

GAS-FIRED ROOFTOP MAKE-UP AIR UNIT SCHEDULE

| ITEM | MANUFACTURER | MODEL NO. | SUPPLY AIR (CFM) | UNIT ESP (IN. W.G.) | FAN MOTOR (HP) | COOLING TOTAL (MBH) | COOLING SENS. (MBH) | COND. EAT (F DB) | EVAP. EAT (F DB/F WB) | EVAP. LAT (F DB/F WB) | DX REHEAT (F DB) | HEAT. INPUT (MBH) | HEAT. OUTPUT (MBH) | BURNER 15:1 TURNDOWN | GAS-FIRED HUMIDIFIER (LBS./HR) | ELECTRICAL V/ø/HZ | WEIGHT LBS. | OPTIONS |
|------|--------------|-----------|---------------------|------------------------|-------------------|------------------------|------------------------|---------------------|--------------------------|--------------------------|---------------------|----------------------|-----------------------|---------------------------------|-----------------------------------|----------------------|---------------------|---|
| MUA2 | - | - | 5,000 | 1.0 | 7.5 | 336 | 215 | 95 | 93/74 | 55/54.5 | 65 | 482 | 385 | 3-PASS, STAINLESS HEATEXCHANGER | 150 | 416/3/60 | NOT TO EXCEED 7,100 | -AIRFOIL FAN, Bl, 800-1,200RPM -NC45 TARGET ROOM ACOUSTICS -VFD -12" FINAL HEPA, LIFT-OUT -STEAM DISPERSION GRID, 24" NON-METTING DISTANCE OR LESS |

UNIT CONFIGURATION:

- 1 100% FRESH AIR, HORIZONTAL SUPPLY
- 2 LOUVERED AIR INTAKE
- 3 MOTORIZED INLET DAMPER; ON/OFF SPRING RETURN ACTUATOR C/W AUXILIARY SWITCHES
- 4 2" MERV-8 FILTERS
- 5 5-STAGE COOLING, SCROLL COMPRESSORS.
- 6 HOT GAS REHEAT DEHUMIDIFICATION
- 7 AIRFOIL FAN, BACKWARD INCLINED, FVD
- 8 MODULATING INDIRECT GAS FURNACE, SS HEATEXCHANGER
- 9 12" HEPA FILTER, LIFT-OUT RACK, MAGNEHELIC GAGE
- 10 GAS-FIRED HUMIDIFIER, 150LBS/HR
- 11 RTU OPEN PROTOCOL CONTROLLER / BACNET COMMUNICATION TO BAS
- 12 STRUCTURAL BASE, 3" INSULATED DOUBLE SKIN WALLS
- 13 ¼" ALUMINUM CHECKER PLATE FLOORS AND SS DRIP PANS IN COOLING AND HUMIDIFICATION SECTIONS
- 14 HINGED ACCESS DOORS
- 15 WARRANTY PARTS&LABOUR-1YEAR COMPRESSOR-5YEAR HEATEXCHANGER-15YEAR

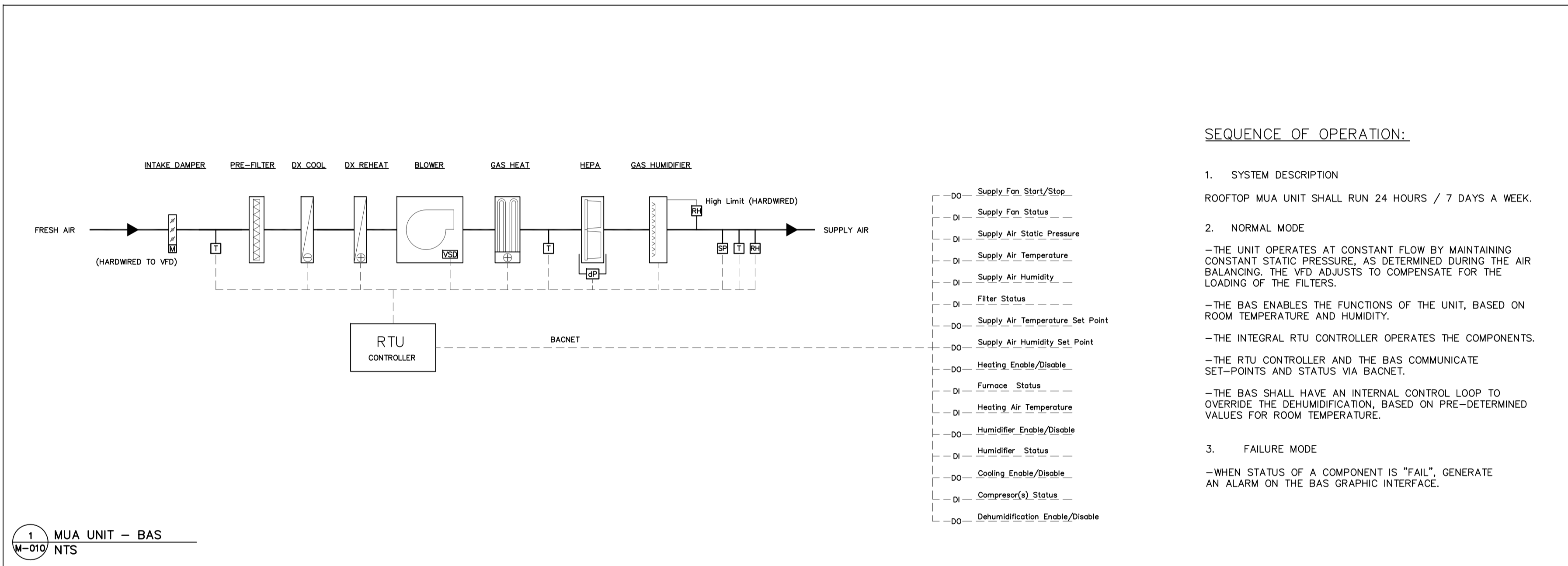
NOTES:

- 1 NEW UNIT TO UTILIZE EXISTING SUPPORT STEEL. SITE VERIFY DIMENSIONS PRIOR TO SHOP DRAWING SUBMITTAL.
- 2 NEW UNIT NOT TO EXCEED 7,100LBS OPERATING WEIGHT.
- 3 GAS-FIRED HUMIDIFIER AND DISPERSION GRID SHALL BE FACTORY INSTALLED.
- 4 THE POWER SUPPLY TO THE UNIT IS 416V/3PH. THE UNIT SHALL HAVE ONBOARD AUTO-TRANSFORMER(S) AS NECESSARY FOR THE COMPONENTS.
- 5 ALL POWER SHALL BE PRE-WIRED TO A SINGLE POINT OF CONNECTION. HUMIDIFIER SHALL HAVE SECONDARY MEANS OF ISOLATION.
- 6 ALL CONTROLS SHALL BE PRE-WIRED.

NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS. ALL PREVIOUS EDITIONS OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISIONS. ALL DRAWINGS AND SPECIFICATIONS REMAIN PROPERTY OF Zdesign+ LTD.

SEQUENCE OF OPERATION:

- SYSTEM DESCRIPTION**
ROOFTOP MUA UNIT SHALL RUN 24 HOURS / 7 DAYS A WEEK.
- NORMAL MODE**
-THE UNIT OPERATES AT CONSTANT FLOW BY MAINTAINING CONSTANT STATIC PRESSURE, AS DETERMINED DURING THE AIR BALANCING. THE VFD ADJUSTS TO COMPENSATE FOR THE LOADING OF THE FILTERS.
-THE BAS ENABLES THE FUNCTIONS OF THE UNIT, BASED ON ROOM TEMPERATURE AND HUMIDITY.
-THE INTEGRAL RTU CONTROLLER OPERATES THE COMPONENTS.
-THE RTU CONTROLLER AND THE BAS COMMUNICATE SET-POINTS AND STATUS VIA BACNET.
-THE BAS SHALL HAVE AN INTERNAL CONTROL LOOP TO OVERRIDE THE DEHUMIDIFICATION, BASED ON PRE-DETERMINED VALUES FOR ROOM TEMPERATURE.
- FAILURE MODE**
-WHEN STATUS OF A COMPONENT IS "FAIL", GENERATE AN ALARM ON THE BAS GRAPHIC INTERFACE.



- DO- Supply Fan Start/Stop
- DI- Supply Fan Status
- DI- Supply Air Static Pressure
- DI- Supply Air Temperature
- DI- Supply Air Humidity
- DI- Filter Status
- DO- Supply Air Temperature Set Point
- DO- Supply Air Humidity Set Point
- DI- Heating Enable/Disable
- DI- Furnace Status
- DI- Heating Air Temperature
- DO- Humidifier Enable/Disable
- DI- Humidifier Status
- DO- Cooling Enable/Disable
- DI- Compressor(s) Status
- DO- Dehumidification Enable/Disable

1 MUA UNIT - BAS
M-010 NTS

| DRAWING LIST | |
|--------------|--------------------------------------|
| DWG. NO. | DESCRIPTION |
| M-010 | SCHEDULES, DETAILS AND DRAWINGS LIST |
| M-020 | SPECIFICATION |
| M-101 | DEMOLITION 1/2 |
| M-102 | DEMOLITION 2/2 |
| M-301 | DUCTWORK AND GAS PIPING |
| M-401 | HUMIDIFIER FEED WATER |
| E-1 | POWER |

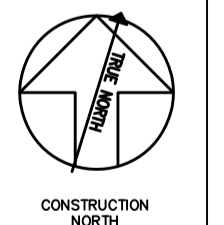


2 SITE PLAN
M-010 NTS

| DATE | ISSUED FOR | REV. |
|-------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
181 Corlaw Avenue, Suite 211
Toronto, ON, M4M 2S1
(416) 837-2736



CLIENT:
camh
CAMH
250 College Street, Toronto, M5T 1R8

PROJECT:
MUA-2 REPLACEMENT

DRAWING TITLE:
DRAWINGS LIST, SCHEDULE AND TYPICAL DETAILS

| | | | |
|---------------|----------|-----------------|--------|
| SCALE: | 1:50 | PROJECT NUMBER: | 242503 |
| DATE PLOTTED: | 24/12/20 | DRAWING NUMBER: | M-010 |
| DRAWN BY: | A.V. | CHECKED BY: | Z.D. |

