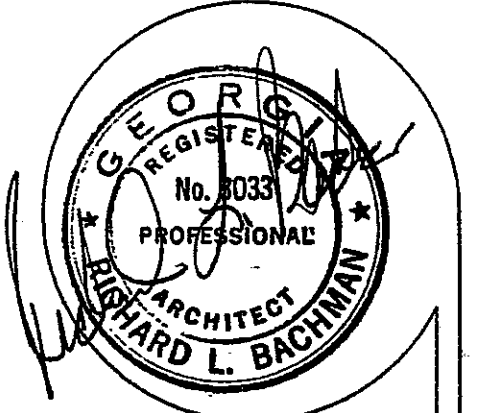




PROJECT: OFFICE & WAREHOUSE BUILD.
FOR: GLOBAL TRADE HOUSE LLC

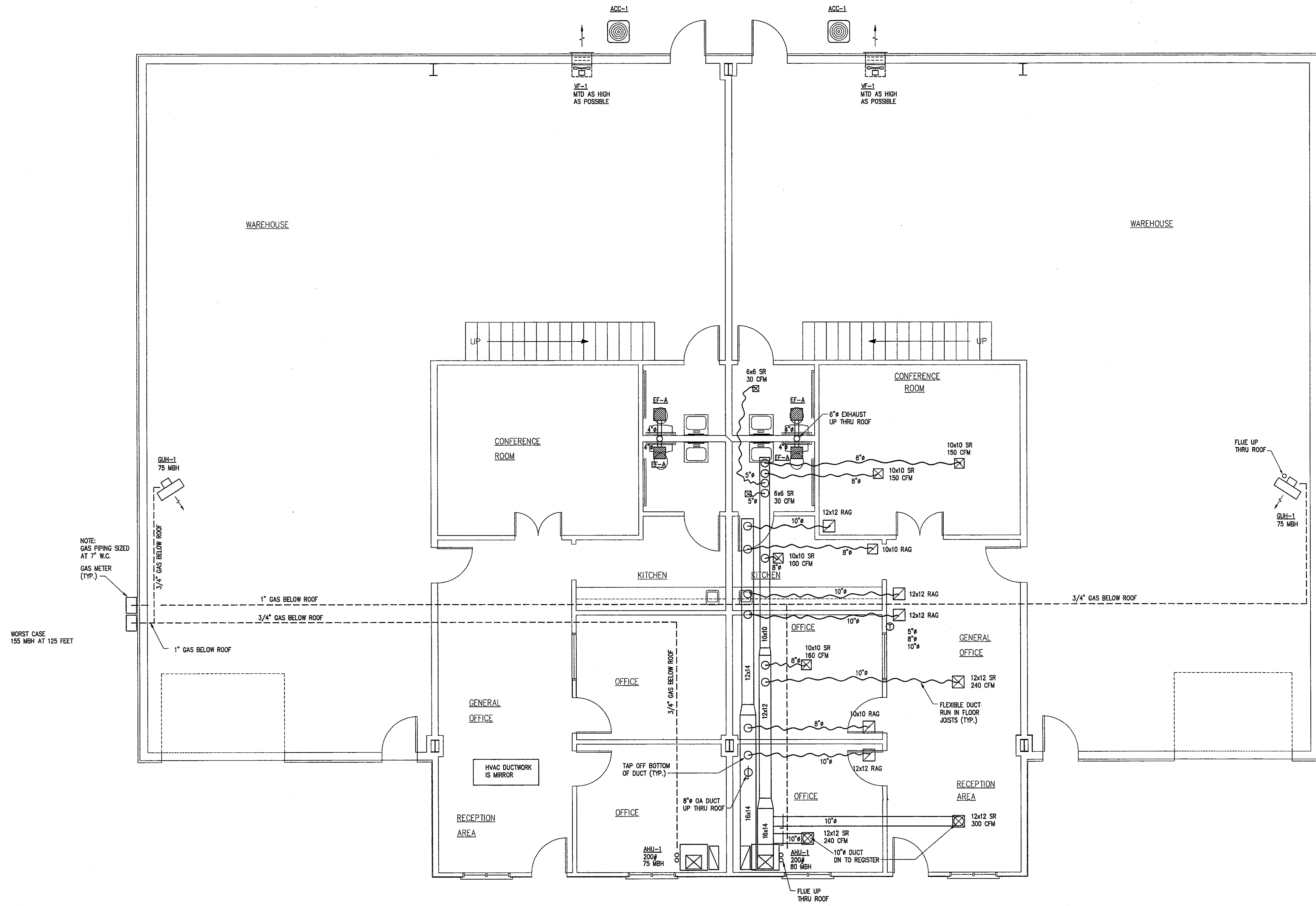
BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS
337 BOULEVARD NE, GAINESVILLE, GA. 3050770 534-6052

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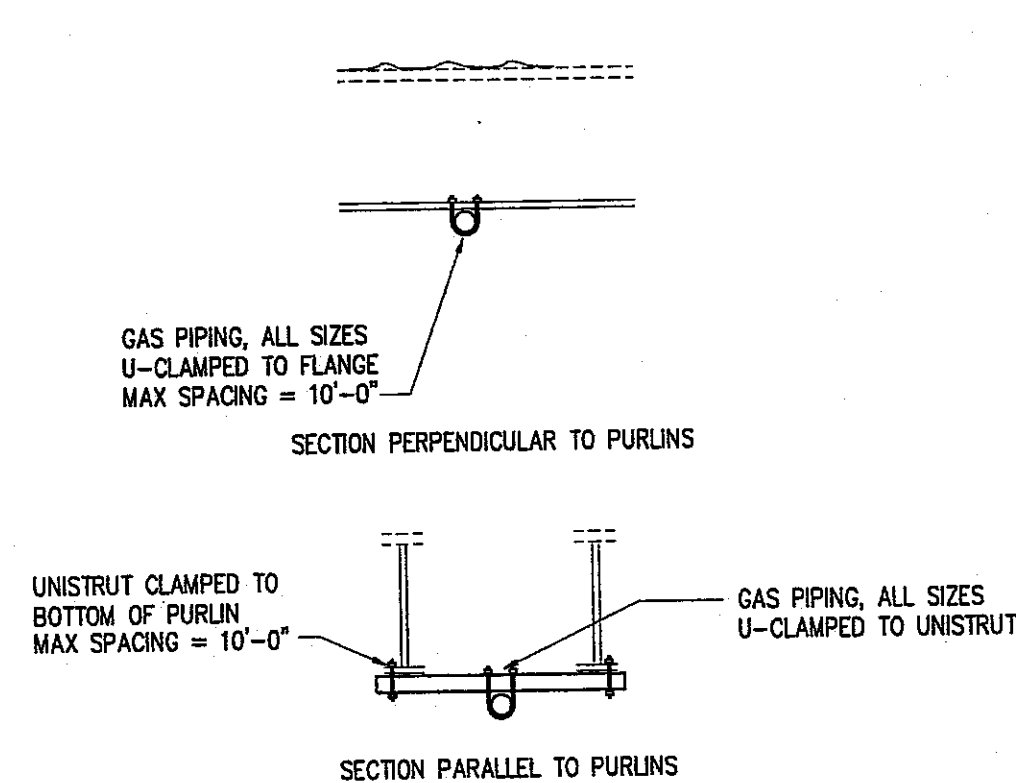
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4/14/08
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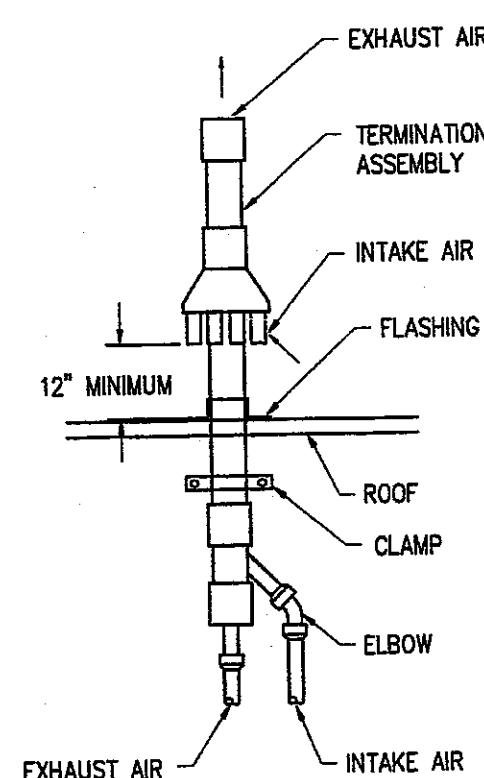
M-1



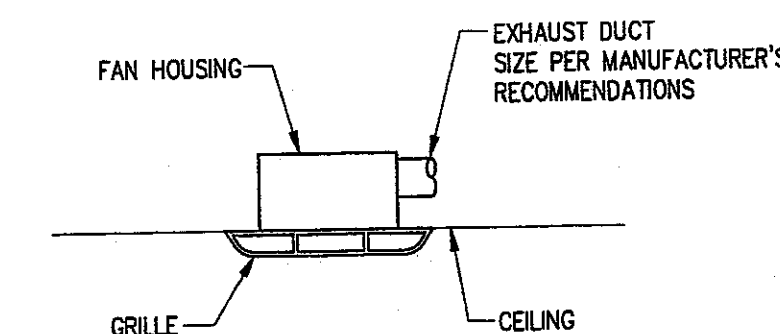
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M-1
MECHANICAL FLOOR PLAN
1/4" = 1'-0"



