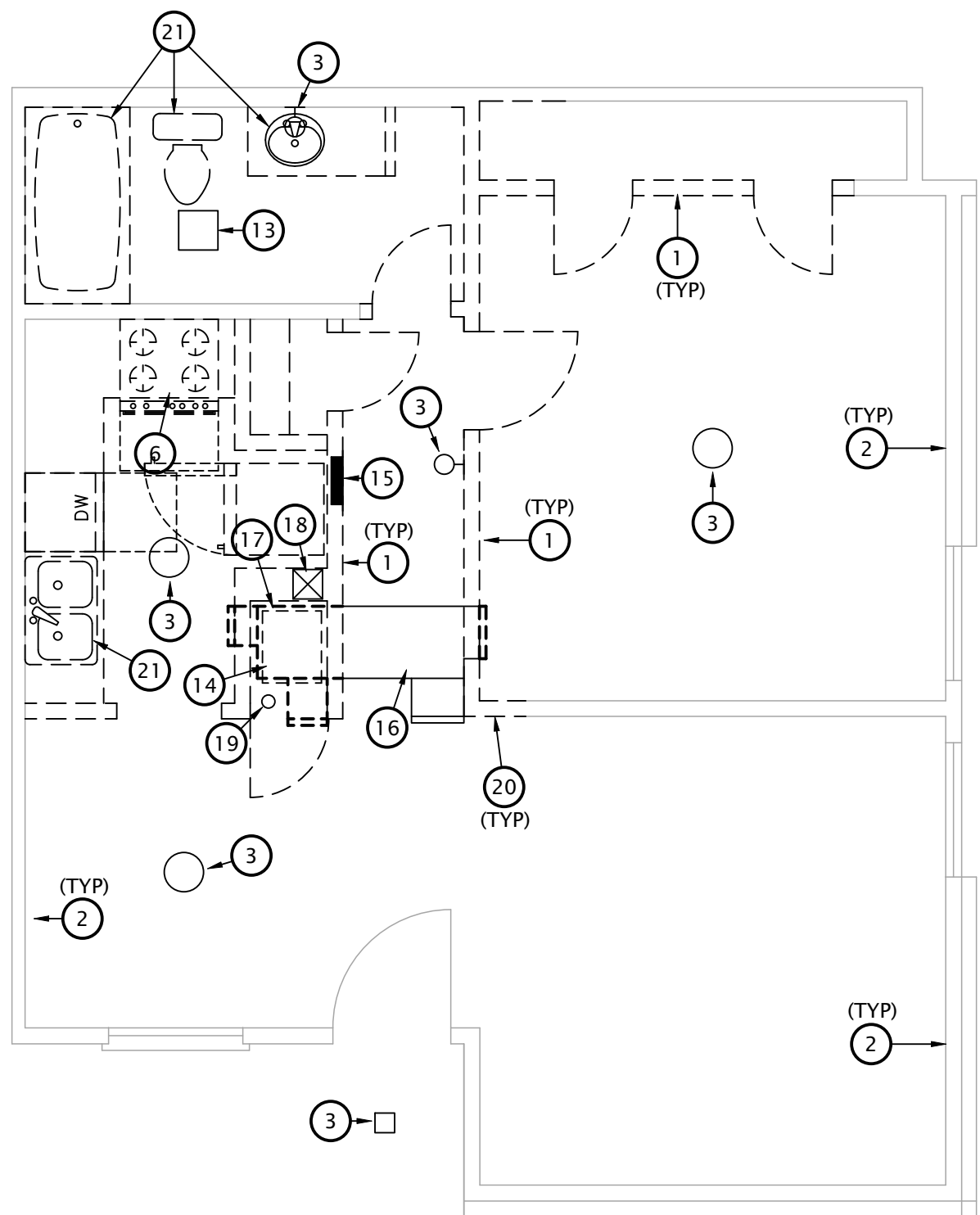
4 CLUBHOUSE - M/E DEMO PLAN  
1/4" = 1'-0"



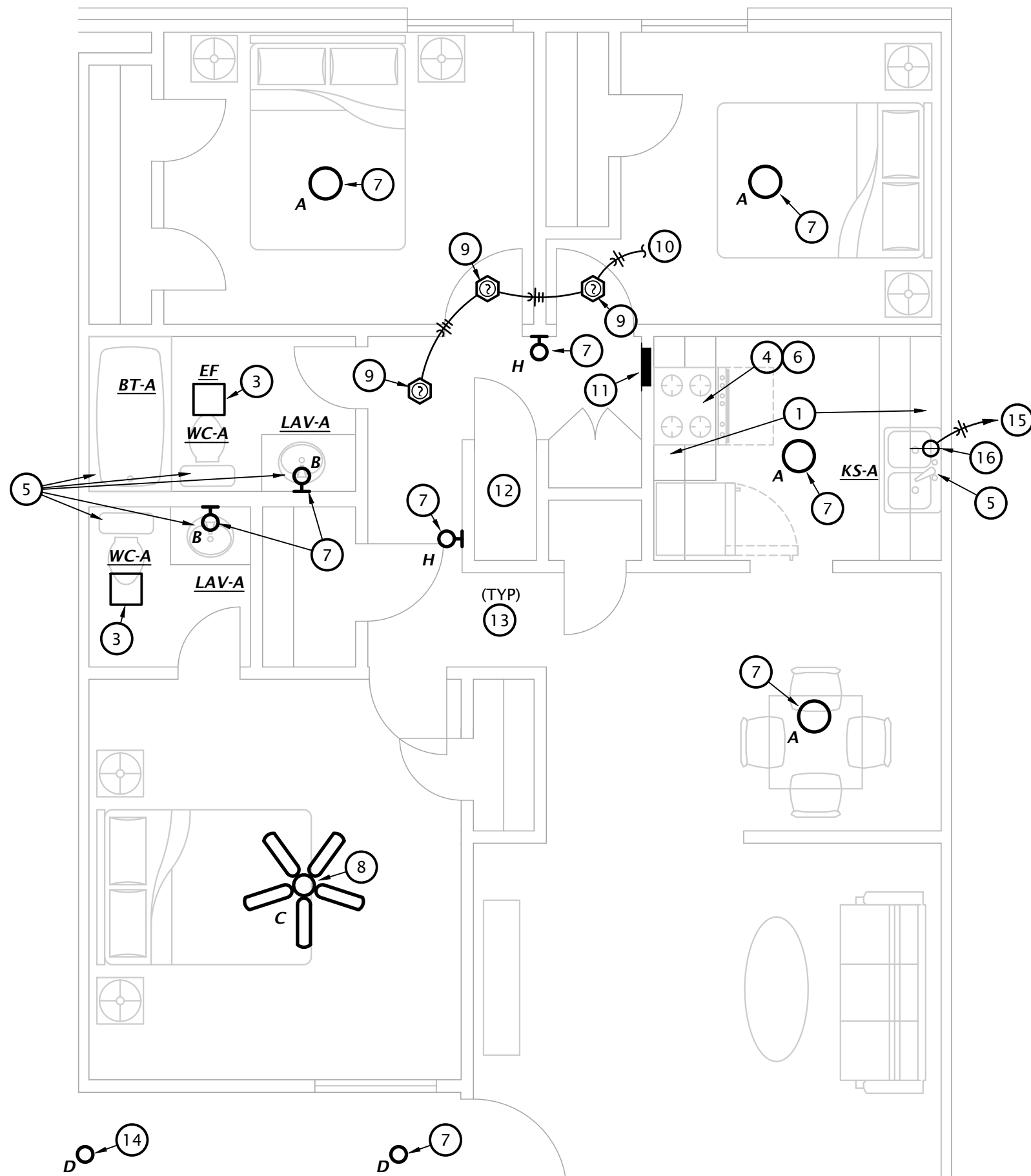
3 UNIT H - M/E DEMO PLAN  
1/4" = 1'-0"



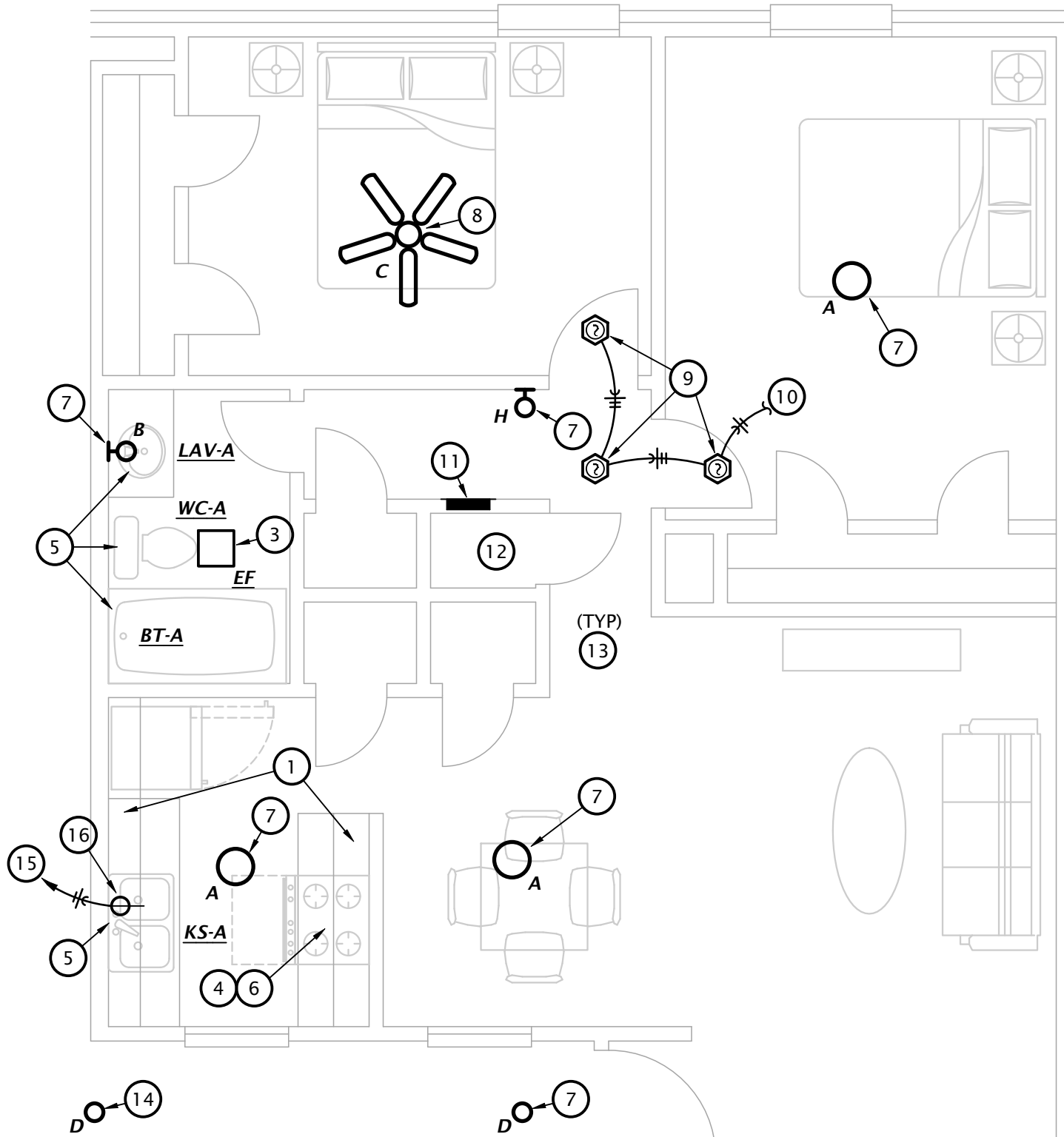
2 UNIT G - M/E DEMO PLAN  
1/4" = 1'-0"