GENERAL

1. GENERAL SCOPE OF WORK
 - 1.1. FURNISH ALL LABOUR, MATERIALS, EQUIPMENT, TOOLS AND SUPPORTS, AND SUPERVISION TO PROVIDE A COMPLETE INSTALLATION, AS INDICATED ON THE DRAWINGS AND IN SPECIFICATIONS.
 - 1.2. THE CONTRACTOR SHALL PERFORM THE WORK STIPULATED IN THE CONTRACT AND ANY OR ALL CONTRACT CHANGES AND CHANGE DIRECTIVES, AND SHALL FURNISH, UNLESS OTHERWISE PROVIDED IN THE CONTRACT, EVERYTHING NECESSARY FOR THE PROPER PERFORMANCE AND COMPLETION OF THE WORK.
 - 1.3. ALL WORK SHALL BE FULLY TESTED, COMMISSIONED AND IN GOOD WORKING ORDER AT TIME OF HAND-OVER TO OWNER.
 - 1.4. MAKE GOOD ANY DAMAGES TO EXISTING EQUIPMENT AND/OR SYSTEM(S). COORDINATE WORK AND WORKING HOURS WITH THE OWNER AND OTHER TRADES TO MINIMIZE DISRUPTION.
2. PERMITS AND FEES
 - 2.1. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATIONS AND APPROVALS AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.
 - 2.2. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO COMMENCING WORK.
3. CODES AND STANDARDS
 - 3.1. ALL WORK SHALL CONFORM TO THE MOST RECENT ISSUES OF: THE ONTARIO BUILDING CODE, THE ONTARIO ELECTRICAL SAFETY CODE, REGULATIONS ISSUED BY THE BUILDING AUTHORITY HAVING JURISDICTION ASHRAE, SMACNA, NFFA, TSSA, CSA, CGA
4. WARRANTY
 - 4.1. WARRANT ALL LABOUR AND MATERIALS INCLUDED IN THIS CONTRACT FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. ASSUME FULL RESPONSIBILITY FOR LAYOUT OF ALL WORK AND FOR ANY DAMAGE CAUSED TO OWNER OR OTHERS BY IMPROPER CARRYING OUT OF THE WORK.
5. DRAWINGS
 - 5.1. DRAWINGS SHOW GENERAL INTENT OF THE WORK AND PROPOSED ROUTING ONLY.
 - 5.2. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS BY FIELD MEASURE BEFORE PROCEEDING WITH THE WORK.
 - 5.3. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING POSSIBLE INTERFERENCES AND INFORMING THE ENGINEER.
 - 5.4. THE DETAILS OF CONSTRUCTION WILL BE DETERMINED IN THE PROCESS OF CONSTRUCTION, SUBJECT TO VENDOR INFORMATION AND SHOP DRAWING APPROVAL.
6. SITE CONDITIONS
 - 6.1. EXAMINE SITE CONDITIONS TO ENSURE THAT WORK CAN BE SATISFACTORILY CARRIED OUT AS SHOWN. IF SITE EXAMINATION REVEALS ANY DIFFICULTIES THAT WILL PREVENT THE WORK FROM BEING CARRIED OUT AS DESIGNED THESE MUST BE INDICATED IN THE TENDER PRICE, AND BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - 6.2. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY ADDITIONAL DIFFICULTIES, INTERFERENCES AND SITE CONSTRAINTS THAT MAY BE IDENTIFIED DURING THE CONSTRUCTION PERIOD.
 - 6.3. COORDINATE SITE ACCESS AND DELIVERIES WITH OWNER AND/OR GENERAL CONTRACTOR.
 - 6.4. COORDINATE THE DETAILS OF INSTALLATION WITH THE SITE CONDITIONS AND OTHER TRADES.
7. EXTRA WORK
 - 7.1. WHERE EXTRA WORK OF ANY KIND IS REQUIRED, OBTAIN WRITTEN INSTRUCTIONS BEFORE PROCEEDING.
 - 7.2. QUOTATION WITH BREAKDOWN OF MATERIAL, LABOUR, OVERHEAD, PROFIT, ETC. SHALL BE SUBMITTED FOR EACH CHANGE. PAYMENTS WILL BE MADE ONLY FOR AUTHORISED CHANGES.
 - 7.3. EXTRAS WILL NOT BE ALLOWED FOR FAILURE TO PROPERLY EXAMINE THE EXISTING CONDITIONS.
8. SHOP DRAWINGS
 - 8.1. SUBMIT 4 COPIES OF SHOP DRAWINGS, UNLESS OTHERWISE INDICATED, FOR ENGINEER'S REVIEW.
 - 8.2. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR ENGINEER'S REVIEW COVERING ALL RELEVANT DETAIL DIMENSIONS AND PERFORMANCE.
 - 8.3. SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE CONTRACTOR AND THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO CONSULTANT / ENGINEER FOR REVIEW.
9. AS BUILT DRAWINGS
 - 9.1. MAINTAIN A RECORD OF ALL REVISIONS. PREPARE RECORD DRAWINGS IN A NEAT MANNER SHOWING ALL DEVIATIONS IN WORK. ON COMPLETION OF WORK, SUBMIT TO THE ENGINEER ONE COPY OF AS BUILT DRAWINGS.
10. OPERATION AND MAINTENANCE MANUALS
 - 10.1. SUBMIT A HARD COPY OF O&M MANUALS TO ENGINEER FOR REVIEW. MANUALS SHALL INCLUDE SHOP DRAWINGS OF ALL NEW EQUIPMENT, TEST AND BALANCING REPORTS, COMMISSIONING REPORTS, WARRANTIES, AND OPERATION, MAINTENANCE PROCEDURES AND AS BUILT DRAWINGS.
 - 10.2. SUBMIT 3 COPIES OF THE O&M MANUALS ON FLASH DRIVE IN PDF FORMAT.

SCOPE OF WORK & PROJECT DESCRIPTION

1. ALL WORK AS INDICATED IN DRAWINGS AND SPECIFICATIONS.
2. DISCONNECT AND REMOVE FROM SITE ROOFTOP UNIT C/W DUCTWORK, GAS, WATER AND CONTROLS AS INDICATED.
3. SUPPLY AND INSTALL NEW ROOFTOP UNIT, CRANE AND RIGGING INCLUDED.
4. RECONNECT DUCTWORK AND PIPING CONNECTIONS AS INDICATED.
5. BAS INTEGRATION OF CONTROLS FOR NEW UNIT.
7. STARTUP, COMMISSIONING AND BALANCING OF ALL AFFECTED EQUIPMENT AND SYSTEMS.
8. TRAINING FOR FACILITY PERSONNEL.