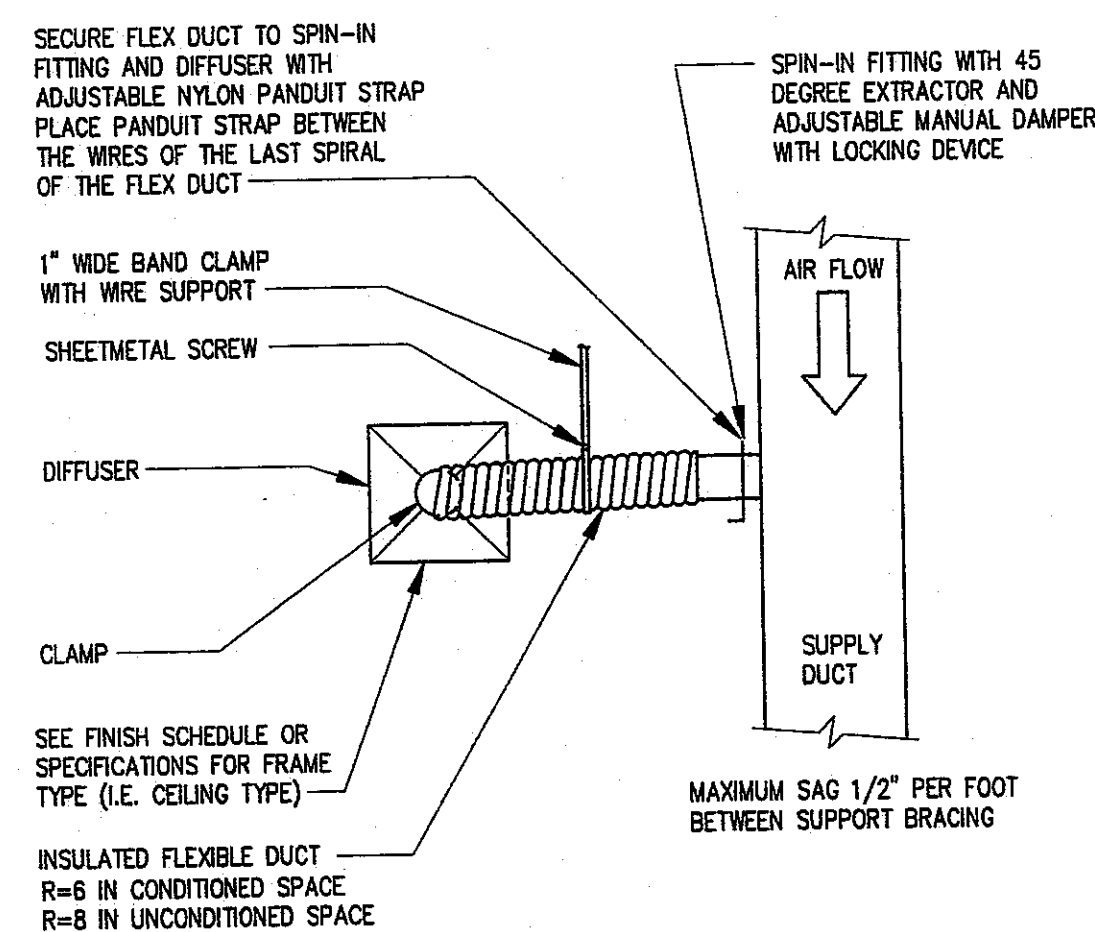
1 PIPE HANGING DETAIL
M-2 NOT TO SCALE



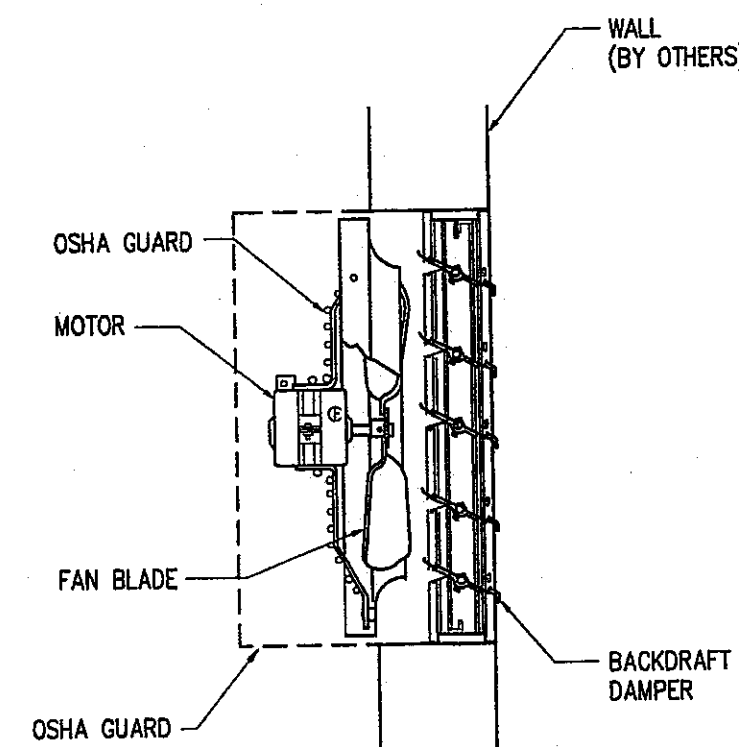
3 CONCENTRIC GAS FLUE THRU ROOF DETAIL
M-2 NOT TO SCALE



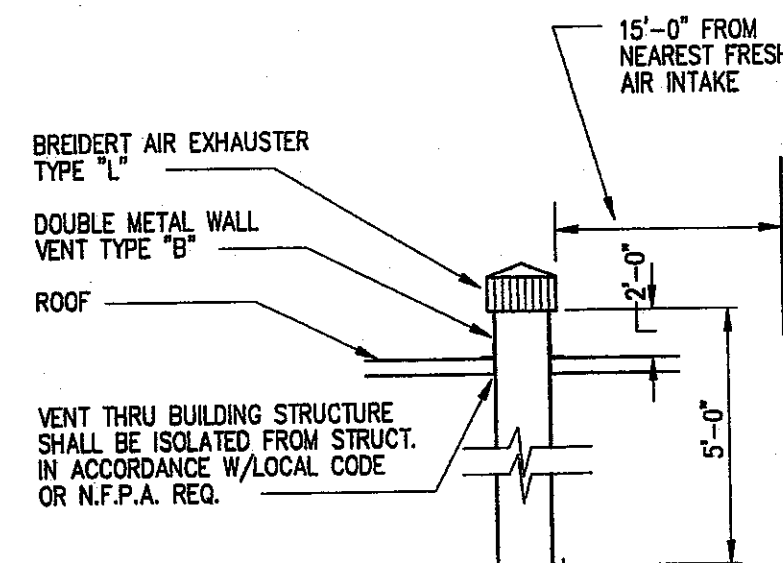
5 EXHAUST FAN DETAIL
M-2 NOT TO SCALE



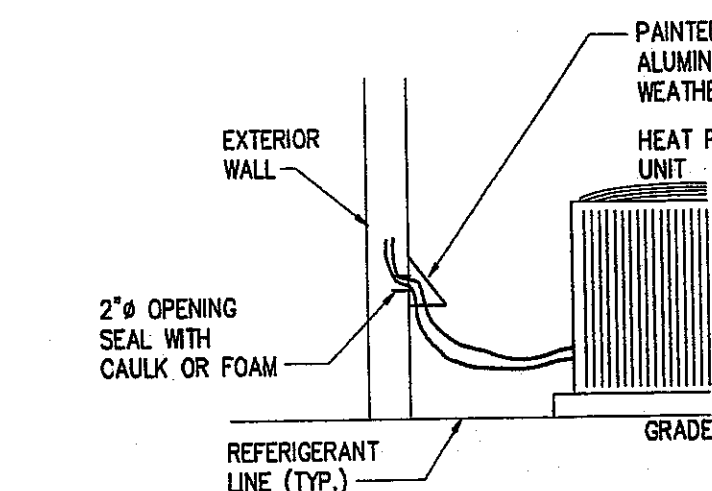
7 DIFFUSER CONNECTION DETAIL
M-2 NOT TO SCALE



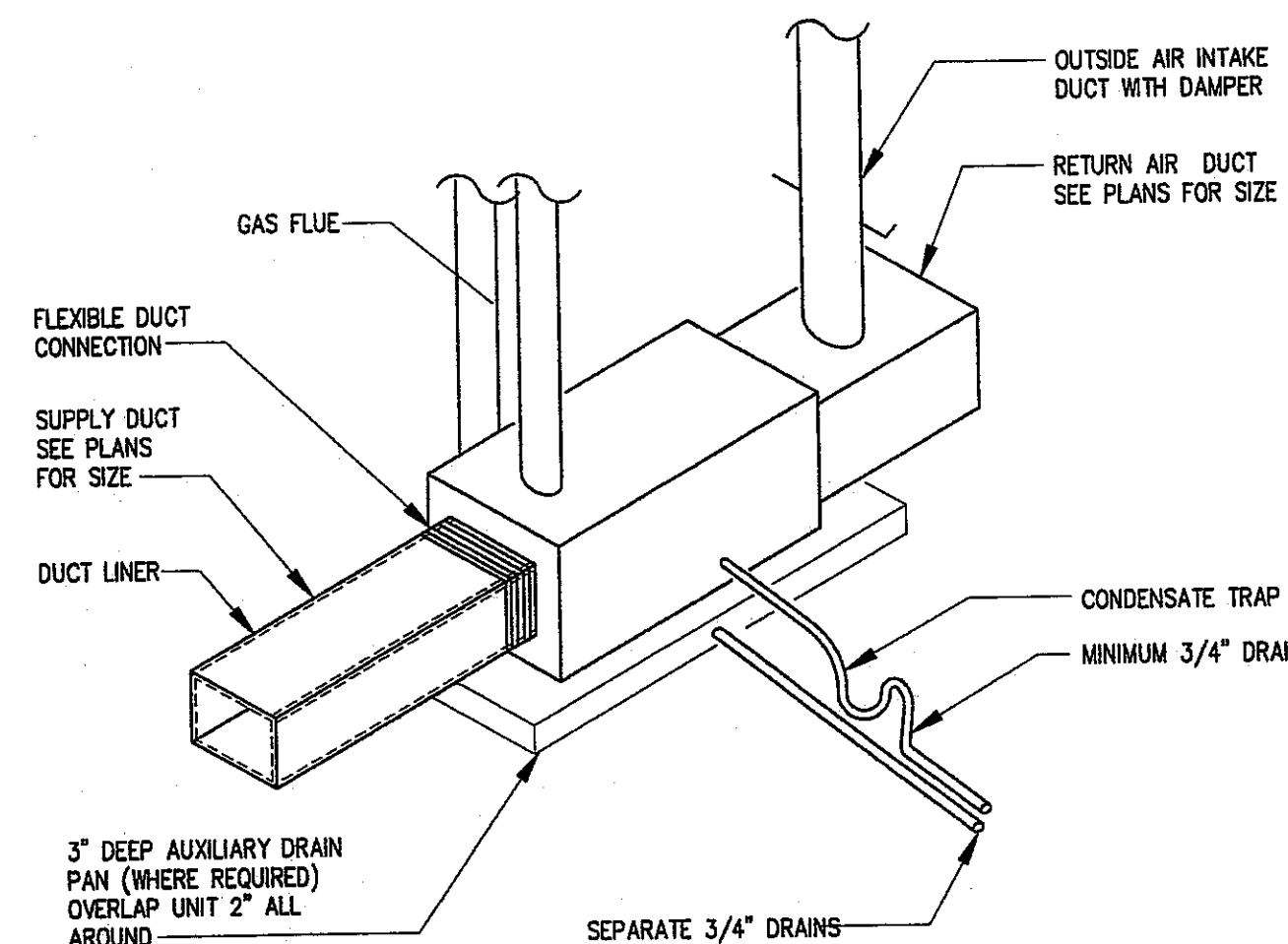
2 WALL MOUNTED EXHAUST FAN DETAIL
M-2 NOT TO SCALE



4 FLUE THRU ROOF DETAIL
M-2 NOT TO SCALE



6 REFRIGERANT LINE ENTRY DETAIL
M-2 NOT TO SCALE



8 HORIZONTAL FAN COIL UNIT
M-2 NOT TO SCALE

MECHANICAL NOTES AND SPECIFICATIONS

- THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT.
- DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING. APPROVAL WILL NOT BE GIVEN UNLESS THE PROPOSED SYSTEM IS EQUAL IN PERFORMANCE, DURABILITY, LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES, LAWS, AND ORDINANCES.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND THE CONDITIONS AND SHALL VERIFY DIMENSIONS AND CLEARANCES AND BE ASSURED THAT THE EQUIPMENT PURCHASED WILL FIT INTO THE AVAILABLE SPACE.
- SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS, SPECIFICATIONS, AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO BIDS FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS DIFFICULTIES COULD NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- THE CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.
- ALL HARD DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL OF THICKNESS AND GAUGES TO CONFORM TO SMACNA DUCT CONSTRUCTION STANDARDS. (RECTANGULAR OR EQUIVALENT ROUND)
- ALL DUCT SHALL BE AIRTIGHT, FREE OF LEAKS, AND SHALL BE INSPECTED FOR LEAKS PRIOR TO INSTALLATION OF FINISHED CEILING SYSTEM.
- DUCTWORK, DAMPERS, LOUVERS, DIFFUSERS, AND OTHER DISTRIBUTION EQUIPMENT AND MATERIALS SHALL CONFORM TO THE FOLLOWING:

A. ASHRAE/ANSI	E. AMCA STANDARD HANDBOOK 99
B. SBCCI/ASME	F. AIR DIFFUSION COUNCIL TEST
C. SMACNA	CODE 1062R3
D. NFPA	G. ANY LOCAL CODES NOT COVERED ABOVE
- ALL DUCT SIZES ARE CLEAR NET INSIDE DIMENSIONS.
- ALL LOW PRESSURE ROUND DUCT AND FLEXIBLE DUCT SHALL BE CONNECTED TO LOW PRESSURE DUCT WITH SPIN-IN FITTINGS AND MANUAL DAMPERS.
- LOW PRESSURE INSULATED FLEXIBLE DUCT SHALL BE A MAXIMUM OF FIFTEEN (15) FEET LONG AND SHALL BE SIZED AS FOLLOWS: USE R-6 IN CONDITIONED AREAS AND R-8 IN UNCONDITIONED AREAS.