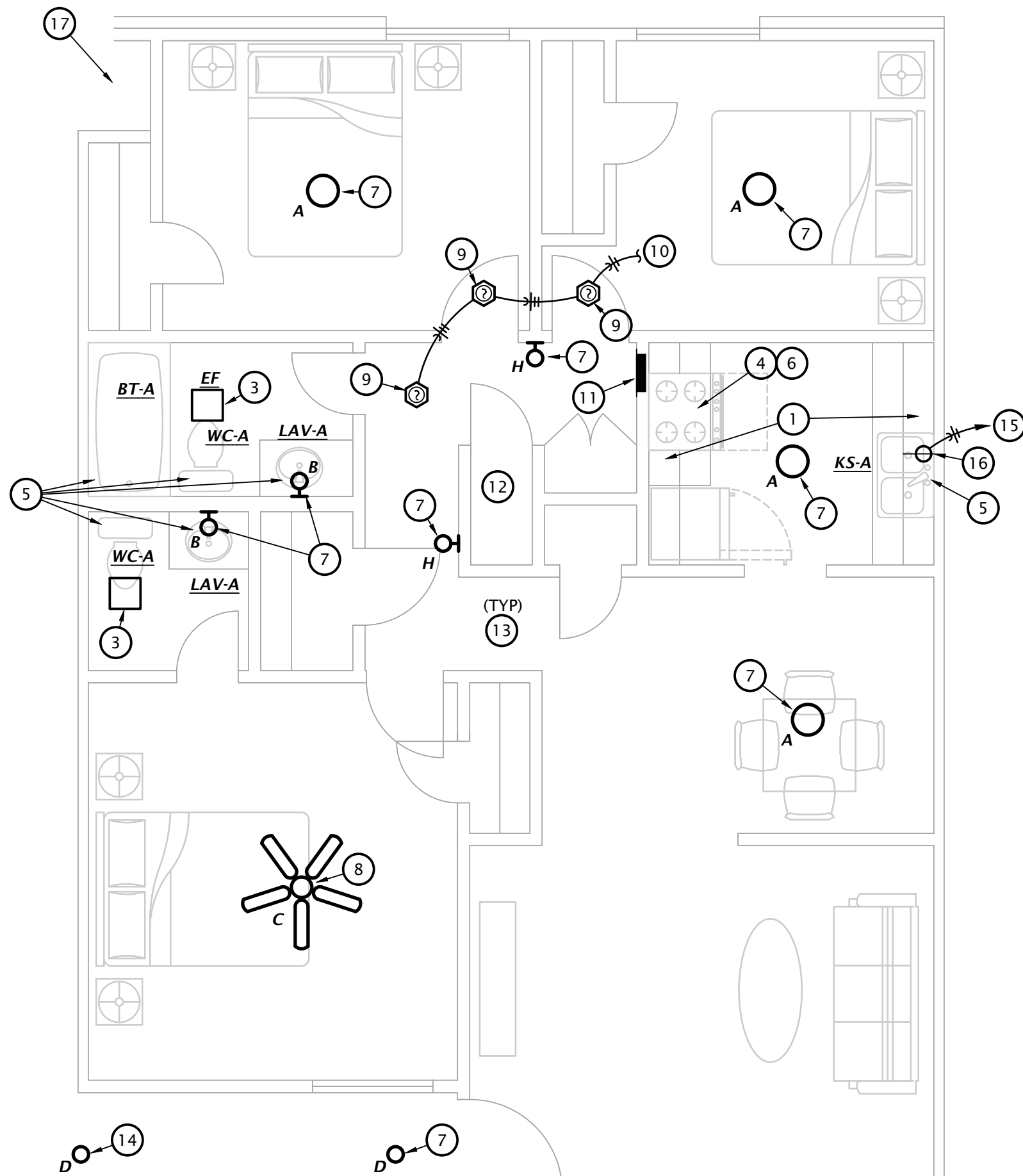
1 UNIT F - M/E DEMO PLAN  
1/4" = 1'-0"



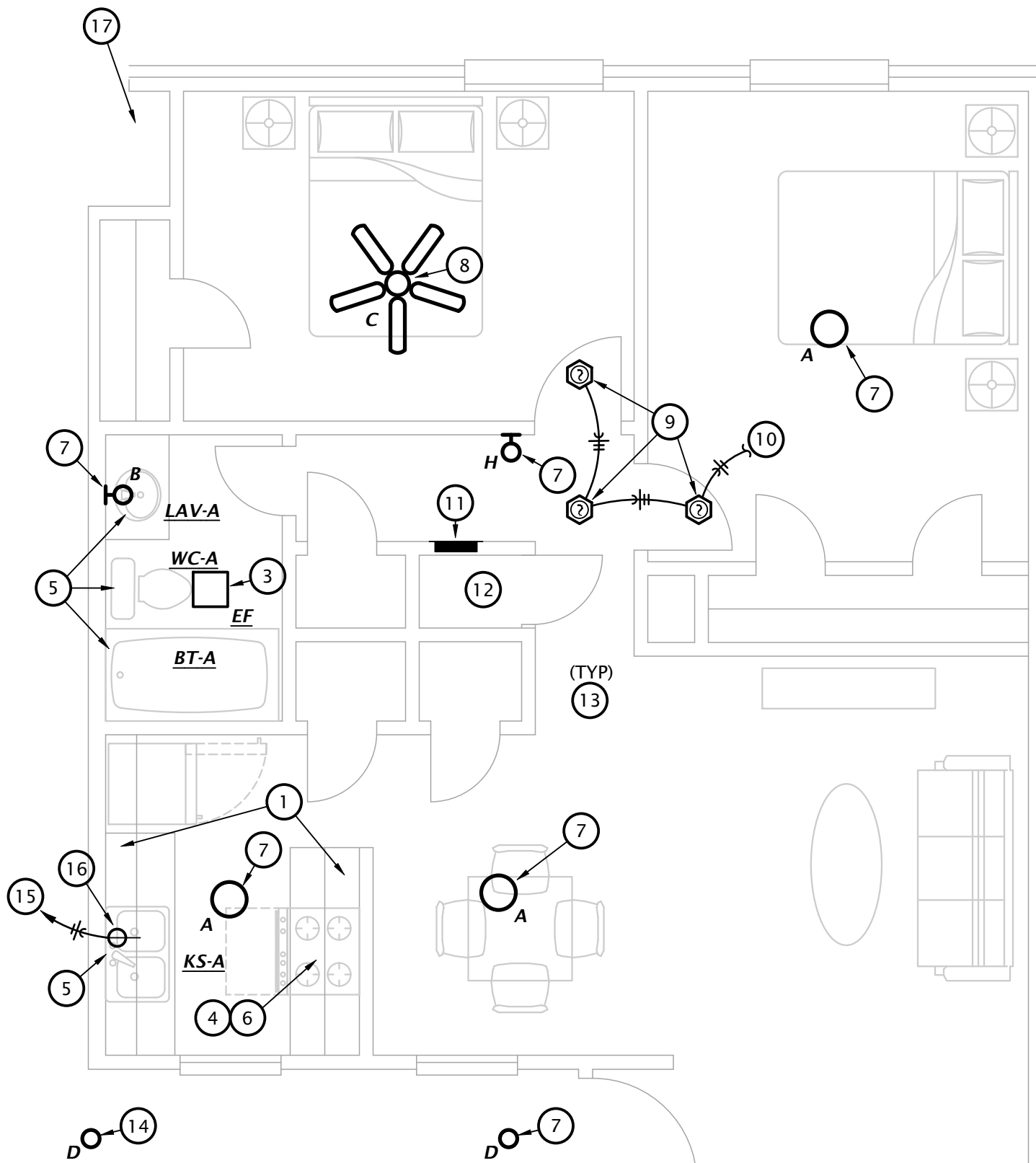
UNIT E - M/E PLAN  
1/4" = 1'-0"