EXECUTION

1. MATERIALS AND WORKMANSHIP
 - 1.1. USE ONLY NEW CSA AND ULC CERTIFIED EQUIPMENT AND MATERIALS UNLESS OTHERWISE INDICATED.
 - 1.2. QUALITY WORKMANSHIP WILL BE ACCEPTED WITH RESPECT TO STANDARD PRACTICES, SAFETY, ACCESSIBILITY, DURABILITY AND NEATNESS OF INSTALLATION WORK.
2. MATERIALS AND WORK WHICH FAILS TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED BY THE ENGINEER WHENEVER FOUND AT ANY TIME PRIOR TO FINAL ACCEPTANCE AND REGARDLESS OF PREVIOUS INSPECTIONS. WHEN REJECTED, DEFECTIVE MATERIALS OR WORK SHALL BE PROMPTLY REMOVED, REPLACED OR REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO EXPENSE TO THE OWNER.
3. CLEANING
 - 3.1. CLEAN PREMISES DAILY AT THE END OF EACH WORK DAY.
 - 3.2. DO NOT ACCUMULATE EQUIPMENT, TOOLS, DEBRIS AND WASTE MATERIALS ON SITE. REMOVE FROM SITE DAILY.
 - 3.3. COORDINATE REMOVE OF ALL DEBRIS AND RUBBISH FROM SPACE WITH LANDLORD TO MINIMIZE DISRUPTION TO FACILITY.
4. SCHEDULING
 - 4.1. COORDINATE WITH FACILITIES AND SECURITY ALL WORK. OBTAIN ACTIVITY PERMITS FOR ALL WORK.
 - 4.2. COORDINATE WITH FACILITIES ANY WORK THAT REQUIRES CONNECTION TO EXISTING SERVICES. EXECUTE SUCH WORK OUT OF THE REGULAR BUSINESS HOURS AS NEEDED. NO WORK SHALL CAUSE INTERRUPTION OF SERVICE.
5. EXISTING EQUIPMENT AND SYSTEMS
 - 5.1. DISCONNECT OR RELOCATE EXISTING EQUIPMENT OR SERVICES WHERE SHOWN OR AS REQUIRED TO PERMIT NEW WORK TO BE INSTALLED WITHOUT INTERFERENCES. ENSURE THAT REQUIRED SERVICES ARE MAINTAINED.
 - 5.2. COORDINATE WITH THE OWNER BEFORE INTERRUPTING ANY ESSENTIAL SERVICES.
 - 5.3. ALL NEW AND EXISTING EQUIPMENT SHALL BE ACCESSIBLE FOR MAINTENANCE.
6. COORDINATION
 - 6.1. CO-ORDINATE ALL SITE DIMENSIONS WITH THE EQUIPMENT SHOP DRAWINGS.
 - 6.2. ADJUST ROUTING OF NEW SERVICES TO ACCOMMODATE EXISTING SERVICES PROVIDED THAT THE INTENT OF THE DRAWINGS IS MET AND THE ORIGINAL STANDARDS ARE MAINTAINED.
 - 6.3. PROVIDE DRAWINGS OF PROPOSED REVISIONS TO ENGINEER FOR APPROVAL BEFORE BEGINNING ANY WORK. INCORPORATE ALL CHANGES IN AS BUILT DRAWINGS.
 - 6.4. COORDINATE ALL ROUTING CHANGES WITH OTHER TRADES THAT MAY BE AFFECTED.
 - 6.5. ENGINEER TO BE ADVISED PRIOR TO CHANGES WHERE CHANGES COULD BE SIGNIFICANT.
7. DEMOLITION
 - 7.1. REMOVE FROM SITE AND DISPOSE OF ALL EQUIPMENT TO BE DEMOLISHED.
 - 7.2. REMOVE ALL ABANDONED PIPES, HANGERS, INSERTS, CONDUITS, DUCTS AND SERVICES.
 - 7.3. PATCH, FIRESTOP AND SEAL ALL AFFECTED WALLS, FLOORS AND ROOFS.
8. PENETRATIONS
 - 8.1. SCAN AND OBTAIN WRITTEN APPROVAL FROM BUILDING OWNER PRIOR TO PENETRATING ANY STRUCTURAL MEMBERS OR FLOOR SLABS. ALL DAMAGE TO THE STRUCTURE OF THE BUILDING SHALL BE REPAIRED AT NO EXTRA COST TO THE OWNER.
9. OPEN FLAMES AND WELDING
 - 9.1. NO OPEN FLAMES OR WELDING IS PERMITTED WITHIN THE BUILDING WITHOUT WRITTEN PERMISSION BY THE OWNER AND THE ENGINEER.
 - 9.2. THE HOT WORK PERMIT MUST BE VISIBLE AT ALL TIMES.
 - 9.3. WELDING SHALL BE UNDERTAKEN BY A COMPANY CERTIFIED BY CANADIAN WELDING BUREAU UNDER REQUIREMENTS OF DIVISION 1 OR DIVISION 2.1 OR W47.1.
 - 9.4. ADEQUATE NUMBER OF FIRE EXTINGUISHERS MUST BE PROVIDED DURING THE OPEN FLAME PROCESS.
10. CUTTING, PATCHING AND PAINTING REQUIREMENTS
 - 10.1. PROVIDE CUTTING, PATCHING AND PAINTING FOR ALL OPENINGS NECESSARY TO EXECUTE THE SCOPE OF WORK.
 - 10.2. USE QUALIFIED TRADES ONLY.
 - 10.3. RESTORE THE FINISHES TO MATCH THE EXISTING.
 - 10.4. PIPING AND VENTS THROUGH WALL AND ROOF SHALL BE BY THE MECHANICAL CONTRACTOR, INCLUDING ALL PATCHING.
 - 10.5. PIPING PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS, OR SMOKE TIGHT WALLS, SHALL BE IN METAL SLEEVE AND FIRE STOPPED UNLESS OTHERWISE SPECIFIED ON ARCHITECTURAL DRAWINGS. GLASS FIBRE FIRE RETARDANT INSULATION SHALL BE PACKED BETWEEN THE PIPE AND THE SLEEVE.
 - 10.6. FIRESTOP CAULKING SHALL BE APPLIED AROUND THE SLEEVE AND BETWEEN THE PIPE AND THE SLEEVE. FIRESTOP CAULKING SHALL BE "JOHNS MANVILLE" FIRETEMP CAULK OR EQUIVALENT.
 - 10.7. APPLY THE FIRESTOP CAULKING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
11. DIELECTRIC ISOLATION
 - 11.1. PROVIDE ISOLATION WHEN USING DISSIMILAR PIPING MATERIALS, TO PREVENT GALVANIC ACTION.
12. MECHANICAL WIRING
 - 12.1. PROVIDE POWER SUPPLY FOR ALL EQUIPMENT SUPPLIED UNDER THIS CONTRACT.
 - 12.2. THE WORK SHALL INCLUDE:
 - 12.2.1. DISCONNECT POWER FROM EXISTING EQUIPMENT TO BE REMOVED.
 - 12.2.2. ALL NECESSARY BREAKERS, FEEDERS, MAGNETIC STARTERS AND DISCONNECT SWITCHES FROM EXISTING POWER DISTRIBUTION PANEL TO NEW EQUIPMENT.
 - 12.2.2.1. PROVIDE NEW BREAKERS IN THE MAIN POWER PANEL, SIZED FOR THE LOAD OF THE NEW EQUIPMENT.
 - 12.2.2.2. THE BREAKERS SHALL BE INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT DOWN THE UNITS WHEN A SMOKE DETECTOR IS ACTIVATED. COORDINATE WITH TYCO ON SITE.
 - 12.2.2.3. TERMINATION, START-UP AND CHECK-UP OF ROTATION.
 - 12.2.4. LOW VOLTAGE CONTROL WIRING FOR SENSORS, INTERLOCKS AND SAFETY DEVICES HARDWIRED TO THE EQUIPMENT.
13. PRESSURE TESTING
 - 13.1. ALL PIPING SYSTEMS SHALL BE PRESSURE TESTED TO 1.5 TIMES SYSTEM OPERATING PRESSURE FOR A DURATION OF 4 HRS UNLESS OTHERWISE INDICATED.
14. START-UP AND COMMISSIONING
 - 14.1. RETAIN THE EQUIPMENT VENDORS TO START-UP THE EQUIPMENT WITH FACTORY TRAINED TECHNICIANS.
 - 14.2. UPON START-UP THE PROPER OPERATION OF ALL COMPONENTS AND ALL SAFETIES SHALL BE VERIFIED.
 - 14.3. PROVIDE START-UP REPORT IDENTIFYING THE ITEMS THAT HAVE BEEN COMMISSIONED AND THEIR STATUS.
15. LABELING
 - 15.1. LABEL ALL EQUIPMENT AND CONTROLS COMPONENTS. MATCH EXISTING LABELING SYSTEM.
 - 15.2. IDENTIFY ALL SERVICES; PROVIDE LABEL FOR THE SERVICE AND ARROWS FOR THE FLOW DIRECTION AT EVERY 3 METERS.