CFM	FLEXIDUCT DIAMETER
0 - 80	6"
81 - 165	8"
166 - 300	10"
301 - 500	12"
- ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE LINED WITH 1", 1-1/2# DENSITY FIBERGLASS 5'-0" DOWNSTREAM FROM UNIT.
- ALL SUPPLY AND RETURN DUCTWORK NOT LINED SHALL BE INSULATED WITH 1-1/2", 3/4# DENSITY FOIL BACKED EXTERNAL INSULATION.
- SUPPLY REGISTER (SR) SHALL BE TITUS MODEL 272RL OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- RETURN AIR GRILLES (RAG) SHALL BE TITUS 50F EGG-CRATE TYPE, 12" x 12" UNLESS OTHERWISE NOTED.
- REFRIGERANT PIPING SHALL BE SIZED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR LIQUID, VAPOR HORIZONTALS AND VAPOR RISERS. JOINTS SHALL BE MADE WITH SILVER SOLDER.
- INSULATE REFRIGERANT SUCTION LINES WITH ARMAFLEX OR EQUAL. INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. RUN IN WALLS AND ABOVE CEILINGS AS MUCH AS POSSIBLE.
- MANUAL DAMPERS SHALL BE INCLUDED IN OUTSIDE AIR INTAKE DUCTS TO REGULATE OUTSIDE AIR TO THE AIR HANDLING UNITS.
- UNDERCUT RESTROOM DOORS 3/4" FOR EXHAUST MAKE-UP.
- CONDENSATE DRAIN MUST TERMINATE AT AN APPROVED POINT: VERIFY AT SITE.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE UNDER THIS CONTRACTOR.
- ALL INSULATING MATERIALS SHALL HAVE A COMPOSITE FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50 (ASTM E-84, NFPA 255 & UL 723).
- THERMOSTATS AND OTHER CONTROL ITEMS SHALL BE A PRODUCT OF THE EQUIPMENT MANUFACTURER. (THERMOSTATS SHALL BE EQUAL TO PROGRAMMABLE HONEYWELL 17300).
- PROVIDE AIR EXTRACTORS AT DUCT TAKE-OFFS AS REQUIRED FOR AIR BALANCING.
- BALANCE ALL AIR SYSTEMS TO PRODUCE THE VOLUMES AND QUANTITIES SHOWN ON THE DRAWINGS OR SPECIFIED.
- THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL CHARACTERISTICS WITH ELECTRICAL DRAWINGS BEFORE PURCHASING EQUIPMENT.
- GAS PIPING SHALL BE SCHEDULE 40 ASTM A120-84 BLACK STEEL WITH 150# BLACK MALLEABLE FITTINGS AND DART #832 UNIONS. PROVIDE DRIP LEGS AND CAPS FOR MOISTURE REMOVAL. PROVIDE UNIONS AND LUBRICATED PLUGS FOR ALL EQUIPMENT.
- UPON COMPLETION OF THE WORK, TEST ALL PIPING SYSTEMS AS FOLLOWS:

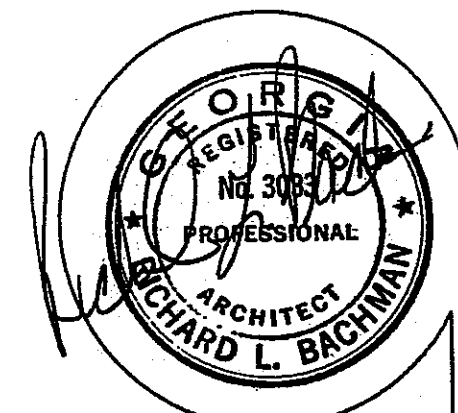
A. GAS PIPING: 20 PSIG AIR PRESSURE TEST: MAINTAIN THIS PRESSURE FOR A MINIMUM OF EIGHT (8) HOURS WITHOUT A LOSS OF PRESSURE. FOLLOW INSTRUCTIONS 2.11 AND 2.12 IN NFPA MANUAL 54.
--
- RETESTING: RETEST PIPING FAILING INITIAL TESTS FOLLOWING CORRECTION OF DEFECTIVE WORK. REQUIREMENTS OF INITIAL TESTS SHALL APPLY.

MECHANICAL EQUIPMENT

- EXHAUST FAN (EF-1) SHALL BE GREENHECK MODEL SP-B80 CAPABLE OF 75 CFM EXHAUST AT 1/8" ESP. SUPPLIED WITH BACKDRAFT DAMPER AND DISCONNECT. CONTROLLED WITH LIGHT SWITCH.
- AIR HANDLING UNIT (AHU-1) SHALL BE CARRIER MODEL 58MCG-080-16 OR APPROVED EQUAL CAPABLE OF 42 MBH COOLING WITH 1,400 CFM AT 0.4" ESP WITH AN INPUT OF 80 MBH GAS HEAT. AFUE = 92% SEE CALCULATIONS FOR OUTSIDE AIR SETTING.
- AIR COOLED CONDENSER (ACC-1) SHALL BE CARRIER MODEL 24ABR3-042 OR APPROVED EQUAL CAPABLE OF 42 MBH COOLING. OPTIONS TO INCLUDE DISCONNECT, FILTER DRIER, LOW AMBIENT KIT AND MOUNTING PAD. SEER = 13.
- GAS FIRED UNIT HEATERS (GUH-1) SHALL BE REZNOR MODEL F-75 OR APPROVED EQUAL CAPABLE OF 75 MBH INPUT AND 980 CFM @ 70°F WITH 1/15 HP FAN MOTOR. SUPPLIED WITH UNIT MOUNTED THERMOSTAT.
- VENTILATION FAN (VF-1) SHALL BE GREENHECK MODEL SB-20, CAPABLE OF 4,200 CFM EXHAUST WITH A 1/3 HP MOTOR AT 0.125" E.S.P. OR APPROVED EQUAL. PROVIDE FAN WITH DISCONNECT, WALL SLEEVE, OSHA GUARD, BACKDRAFT DAMPER AND BIRDSCREEN.
- ALL MECHANICAL EQUIPMENT WHICH HAVE ELECTRICAL CONNECTIONS SHALL BE SUPPLIED WITH DISCONNECT (PROVIDED BY ELECTRICAL CONTRACTOR.)
- OUTSIDE AIR TO AIR HANDLING UNITS SHALL CONFORM 2000 SMC TABLE 403.3. SEE CALCULATIONS.

VENTILATION REQUIREMENTS						
SPACE	EQUIPMENT	GROSS SQ.FT.	NET SQ.FT.	VENTILATION CFM	PEOPLE	TOTAL
OFFICE AREA	AHU-1	1080	900	①	7	140

① TABLE 403.3 REQUIRES 7/1000 AT 20 CFM PER PERSON



PROJECT: OFFICE & WAREHOUSE BUILD.
FOR: GLOBAL TRADE HOUSE LLC

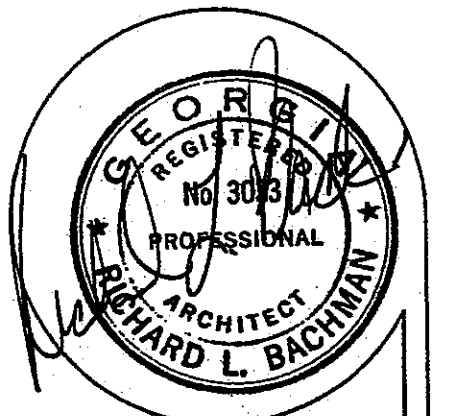
BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS

3377 BOULEVARD NE., GAINESVILLE, GA 30501770 534-6052

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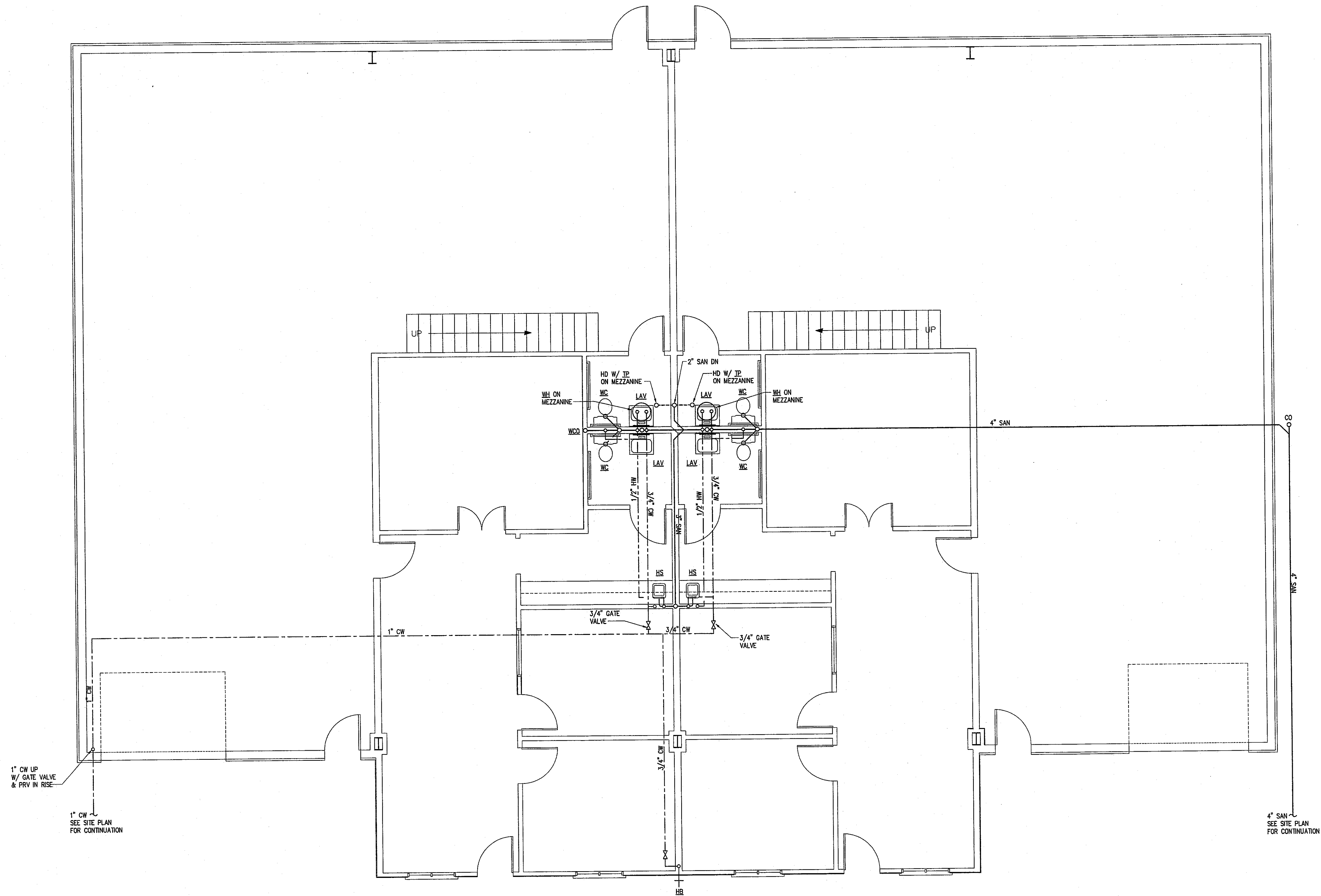
PROJECT: OFFICE & WAREHOUSE BUILD.
FOR: GLOBAL TRADE HOUSE LLC