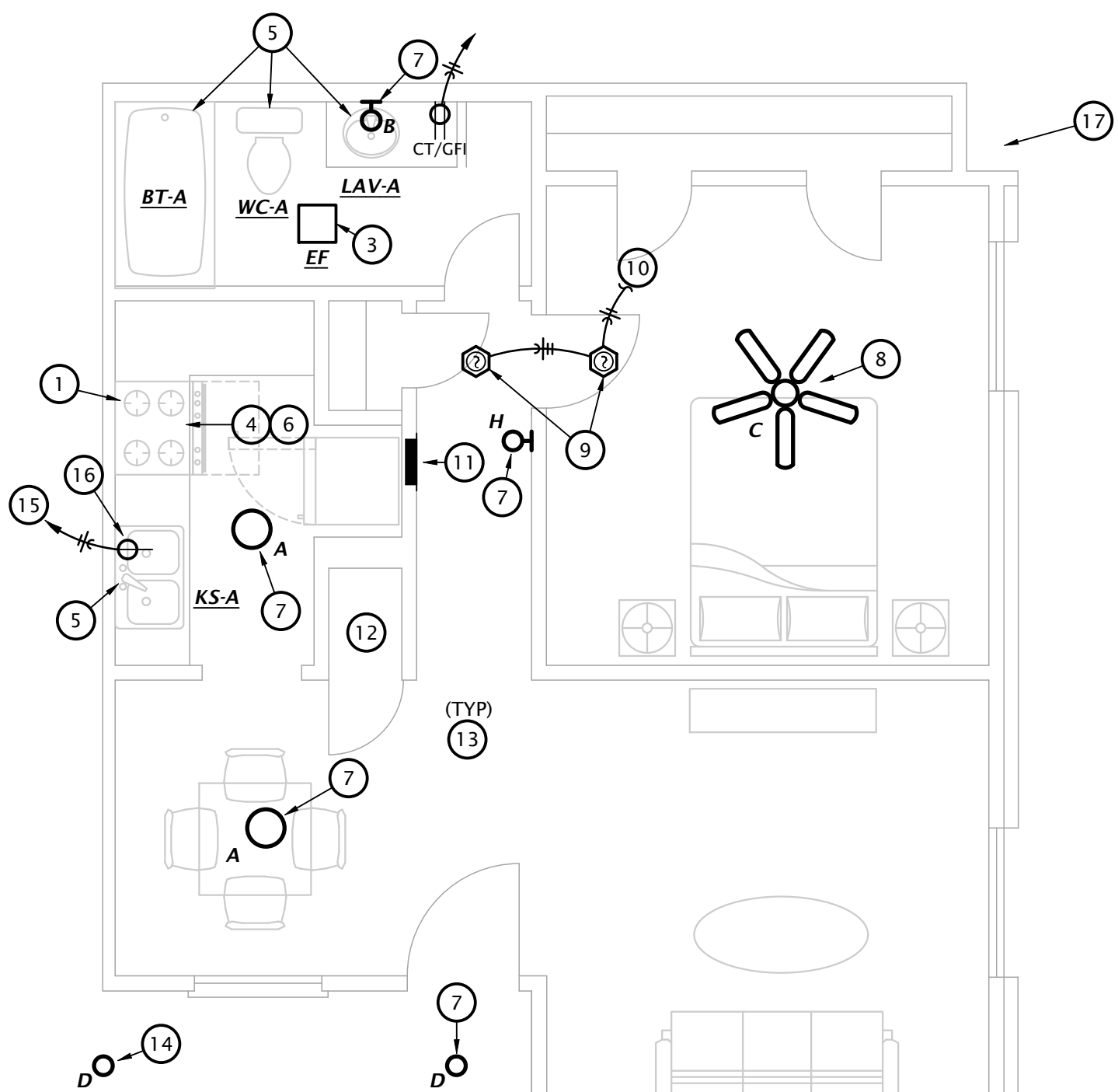
UNIT D - M/E PLAN  
1/4" = 1'-0"



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



UNIT B - M/E PLAN  
1/4" = 1'-0"



UNIT A - M/E PLAN  
1/4" = 1'-0"

NOTE: ALL UNITS SHOWN AS TYPICAL,  
REFER TO SCOPE OF WORK SCHEDULE  
FOR SPECIFIC UNIT EXTENT OF WORK.

FOR APARTMENTS DESIGNATED FOR HEARING-IMPAIRED, REFER TO ARCH  
DRAWING FOR APPLICABLE ROOMS, PROVIDE THE FOLLOWING:

- CEILING MOUNTED SMOKE ALARMS IN ALL BEDROOMS AND OUTSIDE OF  
BEDROOMS. CEILING MOUNTED SMOKE ALARM IN APARTMENTS TO BE  
120VAC WITH 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' AND STROBE LIGHT WITH 1.77 CANDELA OUTPUT,  
SHALL HAVE A SINGLE BUTTON FOR TEST/SILENCE AND LED INDICATOR  
LIGHTS, AND SHALL BE UL 217 LISTED. BRK #7030BSL OR EQUAL.  
CONNECT TO UNSWITCHED 120V CIRCUIT.
- 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.
- PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL  
APARTMENTS. REFER TO DETAIL 1, SHEET E6.1.

GENERAL NOTE:

- PROVIDE TAMPER PROOF RECEPTACLES IN  
DWELLING UNITS PER NEC REQUIREMENTS.

#### PLAN NOTES BY SYMBOL

- PROVIDE NEW (2) #12, #12G. CIRCUIT TO PANEL WITH NEW 20A SINGLE POLE  
CIRCUIT BREAKER.
- ALL RECEPTACLES SERVING KITCHEN COUNTERTOPS SHALL BE GFCI PROTECTED.  
FIELD VERIFY EXISTING CONDITIONS AND REPLACE RECEPTACLES AS REQUIRED.
- REPLACE EXISTING EXHAUST FAN WITH NEW. MODIFY EXISTING MECHANICAL  
AND ELECTRICAL INSTALLATION AS REQUIRED. FIELD VERIFY EXACT  
REQUIREMENTS.
- CONNECT NATURAL GAS TO NEW RANGE PROVIDED BY OTHERS. MODIFY  
EXISTING ROUGH-IN AS REQUIRED FOR NEW. COORDINATE EXACT  
REQUIREMENTS WITH EXISTING CONDITIONS AND EQUIPMENT PROVIDED.
- REPLACE EXISTING PLUMBING FIXTURE. MODIFY EXISTING ROUGH-INS AS  
REQUIRED. FIELD VERIFY EXACT REQUIREMENTS.
- CONNECT NEW RANGE HOOD PROVIDED BY OTHERS. MODIFY EXISTING  
MECHANICAL AND ELECTRICAL INSTALLATION AS REQUIRED. FIELD VERIFY  
EXACT REQUIREMENTS.
- REPLACE EXISTING FIXTURE. ROUGH-IN AND EXISTING CIRCUITRY TO BE RE-USED,  
MODIFY AS REQUIRED.
- REPLACE EXISTING FIXTURE WITH NEW CEILING FAN. EXISTING CIRCUITRY TO BE  
RE-USED AND PROVIDE ADDITIONAL SUPPORT TO STRUCTURE FOR FAN.
- PROVIDE NEW OR REPLACE EXISTING SMOKE DETECTORS WITH SMOKE/CO  
DETECTORS. DETECTORS TO HAVE BATTERY BACKUP AND SHALL BE  
INTERCONNECTED TO OTHERS IN SAME APARTMENT. FIELD VERIFY  
REQUIREMENTS AND EXACT LOCATION OF EXISTING.
- RE-USE EXISTING UNSWITCHED 120V CIRCUITRY OR CONNECT TO EXISTING  
UNSWITCHED 120V CIRCUIT, FIELD VERIFY EXACT REQUIREMENTS.
- PROVIDE NEW FLUSH MOUNT, 125 AMP MLO, 120/240V-1PH-3W LOAD CENTER  
WITH MINIMUM 12 SPACES, PROVIDE NEW CIRCUIT BREAKERS OF EQUAL  
AMPERAGE AND POLES FOR EXISTING CIRCUITS AND PROVIDE NEW CIRCUIT  
BREAKERS AS INDICATED ON PLANS. ALL CIRCUITS SERVING RECEPTACLES IN  
BEDROOMS, LIVING ROOMS, KITCHENS, DINING ROOMS, HALLWAYS OR SIMILAR  
AREAS SHALL BE PROVIDED WITH AFCI BREAKERS.
- PROVIDE NEW FURNACE, EVAPORATIVE COIL, CONDENSING UNIT, AND  
ASSOCIATED INSTALLATION OF EQUAL COOLING AND HEATING CAPACITY. REFER  
TO SCOPE OF WORK FOR WHICH APARTMENTS TO HAVE SYSTEM REPLACED.
- PROVIDE NEW SUPPLY AND RETURN GRILLE OF EQUAL KIND AND QUALITY. REFER  
TO SCOPE OF WORK. IF DEVICE IS TO BE RE-USED, CLEAN, REPAIR AND RESTORE  
EXISTING AIR DEVICES TO LIKE NEW CONDITION. COORDINATE WITH G.C.
- REPLACE EXISTING FIXTURE. ROUGH-IN AND EXISTING CIRCUITRY TO BE RE-USED.  
LIGHT TO BE CONTROLLED BY EXTERIOR LIGHTING CONTROLS, FIELD VERIFY.
- PROVIDE NEW (2) #12, #12G. CIRCUIT TO PANEL WITH NEW 20A SINGLE POLE  
GFCI BREAKER.
- PROVIDE SIMPLEX RECEPTACLE BELOW COUNTER FOR GARBAGE DISPOSAL.  
PROVIDE AIR ACTIVATED PUSH BUTTON SWITCH FOR DISPOSAL OPERATION,  
FINISH TO MATCH SINK. COORDINATE EXACT LOCATION OF PUSH BUTTON WITH  
ARCHITECT.
- REPLACE WATER HEATERS IN KIND AS REQUIRED BY SCOPE OF SCHEDULE.  
COORDINATE WITH G.C. ENSURE WATER RECIRCULATION PUMP IN WORKING  
ORDER, REPLACE AS REQUIRED.