HVAC

1. DUCTWORK
 - 1.1. FABRICATE AND INSTALL ALL DUCTWORK AS PER SMACNA-"HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE, 1995".
 - 1.1.1. DUCTWORK TO BE CONSTRUCTED TO COMPLY WITH THE REQUIREMENTS FOR 6" PRESSURE CLASS, SEAL CLASS "A".
 - 1.1.2. FABRICATE ALL DUCTWORK FROM GALVANIZED STEEL UNLESS NOTED OTHERWISE.
 2. SUPPORTS: SUPPORT DUCTWORK AT EQUAL INTERVALS AS PER SMACNA STANDARDS
 - 2.1. RECTANGULAR DUCTWORK: 1-5/8" UNISTRUT TRAPEZE, TREADED ROD HANGERS C/W LEVELING AND LOCKING NUT.
3. DUCT INSULATION: ALL EXTERIOR DUCTWORK SHALL BE INSULATED.
 - 3.1. R-8 DUCTWRAP: 3" OWENS CORNING TYPE 100
 - 3.2. SELF-ADHESIVE ALUMINUM JACKET: ZERO PERMEABILITY, -30/+300F RANGE, ULC723 FIRE/SMOKE COMPLIANT - VENTURECLAD 1577CW.
4. TESTING AND BALANCING
 - 4.1. CONDUCT AN AIR AUDIT PRIOR DEMOLITION. PROVIDE A REPORT INDICATING THE EXISTING UNIT AIRFLOW AND DUCT STATIC PRESSURE.
 - 4.2. PROVIDE AIR BALANCING FOR THE COMPLETED HVAC SYSTEM WITH THE CONTROLS FULLY FUNCTIONAL.
 - 4.3. THE BALANCING CONTRACTOR SHALL BE NEBB OR AABC CERTIFIED.
 - 4.4. SUBMIT BALANCING REPORTS INDICATING THE PARAMETERS OF THE SYSTEMS FOR "DESIGN" AND "AS-TESTED".
 - 4.5. THE REPORT SHALL INCLUDE SYSTEMS DRAWINGS INDICATING THE POINTS OF MEASUREMENT.
 - 4.6. NOTIFY ENGINEER OF ANY DISCREPANCIES GREATER THAN ±10% OF THE DESIGN VALUES PRIOR THE SUBMISSION OF REPORT.
5. CONTROLS
 - 5.1. RETAIN THE SERVICES OF JCI, THE CURRENT BAS SERVICE PROVIDER, TO FURNISH CONTROLS AS INDICATED ON THE DRAWINGS AND IN THE CONTROL SEQUENCE OF OPERATION.
 - 5.2. NEW CONTROLS TO MATCH EXISTING TO ENSURE THE INTEGRITY OF THE OVERALL BAS SYSTEM. THE FRONT-END GRAPHIC INTERFACE AND ALARMS LIST SHALL BE UPDATED FOR THE NEW EQUIPMENT.
 - 5.3. ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT.
 - 5.4. PROVIDE POINTS VERIFICATION REPORT UPON COMPLETION.

PIPING, PLUMBING AND ACCESSORIES

1. GENERAL
 - 1.1. MATERIAL SHALL BE AS INDICATED ON THE DRAWINGS. IF MATERIALS HAVE NOT BEEN INDICATED ON DRAWINGS, THEN INSTALLATION SHALL ADHERE TO THIS SECTION.
 - 1.2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING EXACT LOCATIONS OF EXISTING PIPING. APPROXIMATE DISTANCES ARE INDICATED ON DRAWINGS AS REQUIRED.
 - 1.3. PROVIDE ALL MATERIALS AS REQUIRED INCLUDING PIPING, VALVES, FITTINGS, TRAPS, HANGERS, SUPPORTS AND THERMAL INSULATION FOR COMPLETE SYSTEM INSTALLATION AND OPERATION.
 - 1.4. ALLOW FOR FULL DRAINING OF THE SYSTEMS: PROVIDE 3/4" DRAINING VALVES WITH HOSE CONNECTOR AND CAP AT ALL LOW POINT, PROVIDE 1/2" VENT VALVES AT ALL HIGH POINTS.
 - 1.5. ALL PIPED SERVICES SHALL HAVE ISOLATION VALVES FOR EVERY BRANCH AND EVERY PIECE OF EQUIPMENT. LOCATE VALVES IMMEDIATELY AFTER TAKE-OFF OR WITHIN 3FT. VALVES SHALL BE EASILY ACCESSIBLE. NEW SERVICES SHALL NOT OBSTRUCT ACCESS TO EXISTING VALVES.
2. SUPPORTS: SEE PIPE HANGER SPACING DETAIL ON DWG. M-1.
 - 2.1. HORIZONTAL PIPING UP TO 1-1/2": ADJUSTABLE SWIVEL RING HANGERS.
 - 2.2. HORIZONTAL PIPING 2" AND UP: GLEVIS HANGERS.
 - 2.3. ALL VERTICAL PIPING: RISER CLAMPS.
 - 2.4. USE HANGERS AND CLAMPS OF SAME MATERIAL AS PIPE OR INSULATING INSERTS BETWEEN HANGER AND PIPE, OR EPOXY COATED HANGERS AND CLAMPS
 - 2.5. INSULATED PIPE: PROTECTION SADDLES AT EACH HANGER. SOLID BLOCK C/W VAPOR BARRIER AT EACH HANGER FOR PIPE OVER 11/2".
3. GAS PIPING
 - 3.1. PIPE
 - 3.1.1. STEEL PIPE: TO ASTM A53, GRADE B, SCHEDULE 40, SEAMLESS AS FOLLOWS:
 - 3.1.2. NPS 1/2 TO 2, SCREWED.
 - 3.1.3. NPS 2 1/2 AND OVER, PLAIN END.
 - 3.1.4. COPPER TUBE: TO ASTM B75M.
 - 3.2. JOINING MATERIAL
 - 3.2.1. SCREWED FITTINGS: PULVERIZED LEAD PASTE.
 - 3.2.2. WELDED FITTINGS: TO CSA W47.1.
 - 3.2.3. FLANGE GASKETS: NONMETALLIC FLAT.
 - 3.2.4. SOLDERED: TO ASTM B32, TIN ANTIMONY 5/5.
 - 3.3. FITTINGS
 - 3.3.1. STEEL PIPE FITTINGS: SCREWED, FLANGED OR WELDED:
 - 3.3.2. MALLEABLE IRON: SCREWED, BANDED, CLASS 150.
 - 3.3.3. STEEL PIPE FLANGES AND FLANGED FITTINGS: TO ANSI/ASME B16.5.
 - 3.3.4. WELDING: BUTT-WELDING FITTINGS.
 - 3.3.5. UNIONS: MALLEABLE IRON, BRASS TO IRON, GROUND SEAT, TO ASTM A47M.
 - 3.3.6. CAST COPPER FITTINGS: TO ANSI B16.18.
 - 3.3.7. WROUGHT COPPER FITTINGS: TO ANSI/ASME B16.22.
- 3.4. VALVES: PROVINCIAL CODE APPROVED, LUBRICATED PLUG TYPE OR BALL.
- 3.5. INSTALLATION
 - 3.5.1. INSTALL IN ACCORDANCE WITH CAN/CGA B149.1.
 - 3.5.2. CONNECT TO EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - 3.5.3. SLOPE PIPING DOWN IN DIRECTION OF FLOW TO LOW POINTS.
 - 3.5.4. INSTALL DRIP POINTS AT ALL LOW POINTS AND AT EACH CONNECTION TO EQUIPMENT.
 - 3.5.5. USE ECCENTRIC REDUCERS AT PIPE SIZE CHANGE INSTALLED TO PROVIDE POSITIVE DRAINAGE.
 - 3.5.6. REAM PIPES, CLEAN SCALE AND DIRT, INSIDE AND OUT.
 - 3.5.7. INSTALL PIPING TO MINIMIZE PIPE DISMANTLING FOR EQUIPMENT REMOVAL.
 - 3.5.8. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL UNLESS OTHERWISE APPROVED BY ENGINEER.
- 3.6. TESTING
 - 3.6.1. TEST SYSTEM IN ACCORDANCE WITH CAN/CGA B149.1 AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
 - 3.6.2. PURGE AFTER PRESSURE TEST IN ACCORDANCE WITH CAN/CGA B149.1