BACHMAN & ASSOCIATES
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337 BOULEVARD NE., GAINESVILLE, GA. 30501770 534-6052

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DATE
4/14/08
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P-1



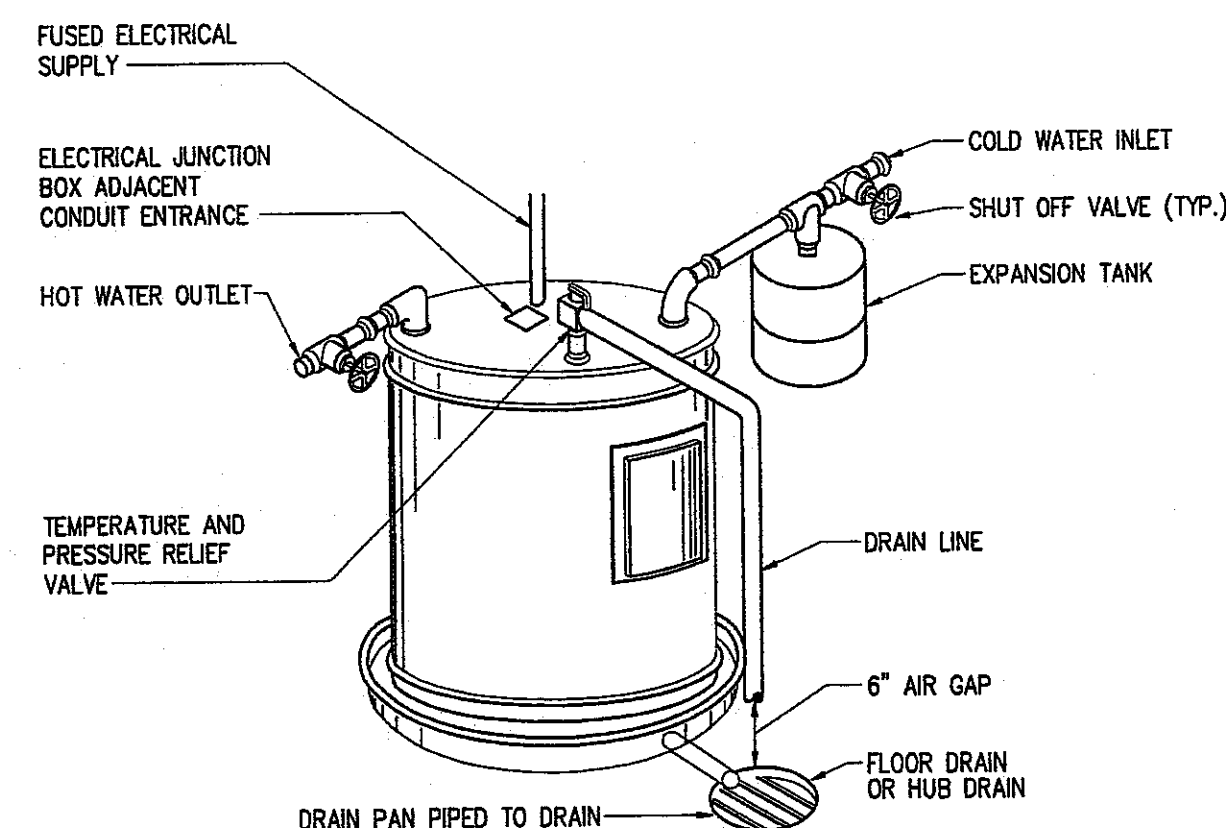
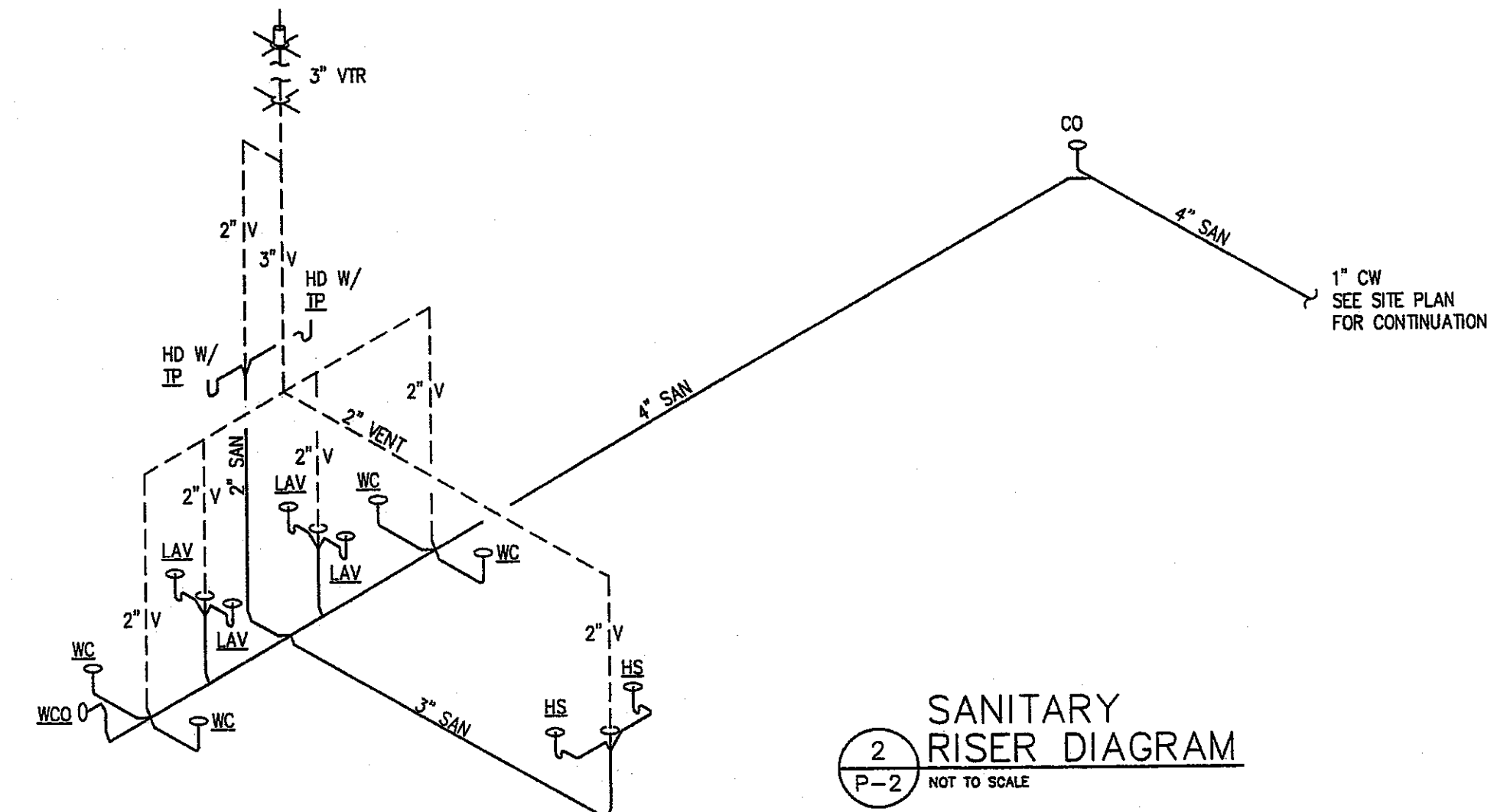
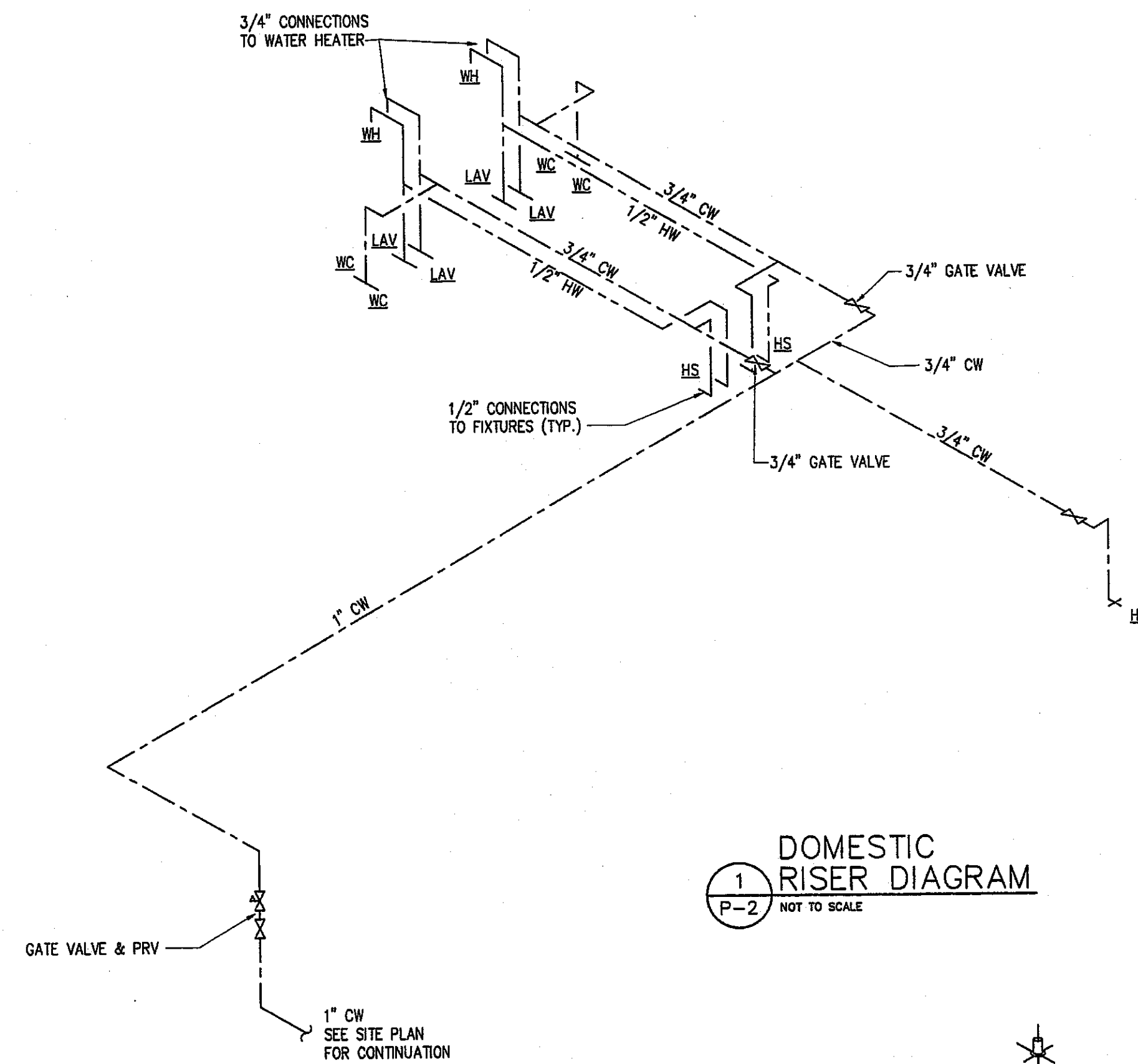
1 PLUMBING FLOOR PLAN
P-1 1/4\"/>