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

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.

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 avg, 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 gypsum 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_
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_

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 16145 - LIGHTING CONTROL DEVICES

16145.01 Provide the lighting control devices as specified and shown on plans.

16145.03 Exterior photocells shall be 120 Volt, thermal type with a cadmium sulfide photocell and polycarbonate case and lens to seal out moisture. Photocells shall have a delay action to eliminate nuisance "off" switching of loads. Furnish complete with 1/2" threaded stem and swivel mount, and light level slide adjustment. Mount photocells as directed on plans, facing North.

- a. Intermatic #K4221C or equal by Tork.

16145.04 Wall mounted occupancy sensors shall be dual technology passive infrared and ultrasonic type, 120/277 VAC, 800 watt rated, with a 20" x 15", 180" coverage pattern tested to NEMA Guide Publication WD 7-2000. Sensors shall be time delay adjustable from 30 seconds to 30 minutes and shall be compatible with all electronic ballasts and drivers. Sensors shall have a manual pushbutton and shall mount in a single gang device box.

- a. Wattstopper #DW-100 or equal by Hubbell, Leviton or Sensorswitch.

16145.09 Provide cover plates for all wall mounted occupancy sensors and in-wall devices. Unless noted otherwise on drawings, mount devices at 46" AFF to the center of the box.

SECTION 16285 - SURGE PROTECTION DEVICES

16285.01 Provide surge protection devices as specified and indicated on the plans, and listed to U.L. 1449 3rd edition for type 1 and 2 surge protection devices. Devices shall be manufactured by APT, Current Technology, Square D, Siemens, General Electric, or Eaton Cutler-Hammer.

16285.02 Surge protection devices shall provide for all modes of protection (L-N, L-G, N-G, L-L) with 200kAIC fault rating. Devices shall have a response time of less than 0.5 nanoseconds; nominal surge current (L-N) of 20kA, repetitive surge current capacity not less than 5,000 impulses, and a maximum continuous operating voltage (MCOV) not less than 115% of nominal system voltage.

16285.03 Voltage Protection Ratings (VPR's) shall be as follows:

- a. 240/120 V System: [ 700 V for L-N, L-G and N-G modes, and 1,200 V for L-L mode

16285.04 Devices shall have status indicator lights (one per phase), service indicator light, form 'C' contacts (NO/NC), audible alarm with silence button, and surge counter.

16285.05 Devices shall be factory installed, internally mounted in panelboards and shall utilize field replaceable modular or non-modular protection circuits. Provide with surge rated integral disconnect switch where not connected to a circuit breaker or fused switch or not direct bus connected.

16285.06 All surge protection devices shall come with a 10 year standard manufacturer's warranty.

16285.07 Main distribution panel shall be provided with surge protection device having a 120kA surge rating per mode, 240kA per phase.

16285.08 Branch circuit panelboards shall be provided with surge protection devices having a 60kA surge rating per mode, 120kA per phase.

SECTION 16442 - PANELBOARDS

16442.01 Provide Square D, Siemens, or Eaton 3-phase, 4-wire panelboards with circuit breakers as scheduled.

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

16442.03 Circuit breakers shall be bolt-on, thermal-magnetic molded case type. Breakers shall be 1, 2 or 3-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 volts ac and 14,000 rms symmetrical amps maximum at 480 volts 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



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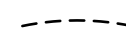


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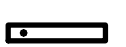

**Project 24040**

**July 2024**














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
	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
	SURFACE MOUNTED LINEAR LUMINAIRE
	STRIP LIGHT

POWER SYMBOLS

	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE WALL SWITCH
	THREE WAY WALL SWITCH
	FOUR WAY WALL SWITCH
	MOTOR HP RATED SWITCH WITHOUT OVERLOAD PROTECTION
	DIMMER WALL SWITCH
	LINE VOLTAGE OCCUPANCY SENSING WALL SWITCH (MANUAL ON/AUTO OFF)
	JUNCTION BOX
	DISCONNECT SWITCH
	LINE VOLTAGE OCCUPANCY SENSOR
	BRANCH CIRCUIT PANELBOARD, FLUSH MOUNTED
	MOTORIZED DAMPER

SYMBOL MODIFYING DESIGNATORS

CLG	CEILING MOUNTED <ul style="list-style-type: none"><li>• FLUSH MOUNTED IN SUSPENDED CEILINGS</li><li>• SURFACE MOUNTED TO STRUCTURE ABOVE IN OPEN CEILINGS</li></ul>
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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SUN VALLEY APARTMENTS

TEXAS

REHAB APARTMENTS

WICHITA FALLS,

07-19-2024



REVISION:

DATE: 7-19-2024

JOB: 24-3391

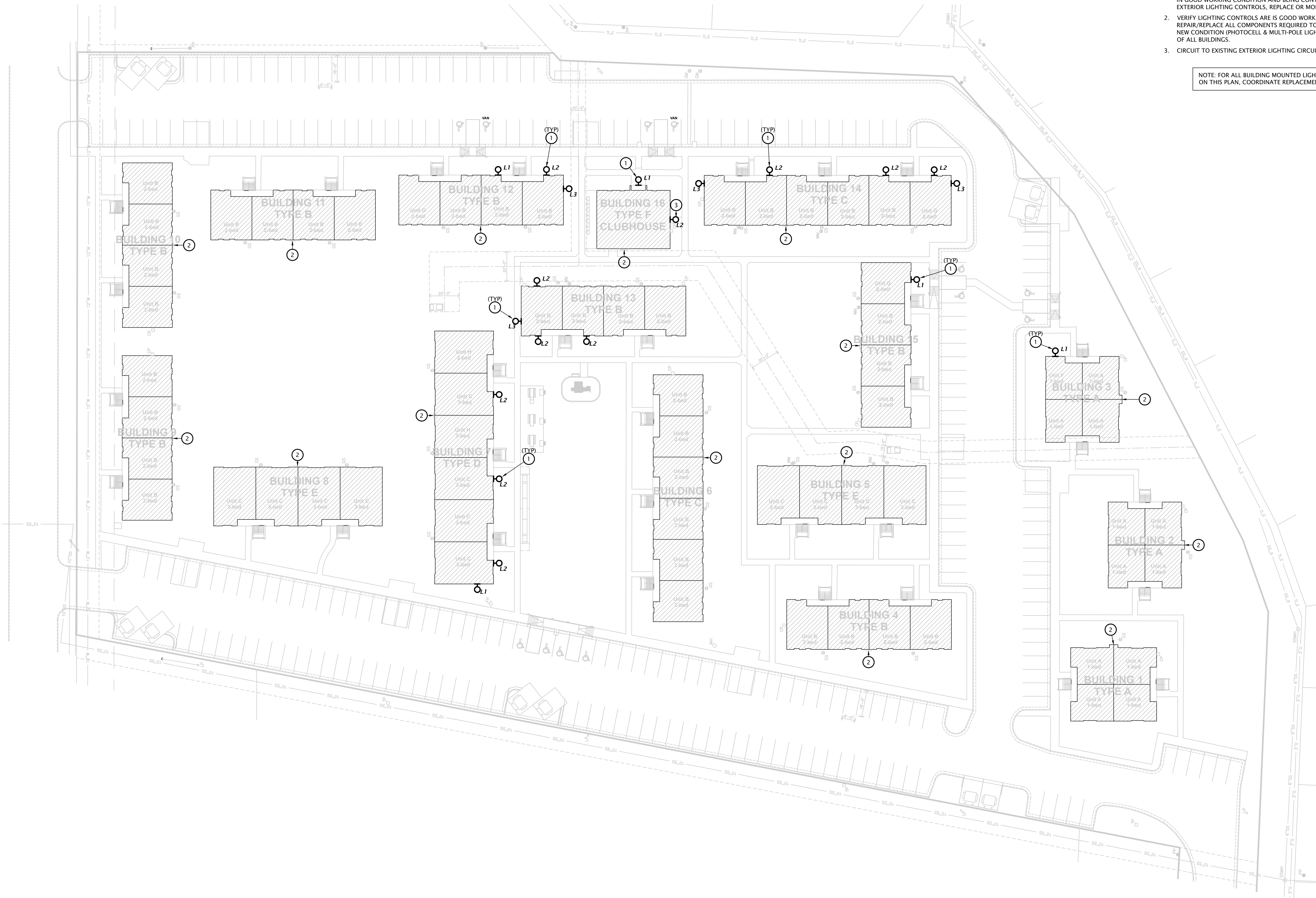
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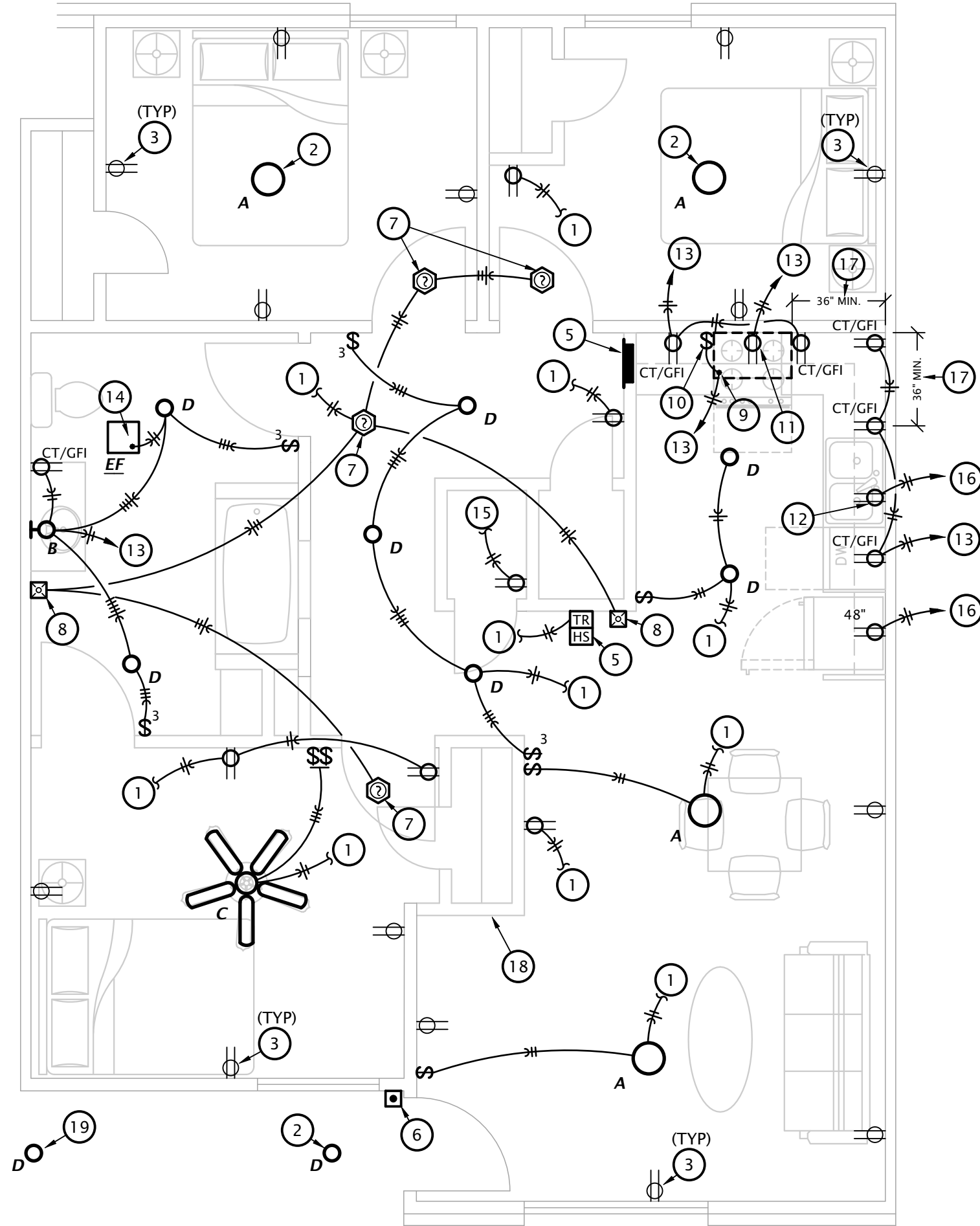
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**PLAN NOTES BY SYMBOL**