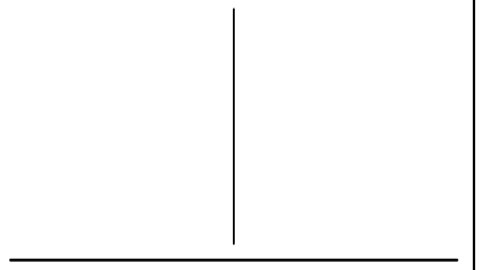
DOMESTIC WATER PIPING

1. PIPE
 - 1.1. ABOVE GROUND: DOMESTIC COLD, HOT AND HOT WATER RE-CIRCULATION AS WELL AS NON-POTABLE WATER WITHIN BUILDING. COPPER TUBE, HARD DRAWN, TYPE L TO ASTM B88M.
 - 1.2. BURIED: COPPER TUBE, SOFT ANNEALED, SEAMLESS TYPE K TO ASTM B88.
2. FITTINGS
 - 2.1. CAST COPPER, SOLDER TYPE TO ANSI B16.18.
 - 2.2. WROUGHT COPPER AND COPPER ALLOY, SOLDER TYPE TO ANSI/ASME B16.22.
3. JOINTS
 - 3.1. NPS 2 AND SMALLER, ABOVE GROUND:
 - SOLDERED WITH LEAD-FREE SOLDER OR TIN-ANTIMONY 95/5 SOLDER TO ASTM B-32
 - THREADED TO CONNECTIONS TO EQUIPMENT
 - 3.2. PIPE JOINTS FOR SIZES NPS 2 AND SMALLER, BELOW GROUND:
 - SILVER ALLOY BRAZING TO AWS CLASSIFICATION BCUP-5
 - 3.3. PIPE JOINTS FOR SIZES NPS 2 1/2 AND LARGER, ABOVE GROUND:
 - SILVER ALLOY BRAZING TO AWS CLASSIFICATION BCUP-5
 - FLANGED CONNECTIONS TO EQUIPMENT
4. VALVES
 - 4.1. GATE VALVES - NPS 2 AND UNDER, NOT PERMITTED.
 - 4.2. GATE VALVES NPS 2 AND OVER - FLANGED, CLASS 150, TO ASTM A216 GRADE WCB, CAST STEEL BODY WITH RAISED FACED FLANGE, FLEXIBLE TYPE 416 STAINLESS STEEL DISC AND HARD FACED SEAT RINGS, RISING STEM, OS & Y, BOLTED BONNET.
 - 4.3. GLOBE VALVES NPS 2 AND UNDER - SOLDERED, CLASS 150, TO MSS SP-80, BRONZE BODY, RENEWABLE COMPOSITION PTFE DISC, UNION BONNET, LOCK SHIELD HANDLES AS INDICATED.
 - 4.4. GLOBE VALVES NPS 2 AND UNDER - SCREWED, CLASS 150, MSS SP-80, BRONZE BODY, RENEWABLE COMPOSITION PTFE DISC, UNION BONNET, LOCK SHIELD HANDLES AS INDICATED.
 - 4.5. BALL VALVES NPS 2 AND SMALLER - SOLDERED OR SCREWED, 600 WOG, TWO PIECE BRONZE BODY, WITH 316 STAINLESS STEEL SOLID BALL AND STEM TO ASME A276, PTFE SEAT RINGS, FULL PORT.
 - 4.6. SWING CHECK VALVES NPS 2 AND UNDER - SOLDERED OR SCREWED, CLASS 150, TO MSS SP-80, BRONZE BODY, BRONZE SWING DISC, REGRINDABLE SEAT, SCREW-IN CAP.
 - 4.7. SWING CHECKS NPS 2 AND OVER - FLANGED, CLASS 150 (125 PSI), TO ASTM A216 GR. WCB, CAST STEEL BODY WITH RAISED FACED FLANGE, RENEWABLE STAINLESS STEEL SEAT RINGS, STAINLESS STEEL DISC, BOLTED CAP.
 - 4.8. DRAIN VALVES - SOLDERED OR SCREWED, 600 WOG, TWO PIECE BRONZE BODY BALL VALVE, WITH FULL PORT, 316 STAINLESS STEEL SOLID BALL AND STEM TO ASME A276, PTFE SEAT RINGS, HOSE END MALE THREAD AND CAP AND CHAIN,
5. FLUSHING
 - 5.1. FLUSH BRANCH AND MAIN PIPING THROUGH AVAILABLE OUTLETS WITH SUFFICIENT FLOW TO PRODUCE VELOCITY OF 1.5 M/S (4.9 FPS), WITHIN A PIPE FOR 10 MINUTES, OR UNTIL FOREIGN MATERIALS HAVE BEEN REMOVED AND FLUSHED WATER IS CLEAR. REMOVE FAUCETS SCREENS BEFORE FLUSHING; REINSTALL AFTER COMPLETION OF DISINFECTION.
 - 5.2.