PLUMBING NOTES AND SPECIFICATIONS

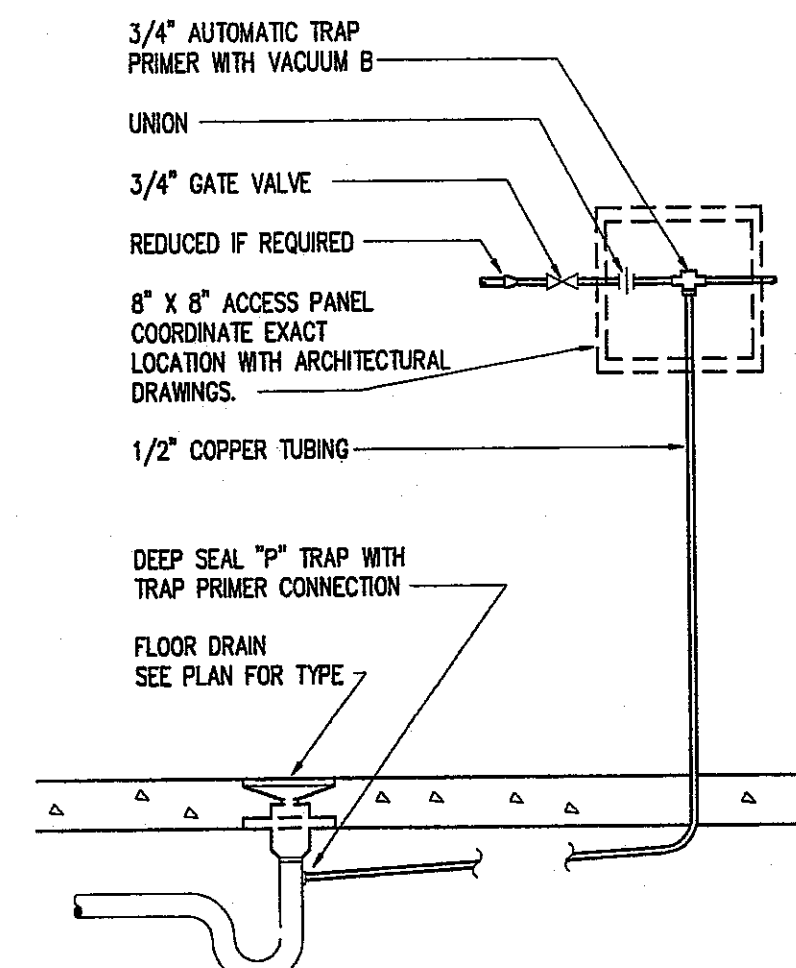
- FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES.
- FURNISH AND INSTALL ALL SYSTEMS OF SOIL, WASTE, AND VENT PIPING, HOT & COLD WATER PIPING, AND DRAINAGE PIPING INCLUDING ALL FITTINGS, VALVES, ETC. AS REQUIRED.
- FURNISH AND INSTALL ALL PLUMBING FIXTURES AND EQUIPMENT AS SHOWN ON THE DRAWINGS.
- ALL PLUMBING WORK SHALL BE DONE UNDER THE SUPERVISION OF AND BY LICENSED AND QUALIFIED PLUMBERS PER ALL LOCAL, STATE, AND NATIONAL CODES AND TO THE COMPLETE SATISFACTION OF THE LOCAL PLUMBING INSPECTOR.
- SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS, SPECIFICATIONS, AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO BIDS FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS DIFFICULTIES COULD NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY CONNECTIONS AND SHALL BEAR ALL COSTS OF INSTALLING NEW WATER METER.
- ALL MATERIALS SHALL BE NEW, CLEAN, AND WITHOUT DEFECTS. ANY DEFECTIVE MATERIALS SHALL BE REMOVED FROM THE JOB SITE.
- ALL PLUMBING PIPING SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE AND ABOVE DROP CEILINGS.
- ALL HOT AND COLD WATER PIPING SHALL BE COPPER TYPE "L".
- ALL COPPER DOMESTIC PIPING SHALL HAVE SOLDER JOINTS, 95-5 NO-LEAD SOLDER, AND SUPPORTED ADEQUATELY FROM STRUCTURE WITH SPLIT RING HANGERS.
- COLD WATER PIPING IN UNCONDITIONED SPACES AND ALL HOT WATER PIPING SHALL BE INSULATED WITH 1/2" THICK PRE-FORMED FOAM PIPE INSULATION, IMMOLOCK OR EQUAL. INSULATE FITTINGS WITH MITERED SECTIONS.
- SANITARY, WASTE, AND VENT PIPING ABOVE GRADE SHALL BE NO-HUB CAST IRON OR ASTM D2665-81 PVC SCHEDULE 40 PIPE.
- CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS AT EACH CHANGE IN DIRECTION. CLEANOUTS SHALL BE PLACED IN READILY ACCESSIBLE LOCATIONS.
- PROVIDE VALVES IN DOMESTIC WATER SYSTEM TO CUT-OFF WATER SERVICE MAIN INSIDE THE BUILDING, AT EACH WALL HYDRANT, AND TO ISOLATE EACH FIXTURE IN THE BUILDING.
- PROVIDE BACK-FLOW PREVENTER AND SHUT-OFF VALVES AT WATER ENTRANCE, OR AS SHOWN, WATTS SERIES 009 OR EQUAL, WITH DRAIN TO OUTSIDE.
- PROVIDE WATER PRESSURE REDUCING VALVE WATTS USB OR EQUAL (SET AT 50 PSIG).
- INSULATE ALL EXPOSED PIPING UNDER HANDICAPPED LAVATORIES WITH TRU-BRO OR EQUAL.
- FIRESTOPS SHALL BE PROSET "FIRESTOP PENETRATORS" OR APPROVED EQUAL.
- UPON COMPLETION OF THE WORK, TEST ALL PIPING SYSTEMS AS FOLLOWS:
 - DRAINAGE SYSTEMS INCLUDING SANITARY SEWERS, ROOF DRAINAGE, AND SANITARY VENTS: PLUG LOW POINTS OF SYSTEM AND FILL WITH WATER TO UPPERMOST OUTLET UP TO TWELVE (12) FEET HIGH, WHICHEVER IS LOWER. LET SYSTEM STAND FULL OF WATER WITH NO INDICATIONS OF LEAKS.
 - DOMESTIC HOT AND COLD WATER: 150 PSIG HYDROSTATIC TEST. HOLD HYDROSTATIC TESTS FOR A MINIMUM OF EIGHT (8) HOURS WITHOUT LOSS OF PRESSURE. HOLD AIR TESTS FOR A MINIMUM OF ONE HOUR WITHOUT SIGNIFICANT LOSS OF PRESSURE. WITH APPROVAL OF ARCHITECT, AIR TESTING MAY BE SUBSTITUTED FOR HYDROSTATIC TESTING IN FREEZING WEATHER.
- RETESTING: RETEST PIPING FAILING INITIAL TESTS FOLLOWING CORRECTION OF DEFECTIVE WORK. REQUIREMENTS OF INITIAL TESTS SHALL APPLY.

PLUMBING FIXTURES (OR APPROVED EQUAL)

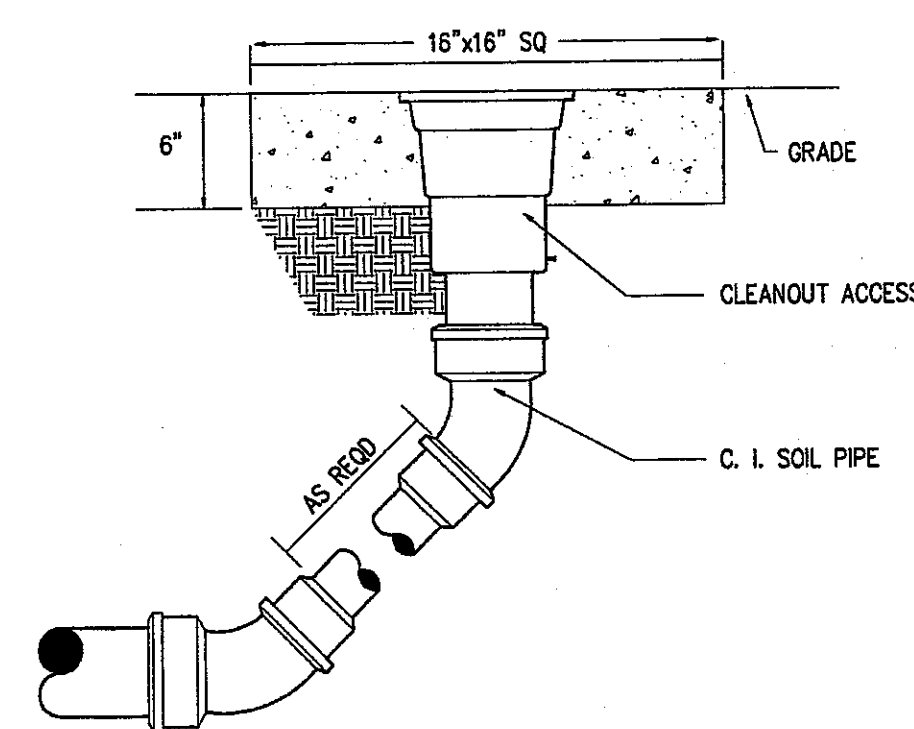
- WC-1 Water Closet - Floor Mounted - Flush Valve - Toto Model No. CT705 (15" high) elongated water saver, 1.6 GPF, white vitreous china toilet, siphon jet action, two bolt caps and 1-1/2" top spud. Church 5320.536 white solid plastic open front heavy duty seat. Toto TMTHNC-32 flushometer valve.
- WC-2 Water Closet - Floor Mounted - Flush Valve - Handicapped - Toto Model No. CT705L (18" high) elongated water saver, 1.6 GPF, white vitreous china toilet, siphon jet action, two bolt caps and 1-1/2" top spud. Church 5320.536 white solid plastic open front heavy duty seat. Toto TMTHNC-32 flushometer valve.
- UR Urinal - Wall Hung - Handicapped - Toto Model No. UT477 white vitreous china washout urinal, 3/4" inlet spud and outlet threaded 2" inside. Jay R. Smith Model 0636 wall hanger. Toto Model TMUHNCR-12, 1.0 GPF flush valve. Mount rim at 17-1/2" to lip from finished floor.
- LAV Lavatory - Countertop - Kohler Model No. K-2196-4 Pennington white vitreous china self-rimming lavatory, Delta Faucet Model No.501. 4" centerset faucet with chrome single lever handle, McGuire No. 155A grid drain assembly, with 1-1/4" tailpiece, McGuire No. 8872 1-1/4" C.P. P-trap with cleanout, McGuire No. 170 supplies with wheel handle stops and escutcheons. Height to match countertop height set by Architect information. Provide and install aerator with .50 GPM flow restrictor.
- EWC Electric Water Cooler - shall be Sunroc Model NSF-8 floor standing cooler. Provide with optional glass filler.
- WH Water Heater - shall be A.O. Smith DEL-10 (1500W) or approved equal with 10 gallon storage with an electric input of 1500 watts heating element, 120 v. single phase (or compatible) service. Unit shall have adjustable thermostat for each heating element. Tank shall be insulated with 2" thick fiberglass insulation and metal jacket. Watts DET Series expansion tank, sized per manufacturers recommendations, shall be provided.
- HB Hose Bibb - shall be Woodford Model 25 or approved equal with anti-siphon vacuum breaker and self draining design.
- FD Floor Drains - shall be Jay R. Smith 2005-ASNB-U or approved equal with cast iron body with Type "A" strainer.
- FCO Floor Cleanout - shall be Jay R. Smith 4025-PB-U or approved equal by Zurn or Josam.
- WCO Wall Cleanout - shall be Jay R. Smith 4422-U or approved equal by Zurn or Josam.
- TP Provide trap primer equal to Precision Plumbing Products "Oregon #1" with soft copper tubing to hub drain above ceiling.
- SP Sump Pump - shall be Zoeller Model M53 submersible pump with check valve. Route 1-1/2" discharge to floor drain.