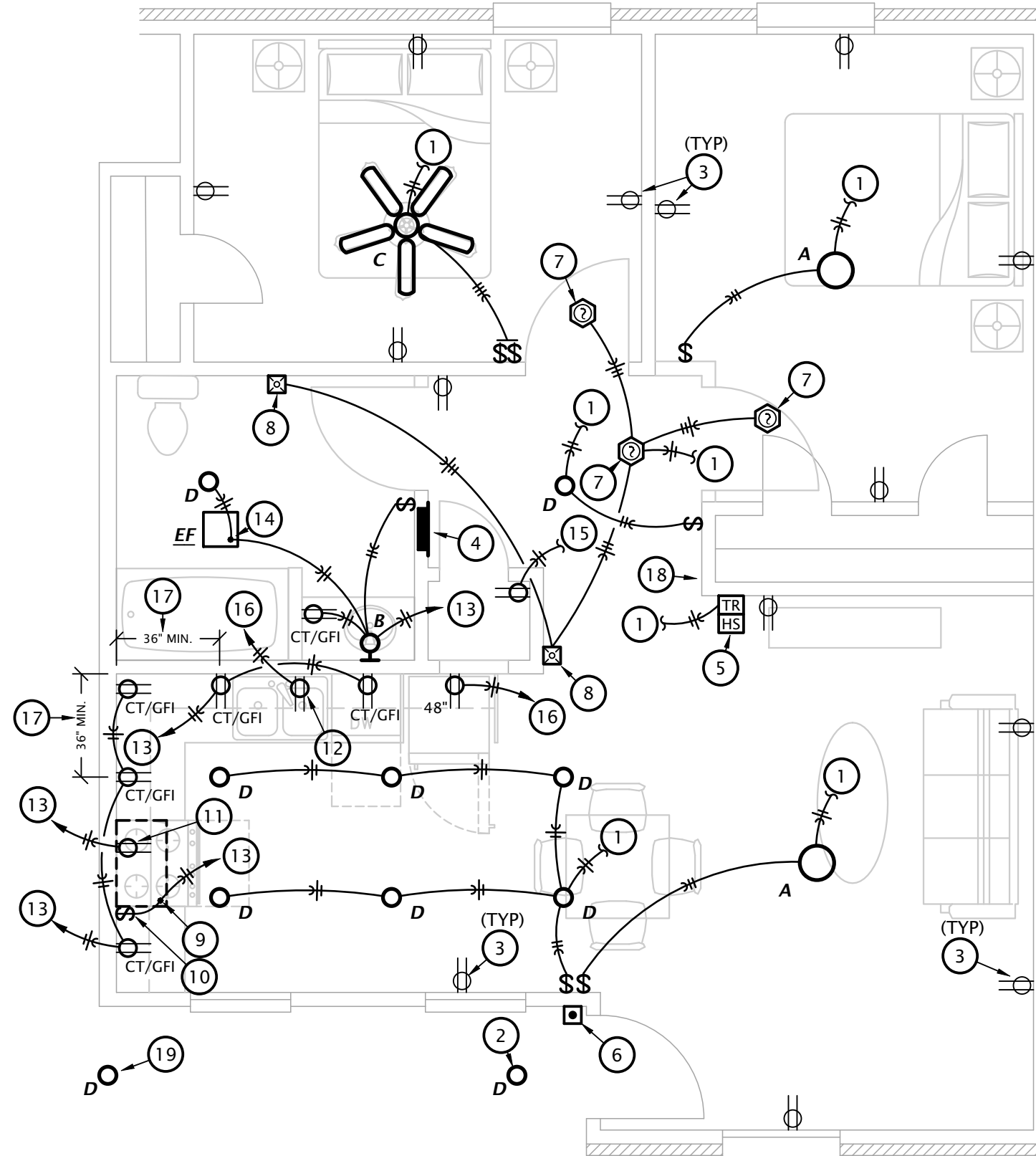
1. PROVIDE LIGHT FIXTURE AS SCHEDULED. INSTALL AT EXISTING FIXTURE/JUNCTION BOX LOCATION. RE-USE EXISTING WIRING. VERIFY EXISTING WIRING IS IN GOOD WORKING CONDITION AND BEING CONTROLLED BY BUILDINGS EXTERIOR LIGHTING CONTROLS, REPLACE OR MODIFY IF REQUIRED. TYPICAL
2. VERIFY LIGHTING CONTROLS ARE IN GOOD WORKING CONDITION. REPAIR/REPLACE ALL COMPONENTS REQUIRED TO RESTORE CONTROL TO LIKE NEW CONDITION (PHOTOCELL & MULTI-POLE LIGHTING CONTACTOR). TYPICAL OF ALL BUILDINGS.
3. CIRCUIT TO EXISTING EXTERIOR LIGHTING CIRCUIT.

NOTE: FOR ALL BUILDING MOUNTED LIGHTS NOT IDENTIFIED ON THIS PLAN, COORDINATE REPLACEMENT WITH OWNER.