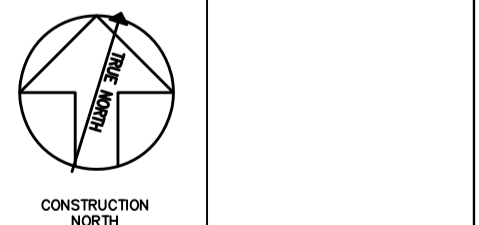
NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE UNDERTAKEN WITHOUT PRIOR WRITTEN APPROVAL. CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS. ALL REVISIONS TO THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISIONS. ALL DRAWINGS AND SPECIFICATIONS REMAIN PROPERTY OF Zdesign+ LTD.


| DATE | ISSUED FOR | REV. |
|-------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |
| (yy/mm/yy) | | |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.



Zdesign+ Ltd.
 181 Corlow Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2736

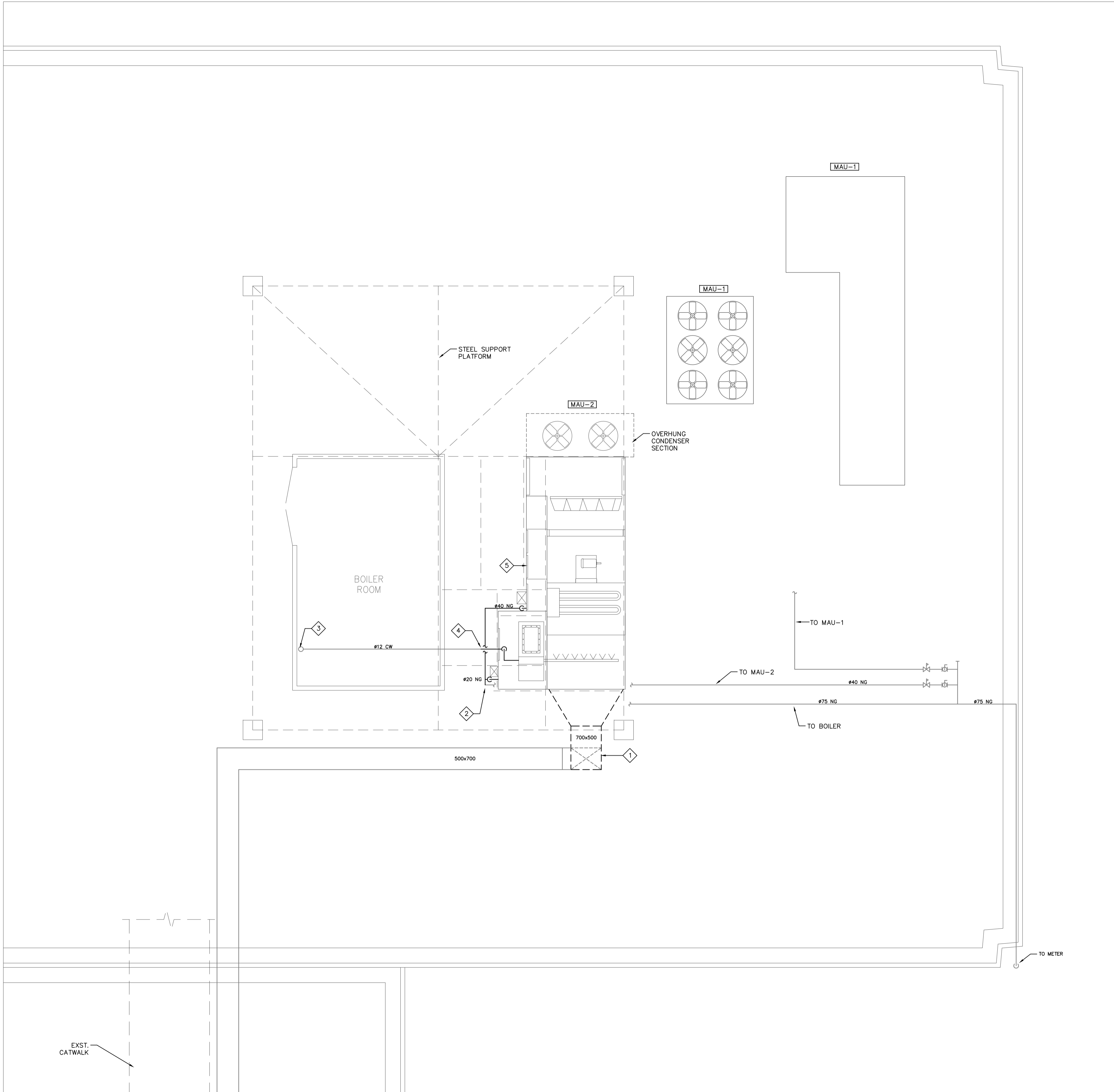


CLIENT:

 CAMH
 250 College Street, Toronto, M5T 1R8

PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 SPECIFICATIONS

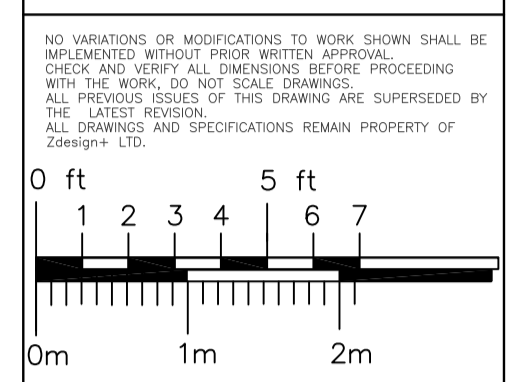
| | | | |
|---------------|----------|-----------------|--------|
| SCALE: | 1:50 | PROJECT NUMBER: | 242503 |
| DATE PLOTTED: | 24/12/20 | DRAWING NUMBER: | M-020 |
| DRAWN BY: | A.V. | CHECKED BY: | Z.D. |



- LEGEND:**
- #20 CW EXISTING PIPING TO REMAIN
 - #75 NG EXISTING PIPING TO DEMOLISH
 - 500x300 EXISTING DUCTWORK
 - 500x300 DUCTWORK TO DEMOLISH

- GENERAL:**
- 1 DISCONNECT UNIT FROM DUCTWORK, GAS AND COLD WATER. DECOMMISSION THE UNIT, REMOVE REFRIGERANT AND OIL FROM ALL DX CIRCUITS AND TAG AS SAFE FOR DISPOSAL.
 - 2 REMOVE UNIT FROM SITE AND DISPOSE OF UNIT IN AN APPROVED MANNER. PROVIDE CRANE AND RIGGING. VERIFY ON SITE STREET ACCESS AND HOISTING REQUIREMENTS.
 - 3 EXISTING SUPPORT STEEL STRUCTURE TO BE REUSED AS-IS. PROVIDE PROTECTION AT ALL TIMES. ALLOW FOR REMOVAL OF UNIT IN PIECES.
 - 4 NOT ALL EQUIPMENT AND SERVICES ON THE ROOF ARE SHOWN. WORK SHALL NOT INTERRUPT THE OPERATION OF ANY OTHER SYSTEM THAN MAU-2.