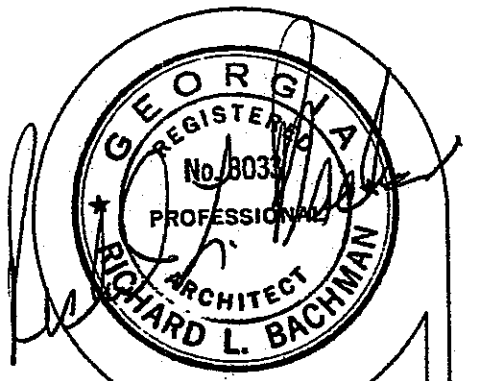
3 ELECTRIC WATER HEATER
P-2 NOT TO SCALE



4 AUTOMATIC TRAP PRIMER
P-2 NOT TO SCALE



5 EXTERIOR CLEANOUT-DETAIL
P-2 NOT TO SCALE



PROJECT: OFFICE & WAREHOUSE BUILD.
FOR: GLOBAL TRADE HOUSE LLC

BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS
337 BOULEVARD NE., GAINESVILLE, GA. 30501770 534-6052

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P-2



PROJECT: OFFICE & WAREHOUSE BUILDING #1
FOR GLOBAL TRADE HOUSE LLC

BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS

337 BOULEVARD NE, GAINESVILLE, GA 30501 (770) 534-6052

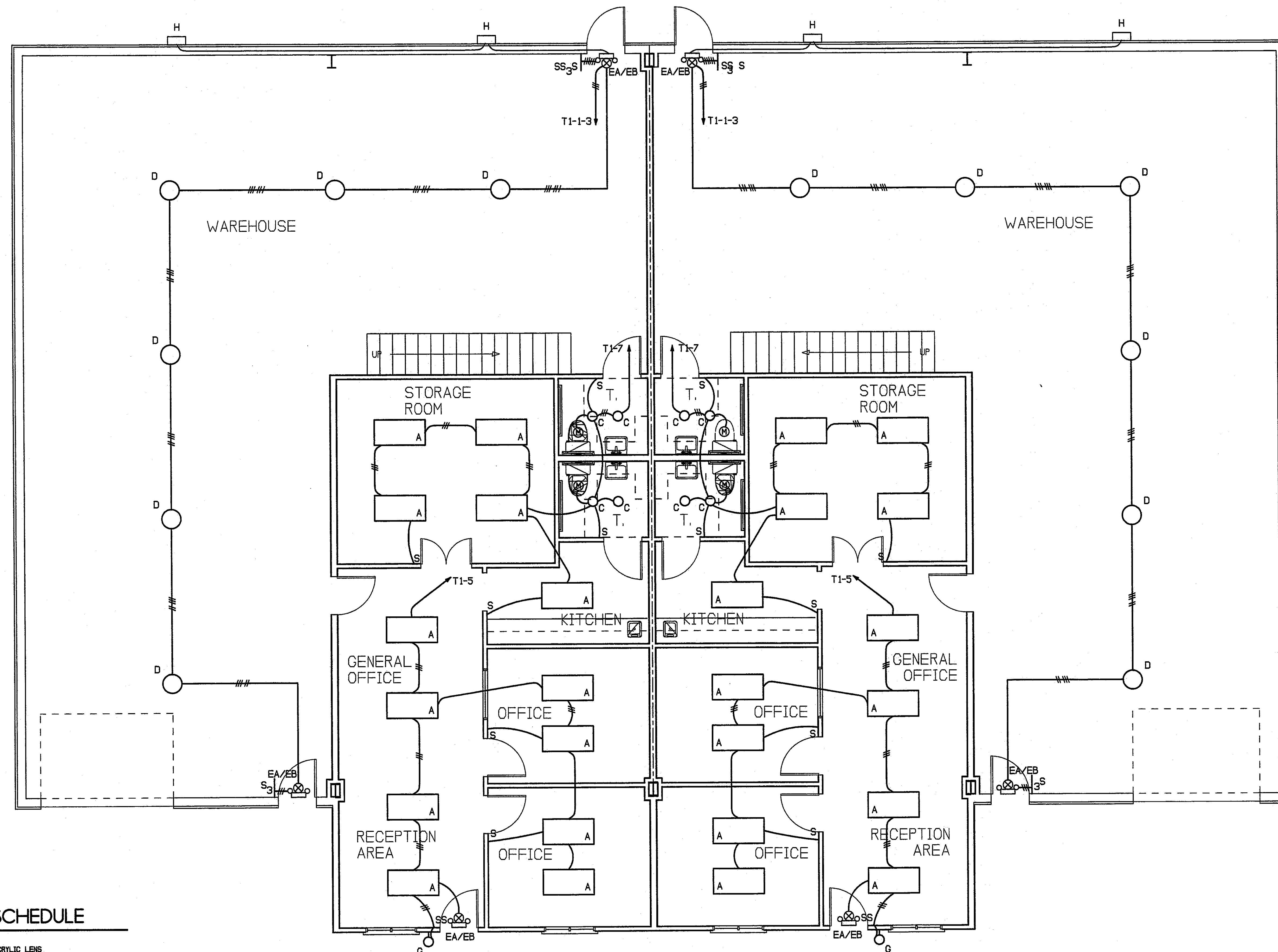
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FLOOR PLAN - LIGHTING

SCALE 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

MARK	DESCRIPTION
A	2 X 4 RECESSED 4 LAMP, PRISMATIC ACRYLIC LENS DAY-BRITE 2108432-01-120-EB101-1/4 PLUS (4) 32W T8 LITHONIA 25PC-152-FW-A12-120V-1/4GEB101S PLUS (4) F32W LAMPS
B	2 X 4 RECESSED 2 LAMP, PRISMATIC ACRYLIC LENS DAY-BRITE 2108232-01-120-EB101-1/2 PLUS (2) 32W T8 LITHONIA 25PC-252-FW-A12-120V-1/2GEB101S PLUS (2) 32W LAMPS
C	RECESSED ROUND DOWNLIGHT - (2) 26W MINI FLUORESCENT WHITE TRIM - ALZAK REFLECTOR - IC RATED
D	HIGHBAY 100W METAL HALIDE FIXTURE WITH WIDE PATTERN REFLECTOR DAY-BRITE HSC100W-28-G-A24 1" OPTION ONLY WHERE DESIGNATED LITHONIA TE100W-E22W-208 (ORS ON UNITS SO MARKED)
EA	EXIT SIGN, RED LETTERS, WHITE HOUSING, INTEGRAL BATTERY BACK-UP CHLORIDE 0H1 LITHONIA QMSW-X-R-120-ELN
EB	EMERGENCY LIGHT, 2 LAMP, WITH INTEGRAL BATTERY BACK-UP CHLORIDE 0H1 LITHONIA ELK2-H
EA/EB	EMERGENCY COMBO UNIT CHLORIDE ERC LITHONIA H0MSW-1-R-120-N-H

F	STANDARD 2 LAMP FLUORESCENT STRIP FIXTURE WITH T8 LAMPS DAY-BRITE T208-120-1/2EB101 LITHONIA 1296T8-120V-0EB10
G	EXTERIOR CUT-OFF WALL PACK, FLUORESCENT LAMP WIDE THROW GARCO 101WT-12TRF-120-BRP -EMR PLUS BODINE PACK #B84C EMERG. FIXT ONLY
H	EXTERIOR CUT-OFF WALL PACK, H.I.D. LAMP WIDE THROW NITE BRITE WLC-070M-12 GARCO 101WT-175M-120-OC (AS SELECTED BY OWNER) GARCO 102WT-175M-120-OC (AS SELECTED BY OWNER) VISIONAIRE SIL-1/12-175M-1-DL COLOR TO MATCH EXTERIOR
NL	NIGHT LIGHT, CONNECT TO CONSTANT CIRCUIT.
NOTE:	SUBSTITUTIONS MUST BE SUBMITTED FOR PRIOR APPROVAL 10 BUSINESS DAYS BEFORE BID DATE. INCLUDE YES FILES OR PHOTOMETRIC CHARTS ALONG WITH FIXTURE CUT SHEETS. FIXTURE SAMPLES MAY BE REQUIRED.