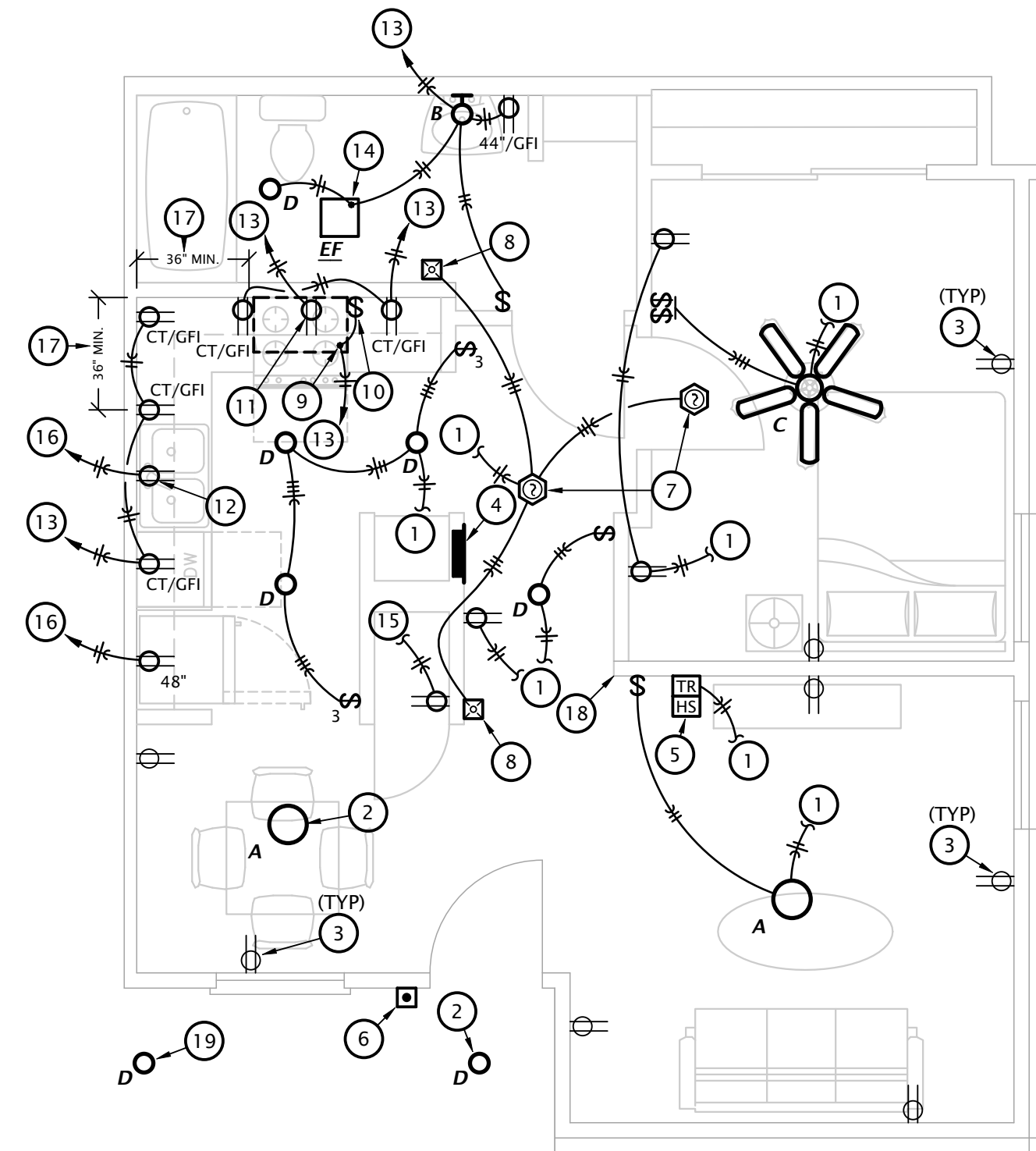




3 UNIT H (ACCESSIBLE) - ELECTRICAL PLAN  
1/4" = 1'-0"



2 UNIT G (ACCESSIBLE) - ELECTRICAL PLAN  
1/4" = 1'-0"



1 UNIT F (ACCESSIBLE) - ELECTRICAL PLAN  
1/4" = 1'-0"

# PLAN NOTES BY SYMBOL

- CONNECT TO EXISTING 120V UN-SWITCHED CIRCUIT PREVIOUSLY SERVING AREA.
- REPLACE EXISTING FIXTURE, ROUGH-IN AND EXISTING CIRCUITRY TO BE RE-USED, MODIFY AS REQUIRED.
- EXISTING RECEPTACLE ON EXISTING WALLS MAY REMAIN. WHERE EXISTING RECEPTACLES DO NOT MEET NEC SPACING REQUIREMENTS, PROVIDE NEW RECEPTACLES AND CONNECT TO EXISTING CIRCUIT SERVING AREA, FIELD VERIFY.
- PROVIDE NEW FLUSH MOUNT, 125 AMP MLO, 120/240V-1PH-3W LOAD CENTER WITH MINIMUM 16 SPACES, PROVIDE NEW CIRCUIT BREAKERS OF EQUAL AMPERAGE AND POLES FOR EXISTING CIRCUITS AND PROVIDE NEW CIRCUIT BREAKERS AS INDICATED ON PLANS. RE-CONNECT EXISTING CIRCUIT TO BE RE-USED. ALL CIRCUITS SERVING RECEPTACLES IN BEDROOMS, LIVING ROOMS, KITCHENS, DINING ROOMS, HALLWAYS OR SIMILAR AREAS SHALL BE PROVIDED WITH AFCI BREAKERS.
- PROVIDE DOOR ANNUNCIATOR SYSTEM A/V HORN/STROBE DEVICE AND LOW VOLTAGE TRANSFORMER. INSTALL HORN/STROBE APPLIANCE AT 80" AFF. INSTALL TRANSFORMER IN DOUBLE GANG JUNCTION BOX ABOVE HORN/STROBE WITH BLANK COVER PLAT AND PROVIDE LOW VOLTAGE CONTROL WIRING. REFER TO DETAIL 1 ON E6.1. PROVIDE ENGRAVED SIGN AT THE HORN/STROBE DEVICE TO READ 'DOOR'.
- PROVIDE PUSH BUTTON AT 48" AFF FOR ANNUNCIATOR SYSTEM AT ALL APARTMENTS DESIGNATED FOR HEARING-IMPAIRED. COORDINATE LOCATION OF UNITS WITH ARCH. SEE DETAIL 1 ON E6.1.
- PROVIDE CEILING MOUNTED SMOKE/CO DETECTORS WITH 177 CANDELA STROBE LIGHT. DETECTORS TO BE 120 VAC WITH BATTERY BACKUP AND SHALL BE INTERCONNECTED TO OTHERS IN SAME APARTMENT.
- PROVIDE STROBE LIGHT, STROBE LIGHTS SHALL BE 120 VAC WITH BATTERY BACKUP AND SHALL BE INTERCONNECTED TO SMOKE DETECTORS IN THE SAME APARTMENT.
- PROVIDE 120V CONNECTION TO RANGE HOOD. COORDINATE EXACT ELECTRICAL ROUGH-IN REQUIREMENTS WITH EQUIPMENT PROVIDED. IF EQUIPMENT IS CORD AND PLUG, PROVIDE RECEPTACLE INSIDE CABINET ABOVE RANGE.
- PROVIDE SWITCH FOR CONTROL OF RANGE HOOD.
- PROVIDE RECEPTACLE BEHIND RANGE FOR CONNECTION OF RANGE. COORDINATE PLACEMENT OF RECEPTACLE WITH THE EQUIPMENT PROVIDED.
- PROVIDE RECEPTACLE BELOW COUNTER FOR DISHWASHER AND GARBAGE DISPOSAL. PROVIDE CORD AND GROUNDING PLUG AS REQUIRED FOR DISHWASHER. RECEPTACLE SHALL BE LOCATED IN BASE CABINET ADJACENT TO DISHWASHER TO ALLOW ACCESS TO PLUG. PROVIDE AIR ACTIVATED PUSH BUTTON SWITCH FOR DISPOSAL OPERATION, FINISH TO MATCH SINK. COORDINATE EXACT LOCATION OF PUSH BUTTON WITH ARCHITECT.
- PROVIDE NEW 120V CIRCUIT. ROUTE TO NEW 20A/1P BREAKER IN UNIT ELECTRICAL PANEL. ROUTE (2) #12 AND #12 GROUND TO RECEPTACLE(S)/EQUIPMENT.
- CONNECT EXHAUST FAN PROVIDED BY MECHANICAL CONTRACTOR.
- CONNECT TO EXISTING 120V CIRCUIT PREVIOUSLY SERVING FURNACE. COORDINATE REQUIREMENTS AND LOCATION WITH EQUIPMENT PROVIDED.
- PROVIDE NEW 120V CIRCUIT. ROUTE TO NEW 20A/1P GFCI BREAKER IN UNIT ELECTRICAL PANEL. ROUTE (2)#12 AND #12 GROUND TO RECEPTACLE.
- IN ACCESSIBLE UNITS, INSTALL COUNTERTOP RECEPTACLES A MINIMUM 36" AWAY FROM CORNER, INSTALL RECEPTACLE AS FAR FROM CORNER AS POSSIBLE. PROVIDE ADDITIONAL OUTLETS WITHIN 36" OF CORNER TO ENSURE COMPLIANCE WITH NEC SPACING REQUIREMENTS.
- COORDINATE WITH OWNER NEW LOCATION OF PHONE, DATA, OR CATV DEVICES WHERE DEVICES WERE IN WALLS BEING DEMOLISHED. TYPICAL THROUGHOUT APARTMENT.
- REPLACE EXISTING FIXTURE, ROUGH-IN AND EXISTING CIRCUITRY TO BE RE-USED. LIGHT TO BE CONTROLLED BY EXTERIOR LIGHTING CONTROLS, FIELD VERIFY.

GENERAL NOTE:

- PROVIDE TAMPER PROOF RECEPTACLES IN DWELLING UNITS PER NEC REQUIREMENTS.

REVISION:

DATE: 7-19-2024

JOB: 24-3391

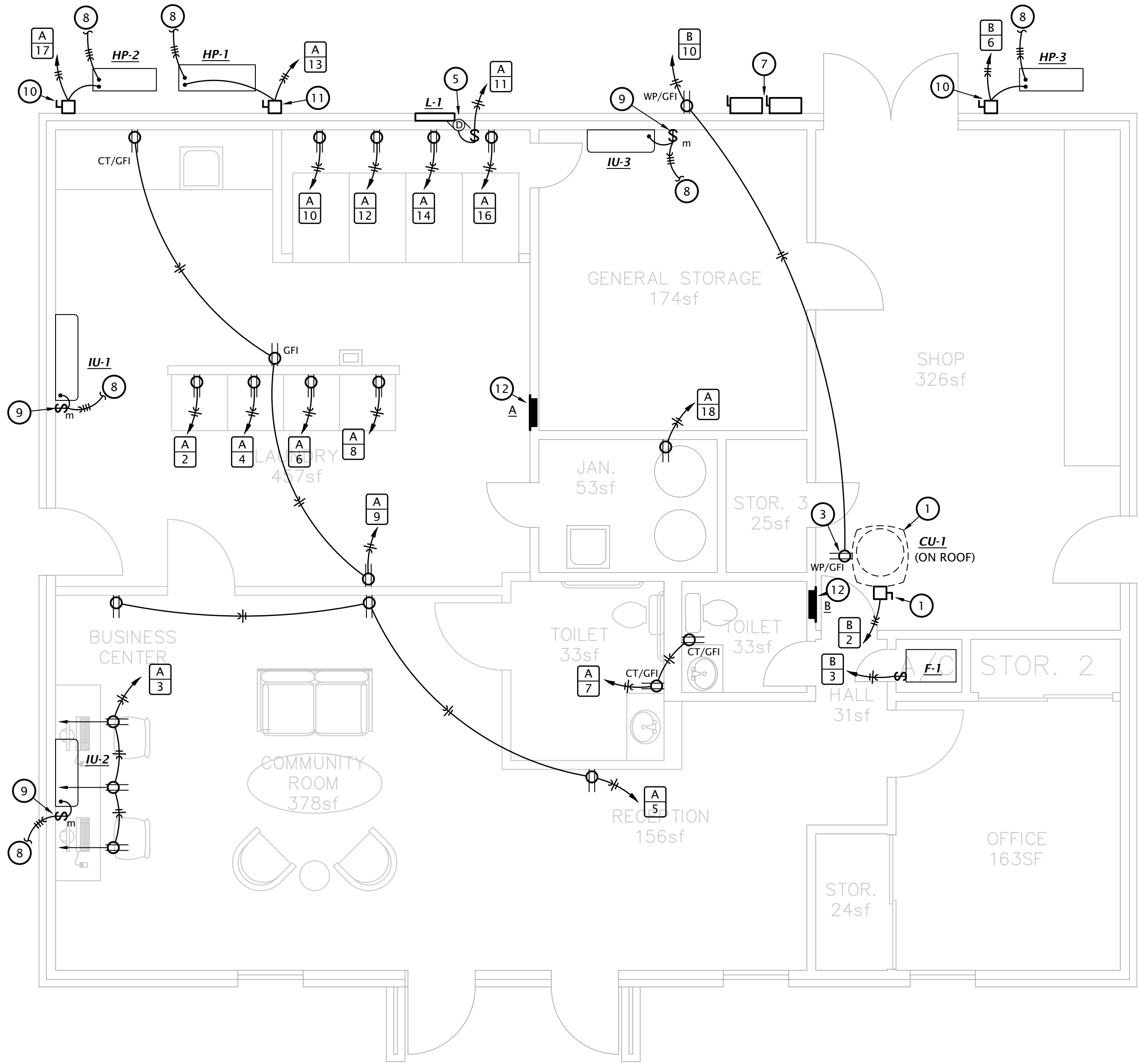
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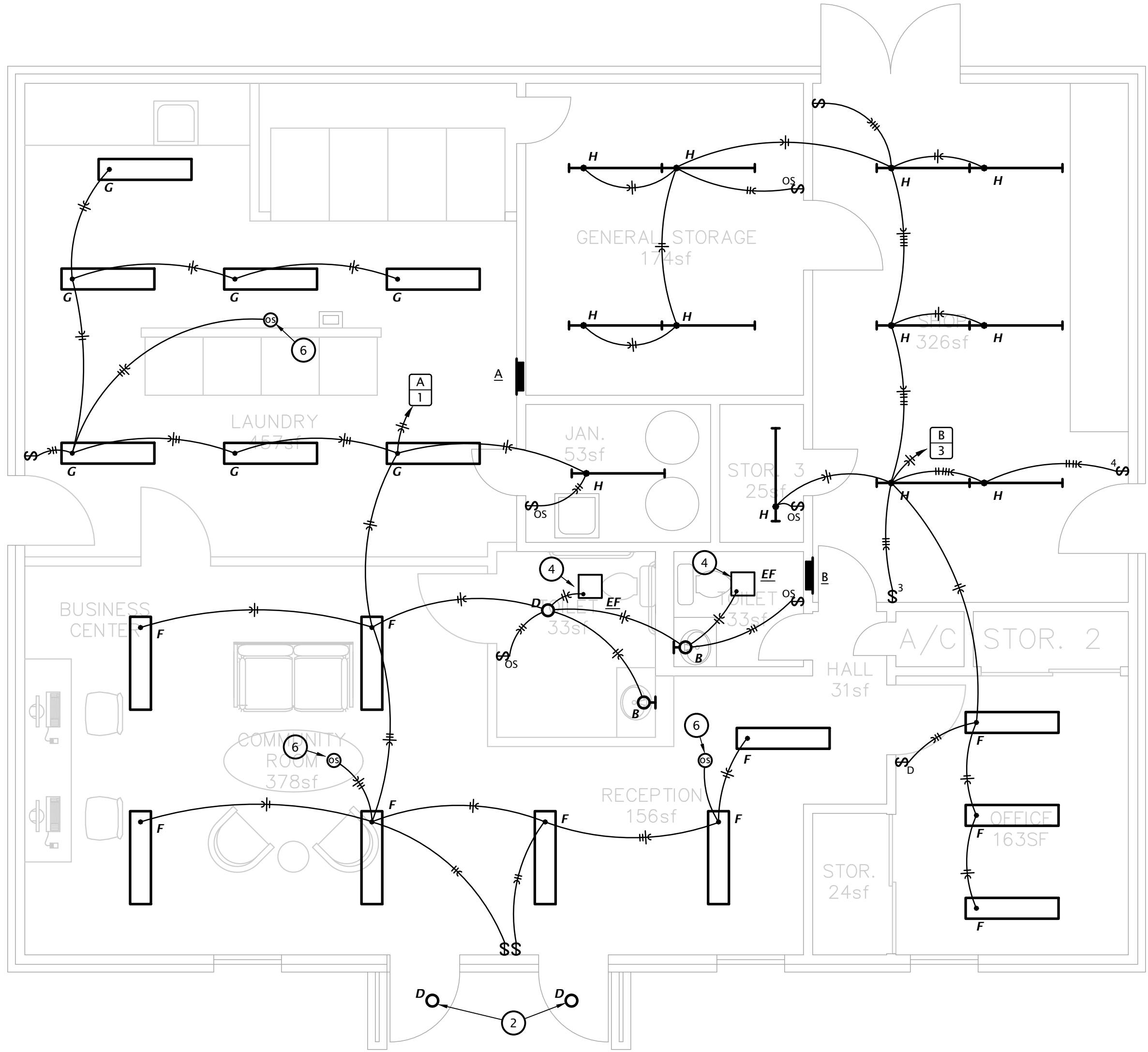
Designation: 'A'				Manufacturer: Square D 'NQ'			
Location: Laundry				Bus Amps: 225			
Voltage: 240/120V-1Ph-3W				MCB Amps: MLO			
Enclosure: NEMA 1				AIC Rating: 10 kAIC			
Mounting: Recessed				Other: Integral Surge Protection			
Circuit #	Load Description	Conductors	C/B Size	C/B Size	Conductors	Load Description	Circuit #
1	LIGHTING - LAUNDRY/ COMM. ROOM	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES WASHER	2
3	RCPTS - BUSINESS CENTER	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES WASHER	4
5	RCPTS - COMM RM/ RECEPTION	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES WASHER	6
7	RCPTS - RESTROOMS	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES WASHER	8
9	RCPTS - LAUNDRY	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES DRYER	10
11	LOUVER DAMPER MOTOR	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES DRYER	12
13	HEAT PUMP 'HP-1'	2#8, #10G, 3/4" C	40 / 2	20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES DRYER	14
15				20 / 1	2#12, #12G, 1/2" C	RCPT - CLOTHES DRYER	16
17	HEAT PUMP 'HP-2'	2#10, #10G, 3/4" C	25 / 2	20 / 1	2#12, #12G, 1/2" C	RCPT - WATER HEATER	18
19				20 / 1	2#12, #12G, 1/2" C	EXISTING RECEPTACLES	20
21	SPARE BREAKER	---	---	20 / 1	2#12, #12G, 1/2" C	EXISTING RECEPTACLES	22
23	SPARE BREAKER	---	---	20 / 1	2#12, #12G, 1/2" C	EXISTING RECEPTACLES	24
25	SPACE	---	---	---	---	SPACE	26
27	SPACE	---	---	---	---	SPACE	28
29	SPACE	---	---	---	---	SPACE	30
NOTE: FIELD VERIFY ALL CIRCUITS TO REMAIN AND CONNECT THEM TO NEW BREAKERS IN PANEL.							

Designation: 'B'				Manufacturer: Square D 'NQ'			
Location: Shop				Bus Amps: 225			
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	LIGHTING - OFFICE/ SHOP/STORAGE	2#12, #12G, 1/2" C	20 / 1	20 / 2	2#12, #12G, 1/2" C	CONDENSING UNIT 'CU-1'	2
3	FURNACE 'F-1'	2#12, #12G, 1/2" C	15 / 1				4
5	RECEPT - ROOF	2#12, #12G, 1/2" C	20 / 1	25 / 2	2#10, #10G, 3/4" C	HEAT PUMP 'HP-3'	6
7	EXISTING RECEPTACLES	2#12, #12G, 1/2" C	20 / 1				8
9	EXISTING RECEPTACLES	2#12, #12G, 1/2" C	20 / 1	20 / 1	2#12, #12G, 1/2" C	RCPTS - EXT./ROOF	10
11	EXISTING RECEPTACLES	2#12, #12G, 1/2" C	20 / 1	30 / 1	2#10, #10G, 3/4" C	EXISTING	12
13	SPARE BREAKER	---	20 / 1	30 / 1	2#10, #10G, 3/4" C	EXISTING	14
15	SPARE BREAKER	---	20 / 1	---	---	SPACE	16
17	SPACE	---	---	---	---	SPACE	18
19	SPACE	---	---	---	---	SPACE	20
NOTE: FIELD VERIFY ALL CIRCUITS TO REMAIN AND CONNECT THEM TO NEW BREAKERS IN PANEL.							