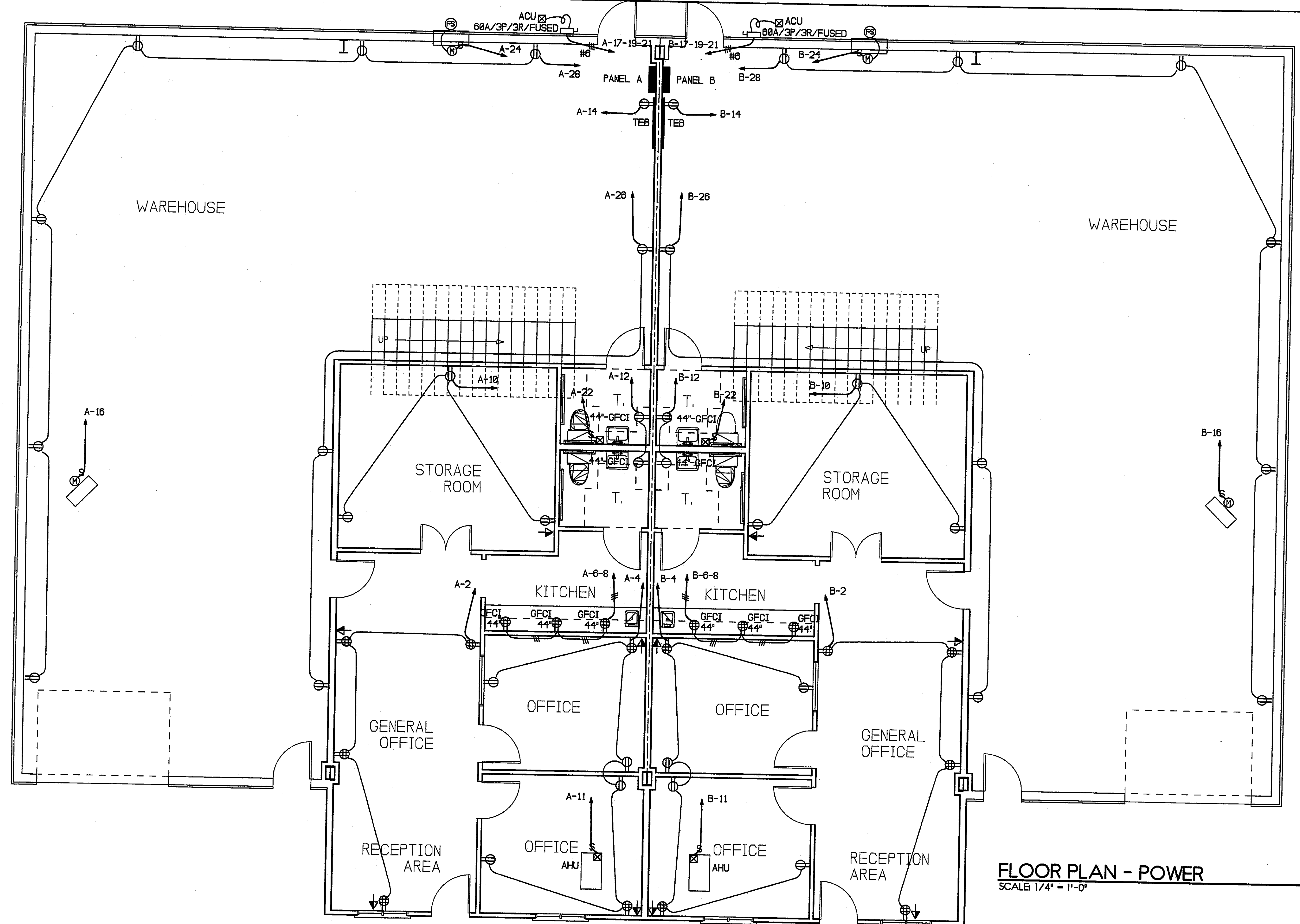
GENERAL LIGHTING SYMBOLS

—	FLUORESCENT STRIP & OUTLET. SEE SCHEDULE.
□	FLUORESCENT FIXTURE & OUTLET. SEE SCHEDULE.
○	INCANDESCENT (OR HID) FIXTURE & OUTLET. SEE SCHEDULE.
○	INCANDESCENT (OR HID) BRACKET & OUTLET. SEE SCHEDULE.
⊗	EXIT SIGN, BATTERY BACK-UP. SEE SCHEDULE.
⌚	EMERGENCY BATTERY BACK-UP LIGHTING FIXTURE, SURFACE MOUNTED ON FLUSH OUTLET AT 7'-0" HIGH. WIRE TO CONSTANT LIGHTING CIRCUIT. SEE SCHEDULE.
⌚	COMBINATION EXIT SIGN/ EMERGENCY BATTERY BACK-UP LIGHTING FIXTURE. WIRE TO CONSTANT CIRCUIT. SEE LIGHTING FIXTURE SCHEDULE.

GENERAL SWITCH SYMBOLS

S	SINGLE POLE SWITCH - 48" HIGH - GE# 5951
S ₂	DOUBLE POLE SWITCH - 48" HIGH - GE# 5952
S ₃	THREE-WAY SWITCH - 48" HIGH - GE# 5953
S ₄	FOUR-WAY SWITCH - 48" HIGH - GE# 5954
S _p	SWITCH W/ PILOT LIGHT, SINGLE POLE (OR AS NOTED) - 48" HIGH. GE# SP121-80
S _d	INCANDESCENT DIMMER SWITCH - 48" HIGH, 1000W 1500W 2000W RATING DEPENDENT ON CIRCUIT SERVED. LUTRON NOVA SERIES.

NOTE: COLOR OF DEVICES AND COVERPLATES SHALL BE AS SELECTED BY ARCHITECT
FROM STANDARD IVORY, GRAY, WHITE, OR BROWN COLORS. COLOR IS
DENOTED BY AN * IN THE CATALOG NUMBER. SPECIALTY COLORS (COLORS
OTHER THAN STANDARDS) WILL BE SO NOTED ON THE FLOOR PLANS.



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

GENERAL RECEPTACLE SYMBOLS

- ⊕ DUPLEX RECEPTACLE - 16" HIGH. GE #5262-K/15A-125V/NEMA 5-15R.
 - ⊕ DUPLEX RECEPTACLE - 48" HIGH. GE #5262-K/15A-125V/NEMA 5-15R.
 - ⊕ QUAD-PLEX RECEPTACLE - 16" HIGH (OR AS NOTED). TWO (2) EACH. GE #5262-K/15A-125V/NEMA 5-15R.
 - ⊕ DUPLEX RECEPTACLE - 16" HIGH (OR AS NOTED). GE #5362-K/20A-125V/NEMA 5-20R.
 - EWC ⊕ DUPLEX RECEPTACLE - CONCEAL BEHIND OR WITHIN ENCLOSURE OF ELECTRIC WATER COOLER. GE #5362-K/20A-125V/NEMA 5-20R.
 - WP ⊕ GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE - 16" HIGH. GE OF #5342-WP-8/20A-125V/NEMA 5-20R.
 - GFI ⊕ GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE - 16" HIGH. GE OF #5342-K/20A-125V/NEMA 5-20R.
 - GFI ⊕ GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE - 48" HIGH. GE OF #5342-K/20A-125V/NEMA 5-20R.
 - ⊕ SINGLE RECEPTACLE - 16" HIGH. GE #4182-K/20A-125V/NEMA 5-20R.
 - ⊕ POWER RECEPTACLE - HEIGHT AS NOTED. RATINGS AS NOTED.
- NOTE: COLOR OF DEVICES AND COVERPLATES SHALL BE AS SELECTED BY ARCHITECT FROM STANDARD IVORY, GRAY, WHITE, OR BROWN COLORS. COLOR IS DENOTED BY AN "N" IN THE CATALOG NUMBER. SPECIALTY COLORS (COLORS OTHER THAN STANDARDS) WILL BE SO NOTED ON THE FLOOR PLANS.

GENERAL DISTRIBUTION & POWER SYMBOLS

- ⊕ FULLBOX. SIZE IN ACCORDANCE WITH NEC 378-18.
- T TRANSFORMER. RATINGS AS NOTED.
- ⊕ POWER PANELBOARD. SEE SCHEDULES.
- ⊕ LIGHTING/APPLIANCE PANELBOARD. SEE SCHEDULES.
- ⊕ SAFETY DISCONNECT SWITCH PROVIDED, INSTALLED, AND CONNECTED UNDER ELECTRICAL SECTION. H.O. FUSED TYPE (UNLESS NOTED OTHERWISE). NEMA 1 FOR INDOOR, NEMA 3R FOR OUTDOOR. OTHER RATINGS AS NOTED. 250 VOLT FOR 208Y & 240V SYSTEMS. 600 VOLT FOR 480V, 480V & 575V SYSTEMS. NEUTRAL BUS & SEPARATE EQUIPMENT GROUND BUS REQUIRED FOR EACH. SEE RATING REQUIRED WHERE SWITCH IS USED FOR SERVICE ENTRANCE DISCONNECTING MEANS.
- ⊕ MOTOR STARTER AND/OR CONTROLLER - PROVIDED UNDER MECHANICAL SECTION OF SPECIFICATIONS. INSTALLED AND CONNECTED TO POWER UNDER THIS SECTION OF SPECIFICATIONS.
- ⊕ ELECTRIC MOTOR. RATINGS AS NOTED. PROVIDED AND INSTALLED UNDER MECHANICAL SECTION OF SPECIFICATIONS. CONNECTED TO POWER UNDER THIS SECTION OF SPECIFICATIONS.
- ⊕ JUNCTION BOX. HEIGHT AS NOTED. LOCATION AS SHOWN.
- ⊕ FIRE STAT.

GENERAL CONDUIT & WIRING SYMBOLS

- NOTE: MINIMUM CIRCUIT SHALL BE 2#12AWG-CU-TY IN 1/2" EMT. ADDITIONAL NUMBER, SIZE, TYPE, AND/OR RATINGS AS SHOWN AND/OR SPECIFIED IN DRAWINGS AND/OR SPECIFICATIONS.
- ⊕ INTENTIONAL GROUNDING CONNECTION IN ACCORDANCE WITH NEC 250.
 - ⊕ WIRING IN CONDUIT EXPOSED ON CEILING OR WALL.
 - ⊕ WIRING IN CONDUIT CONCEALED IN CEILING OR WALL.
 - ⊕ WIRING IN CONDUIT CONCEALED IN FLOOR OR WALL.
 - ⊕ STRANDED WIRING IN FLEXIBLE CONDUIT. IF EXPOSED, THEN SEALTITE.
 - ⊕ WIRING IN CONDUIT HOMERUN TO PANELBOARD (OR EQUIPMENT AS NOTED). LETTER(S) DENOTE PANELBOARD DESIGNATION AND NUMERAL(S) DENOTE CIRCUIT NUMBER(S).

TELEPHONE/COMMUNICATIONS SYSTEM SYMBOLS

- ⊕ TELEPHONE (TEB) OR COMPUTER (CEB) EQUIPMENT BACKBOARD - 4'-0" x 8'-0" x 3/4" EXTERIOR GRADE A/D PLYWOOD BACKBOARD BOLTED TO WALL OR STRUCTURE. PROVIDE IN WIDTH SHOWN ON DRAWINGS. PAINT TWO (2) COATS GRAY ENAMEL. PROVIDE 1/8" CU EQUIPMENT GROUNDING CONDUCTOR TO COLD WATER PIPE CONNECTION AT SAME LOCATION AS COLD WATER PIPE BOND CONNECTION TO GROUND BUS IN MAIN PANEL. PROVIDE WITH QUAD-PLEX RECEPTACLE AT UPPER RIGHT HAND CORNER OF BACKBOARD (OR AS SHOWN ON DRAWINGS).
- ⊕ TELEPHONE OUTLET - 36" HIGH - (WALL PHONE). 3/4" CONDUIT STUB-UP TO CEILING SPACE.
- ⊕ COMBINATION COMPUTER AND TELEPHONE OUTLET - 16" HIGH - FOR CRT'S, PRINTERS, P.C.'S, AND OTHER EQUIPMENT AS INDICATED AND/OR NOTED.
- ⊕ TELEPHONE DUPLEX OUTLET AND COMPUTER DUPLEX OUTLET IN TWO GANG OUTLET BOX. NOTED. 3/4" CONDUIT STUB-UP TO CEILING SPACE.
- ⊕ CONDUIT HOMERUN TO TELEPHONE (OR COMPUTER) EQUIPMENT BACKBOARD OR TELEPHONE (OR COMPUTER) EQUIPMENT CABINET AS INDICATED. INSTALL CABLES IF NOTED AND/OR SPECIFIED. OTHERWISE INSTALL 300 POUND TEST PULL CORD THROUGHOUT ENTIRE LENGTH OF RUN. 1" CONDUIT OR OTHER SIZES AS NOTED.



PROJECT: OFFICE & WAREHOUSE BUILDING #1
FOR GLOBAL TRADE HOUSE LLC

BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS
337 BOULEVARD NE, GAINESVILLE, GA 30601 (770) 534-0652

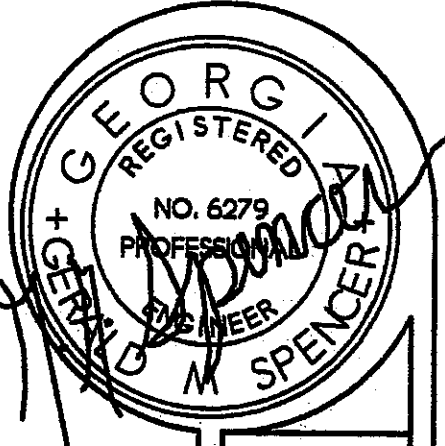
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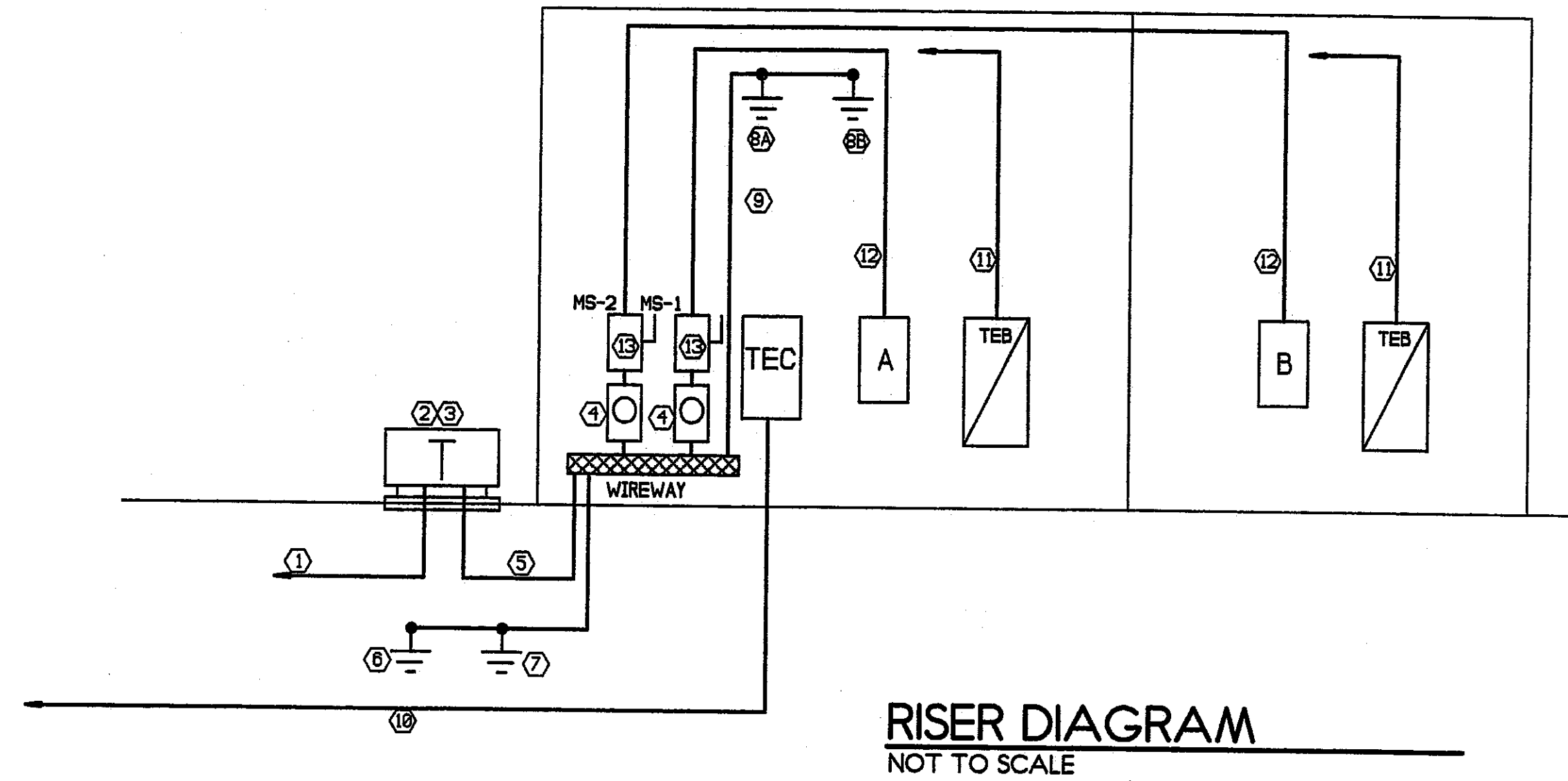
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PROJECT: OFFICE & WAREHOUSE BUILDING #1
FOR GLOBAL TRADE HOUSE LLC

BACHMAN & ASSOCIATES
ARCHITECTS & BUILDERS
337 BOULEVARD NE, GAINESVILLE, GA 30501 (770) 534-8852

REV.
DATE
04/14/08
SHEET
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RISER DIAGRAM
NOT TO SCALE

PANEL A 208Y/120V/3Ø-4W-60HZ-42kAIC									
		AMP/ POLE		TRIP/ POLES		TRIP/ POLES		TRIP/ POLES	
		200 AMP BUS		200 AMP BUS		200 AMP BUS		200 AMP BUS	
		MAIN BREAKER-TRIP		MAIN LUGS ONLY		SURFACE MOUNTED		FLUSH MOUNTED	
CKT NO	DESCRIPTION	CKT KW	TRIP/ POLES	TRIP/ POLES	CKT KW	DESCRIPTION	CKT NO	DESCRIPTION	CKT NO
1	LIGHTING	1.6	20/1	20/1	0.6	RECEPTACLES	2		
3	LIGHTING	1.2	20/1	20/1	0.4	RECEPTACLES	4		
5	LIGHTING	0.8	20/1	20/1	0.4	RECEPTACLES	6		
7	LIGHTING	1.2	20/1	20/1	0.6	RECEPTACLES	8		
9	SPARE	-	20/1	20/1	1.6	RECEPTACLES	10		
11	AHU	0.5	20/1	20/1	0.8	RECEPTACLES	12		
13	SPARE	-	20/1	20/1	1.6	RECEPTACLES	14		
15	SPARE	-	20/1	20/1	0.5	UH-1	16		
17	ACU	9.6	60/3	SPC	-	SPACE	18		
19				SPC	-	SPACE	20		
21				SPC	-	UH-1	22		
23	SPACE	-	SPC	20/1	0.5	VEF	24		
25	SPACE	-	SPC	20/1	0.6	RECEPTACLES	26		
27	SPACE	-	SPC	20/1	1.2	RECEPTACLES	28		
29	SPACE	-	SPC	SPC	-	SPACE	30		
31	SPACE	-	SPC	SPC	-	SPACE	32		
33	SPACE	-	SPC	SPC	-	SPACE	34		
35	SPACE	-	SPC	SPC	-	SPACE	36		
37	SPACE	-	SPC	SPC	-	SPACE	38		
39	SPACE	-	SPC	SPC	-	SPACE	40		
41	SPACE	-	SPC	SPC	-	SPACE	42		

[DEMAND] 225 kVA @ 208Y = 62.5 AMPS

PANEL B 208Y/120V/3Ø-4W-60HZ-42kAIC									
		AMP/ POLE		TRIP/ POLES		TRIP/ POLES		TRIP/ POLES	
		200 AMP BUS		200 AMP BUS		200 AMP BUS		200 AMP BUS	
		MAIN BREAKER-TRIP		MAIN LUGS ONLY		SURFACE MOUNTED		FLUSH MOUNTED	
CKT NO	DESCRIPTION	CKT KW	TRIP/ POLES	TRIP/ POLES	CKT KW	DESCRIPTION	CKT NO	DESCRIPTION	CKT NO
1	LIGHTING	1.6	20/1	20/1	0.6	RECEPTACLES	2		
3	LIGHTING	1.2	20/1	20/1	0.4	RECEPTACLES	4		
5	LIGHTING	0.8	20/1	20/1	0.4	RECEPTACLES	6		
7	LIGHTING	1.2	20/1	20/1	0.6	RECEPTACLES	8		
9	SPARE	-	20/1	20/1	0.8	RECEPTACLES	10		
11	AHU	0.5	20/1	20/1	1.6	RECEPTACLES	12		
13	SPARE	-	20/1	20/1	0.8	RECEPTACLES	14		
15	SPARE	-	20/1	20/1	0.5	UH-1	16		
17	ACU	9.6	60/3	SPC	-	SPACE	18		
19				SPC	-	SPACE	20		
21				SPC	-	UH-1	22		
23	SPACE	-	SPC	20/1	0.5	VEF	24		
25	SPACE	-	SPC	20/1	0.6	RECEPTACLES	26		
27	SPACE	-	SPC	20/1	1.2	RECEPTACLES	28		
29	SPACE	-	SPC	SPC	-	SPACE	30		
31	SPACE	-	SPC	SPC	-	SPACE	32		
33	SPACE	-	SPC	SPC	-	SPACE	34		
35	SPACE	-	SPC	SPC	-	SPACE	36		
37	SPACE	-	SPC	SPC	-	SPACE	38		
39	SPACE	-	SPC	SPC	-	SPACE	40		
41	SPACE	-	SPC	SPC	-	SPACE	42		

[DEMAND] 225 kVA @ 208Y = 62.5 AMPS

ELECTRICAL LEGEND - RISER DIAGRAM ONLY

- UNDERGROUND PRIMARY ELECTRICAL SERVICE - IN PLACE BY POWER
- ELECTRICAL SERVICE TRANSFORMER - IN PLACE BY POWER COMPANY.
- ELECTRICAL SERVICE - 208Y/120V/3Ø-4W-60HZ.
- METERING
PROVIDE METERING IN ACCORDANCE WITH POWER COMPANY'S REQUIREMENTS. THIS SHALL INCLUDE BUT NOT LIMITED TO:
INSTALL METER BASE & COVER, INSTALL METER WIRING,
BOND METER BASE & METER WIRING CONDUIT TO EQUIPMENT
GROUNDING CONDUCTOR AND GROUND ELECTRODE.
- MAIN ELECTRICAL SERVICE
(2) SETS OF FOUR #6 AWG CU-XHHW EACH SET IN 2" C.
- GROUND ELECTRODE (MADE)
(8) 1/2" x 8" CLAD FLUSH DRIVEN GROUND RODS
INTERCONNECTED WITH #6 AWG BARE COPPER CABLES AND UL LISTED
COMPRESSION CONNECTIONS, CONNECT TO NEUTRAL BUS OR MAIN GROUNDING
CONDUCTOR VIA #6 AWG COPPER CABLE.
- GROUND ELECTRODE (MADE)
MINIMUM OF 20 FT. OF #6 AWG BARE COPPER OR LARGER, OR 1/2" OR LARGER
STEEL REBAR ENCASED IN AT LEAST 2" CONCRETE ALL DIRECTIONS.
LOCATE WITHIN AND/OR NEAR FOOTING FOUNDATION. CONNECT TO NEUTRAL BUS OR
BUS OR MAIN GROUNDING CONDUCTOR VIA #6 AWG CU CABLE.
- COLD WATER METAL PIPE BOND CONNECTION
UL LISTED PIPE CLAMP BRONZE TYPE. CONNECT TO COLD WATER LINE
WITHIN 6 FT OF ENTERING BLDG.
- BUILDING STEEL BOND CONNECTION
UL LISTED BOLTED CLAMP. CONNECT TO EFFECTIVELY GROUNDED
METAL FRAME OF BUILDING. NEAR C.W. PIPE CONNECTION.
-
- TELEPHONE SERVICE - TWO(2) 4" C. OUT TO TELEPHONE TERMINAL AT STREET. (48" SQ x 12" D - NEMA 5F).
- TELEPHONE SERVICE - ONE(1) 2" C. TO TELEPHONE CABINET ON BLDG.
- FEEDER - FOUR(4) #3/0 AWG CU-THHN IN 2" CONDUIT (200A).
- 200A/8P DISCONNECT SWITCH - FUSED 200A, NEMA 5F FOR EXTERIOR LOCATIONS.