- ① **PLAN NOTES BY SYMBOL**
- PROVIDE 30A/2P, NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE AND MAKE FINAL CONNECTION TO EQUIPMENT IN LFMC RACEWAY. MOUNT TO UNISTRUT FRAME SUPPORTED FROM EQUIPMENT SUPPORT RAILS.
  - REPLACE EXISTING FIXTURE, ROUGH-IN AND EXISTING CIRCUITRY TO BE RE-USED, MODIFY AS REQUIRED.
  - MOUNT RECEPTACLE TO UNISTRUT FRAME SUPPORTED FROM CONDENSING UNIT UNISTRUT FRAME.
  - CONNECT EXHAUST FAN/LIGHT PROVIDED BY MECHANICAL CONTRACTOR. MODIFY EXISTING MECHANICAL INSTALLATION AS REQUIRED. FIELD VERIFY EXACT REQUIREMENTS.
  - MOTORIZED DAMPER TO BE INTERLOCKED WITH DRYERS. WHEN ANY ONE DRYER IS ON THE DAMPER SHOULD BE IN THE OPEN POSITION. PROVIDE CURRENT SENSORS AND RELAYS AS REQUIRED.
  - PROVIDE LINE VOLTAGE OCCUPANCY SENSOR EQUAL TO SENSORWORX MODEL # SWX-211-2.
  - NEW ELECTRICAL SERVICE, SEE RISER DIAGRAM ON SHEET E6.1.
  - PROVIDE (3) #12, #12G, 1/2" C INTERCONNECTING WIRING BETWEEN OUTDOOR AND INDOOR UNITS.
  - 30A/3P MANUAL MOTOR STARTER SNAP SWITCH IN NEMA 1 ENCLOSURE. MOUNT ADJACENT TO INDOOR UNIT AND MAKE FINAL CONNECTION.
  - 30A/2P NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. MAKE FINAL CONNECTION TO EQUIPMENT.
  - 60A/2P NON-FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. MAKE FINAL CONNECTION TO EQUIPMENT.
  - NEW ELECTRICAL PANEL, SEE RISER DIAGRAM ON SHEET E6.1.



② **CLUBHOUSE POWER PLAN**  
1/4" = 1'-0"

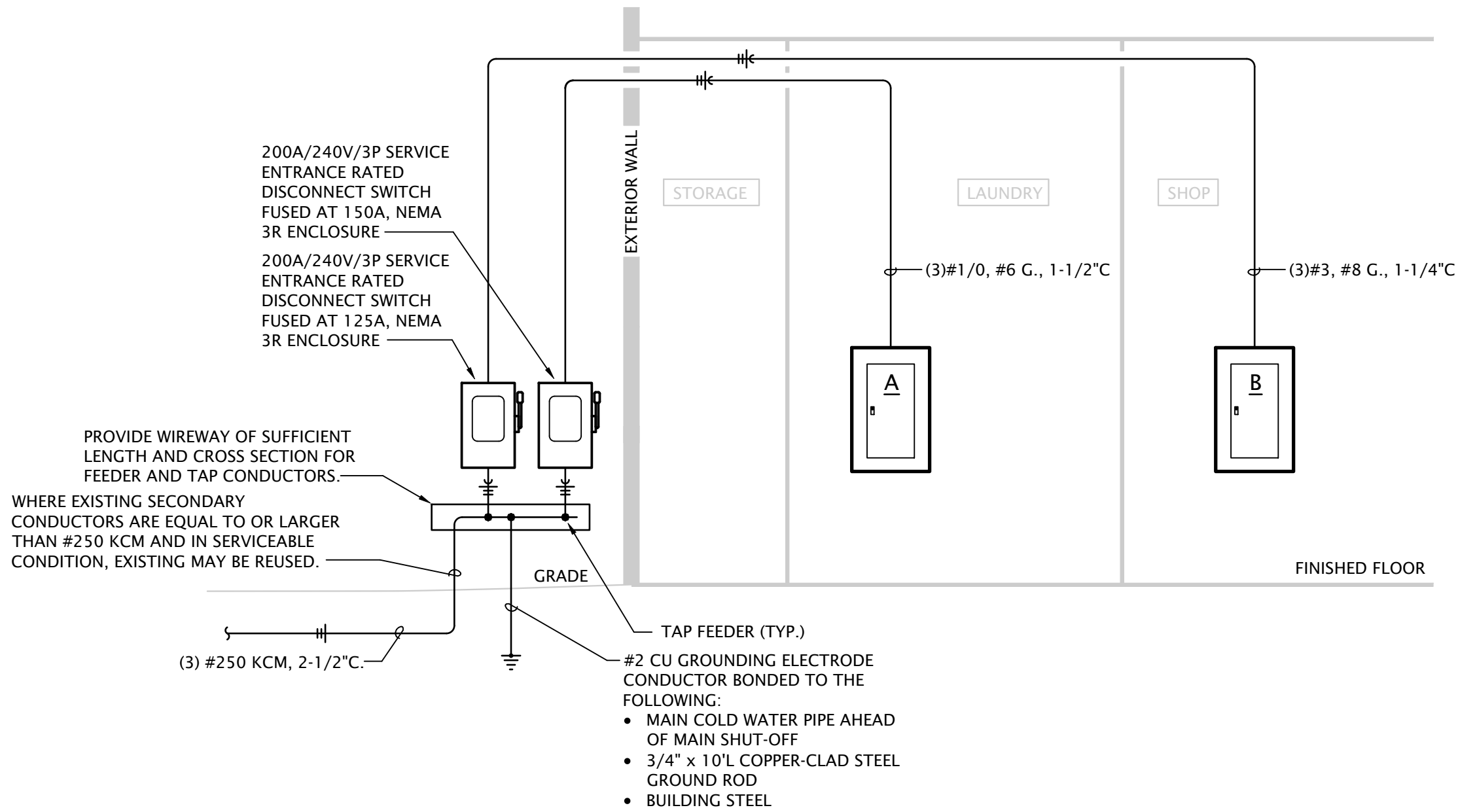


① **CLUBHOUSE LIGHTING PLAN**  
1/4" = 1'-0"

APARTMENT LIGHT FIXTURE SCHEDULE

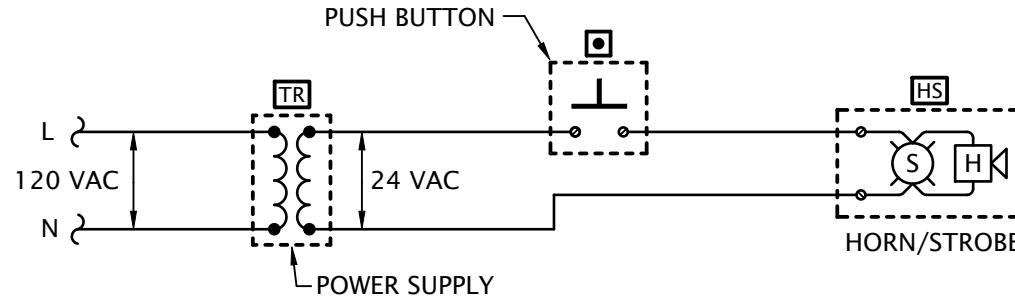
MARK	MANUF.	MODEL NUMBER	LAMP DATA		BALLAST/LED DRIVER	MOUNTING	FINISH	DESCRIPTION	NOTES
			#	TYPE					
A	LITHONIA	FMML-13-8-30	---	1900 LUMEN 28W LED	STANDARD	SURFACE	WHITE	13" ROUND LED FLUSH MOUNT	
B	SEAGULL	4423003EN3-710	3	9.5W LED	STANDARD	WALL	BURNT SIENNA	3 LAMP VANITY LIGHT	
C	SEAGULL	15030EN-829	2	10W LED	STANDARD	SURFACE	BRONZE	52" DIAMETER CEILING FAN WITH LED LIGHT KIT	
D	HALO	SMD6R-6-930-WH	---	600 LUMEN 10W LED	STANDARD	SURFACE	WHITE	6" ROUND SURFACE MOUNT DOWNLIGHT	4
F	LITHONIA	FMFL-30840-CAML-WH	---	2800 LUMEN 35W LED	STANDARD	SURFACE	WHITE	LED DECORATIVE SURFACE	
G	LITHONIA	FML-WL-48-35	---	2380 LUMEN 40W LED	STANDARD	SURFACE	WHITE	4' LED WRAP AROUND	
H	LITHONIA	CSS-L48-AL03-MVOLT-40K-80CRI	---	5880 LUMEN 41.5W LED	STANDARD	SURFACE	WHITE	4' LED STRIP LIGHT	
L1	LITHONIA	WDGE2-LED-P4-40K-80CRI-T4M-MVOLT-DDXBD	---	4177 LUMENS 47W LED	STANDARD	WALL	DARK BRONZE	4000K LED WALL PACK TYPE IV DISTRIBUTION	2
L2	LITHONIA	WDGE2-LED-P2-40K-80CRI-T3M-MVOLT-DDXBD	---	2060 LUMENS 19W LED	STANDARD	WALL	DARK BRONZE	4000K LED WALL PACK TYPE II DISTRIBUTION	2
L3	LITHONIA	WDGE2-LED-P2-40K-80CRI-T2M-MVOLT-DDXBD	---	2060 LUMENS 19W LED	STANDARD	WALL	DARK BRONZE	4000K LED WALL PACK TYPE III DISTRIBUTION	2

- GENERAL:
- All fixtures shall be provided with multi-volt driver capable of operating between 120V-277V
  - All exterior fixtures shall be 4000K color temperature
  - All interior fixtures shall be 3000K color temperature
  - All apartment light fixtures and ceiling fans shall be Energy Star rated
- NOTES:
- Provide wall or ceiling mounted as required
  - Fixture shall be U.L. listed for wet locations.
  - Provide with test switch, status indicator and rechargeable nickel-cadmium battery for 90 minutes of emergency power.
  - Fixture shall be U.L. listed for damp locations where installed exterior to building.



2 CLUBHOUSE ELECTRICAL RISER DIAGRAM

NO SCALE



DOOR ALARM BUZZER SYSTEM NOTES

- 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.
- 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.
- 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.
- 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.
- LOW VOLTAGE CLASS 2 CABLING SHALL BE MINIMUM 18 AWG UNSHIELDED.

1 APARTMENT DOOR ANNUNCIATOR DIAGRAM

No Scale