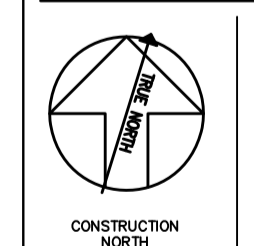
- NOTES:**
- 1 REMOVE DUCT TO THE FIRST ELBOW DOWN. CAP AND SEAL REMAINING.
 - 2 DISCONNECT GAS FROM FURNACE AND HUMIDIFIER AND CAP.
 - 3 DISCONNECT PIPING AT THE HEADER ABOVE AND CAP AT THE ISOLATION VALVE. THE REMAINING CW PIPING IS TO BE REUSED.
 - 4 DEMOLISH HUMIDIFIER FEED WATER PIPING TO ALLOW FOR UNIT'S DEMOLITION. PULL BACK HEAT TRACER CABLE FROM MAU2 TO REUSE.
 - 5 DISCONNECT THE CONTROL WIRING FROM THE UNIT AND PULL BACK AS NECESSARY TO ALLOW FOR THE DEMOLITION.



| DATE | ISSUED FOR | REV. |
|-------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |
| (yy/mm/yy) | | |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
 181 Corlaw Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2736



CLIENT:
camh
 CAMH
 250 College Street, Toronto, M5T 1R8

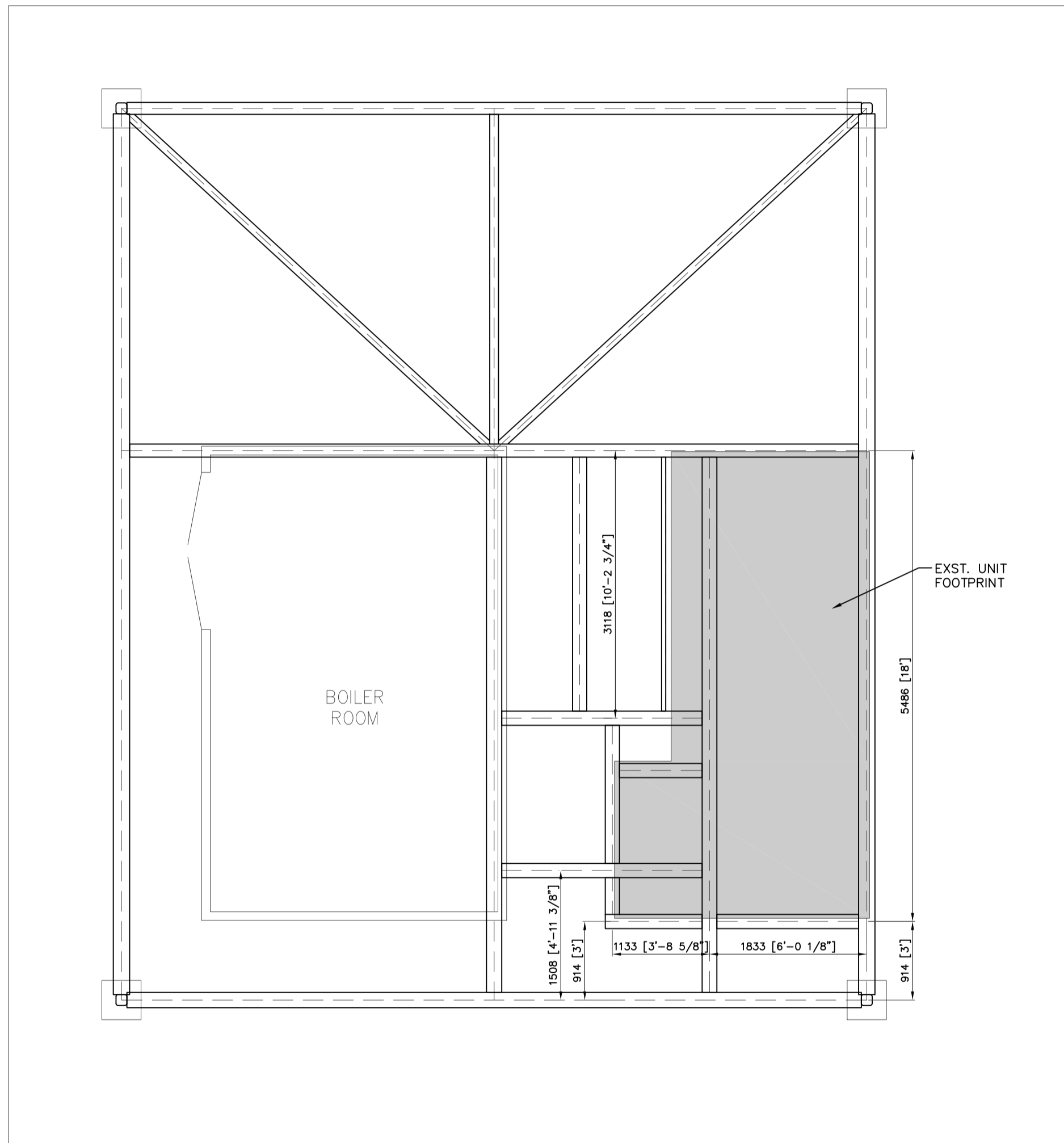
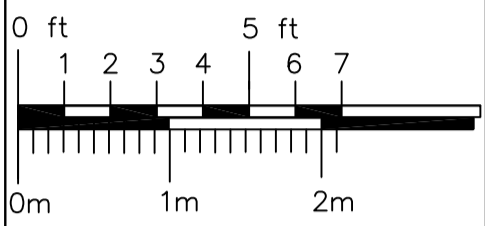
PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 DEMOLITION 1/2

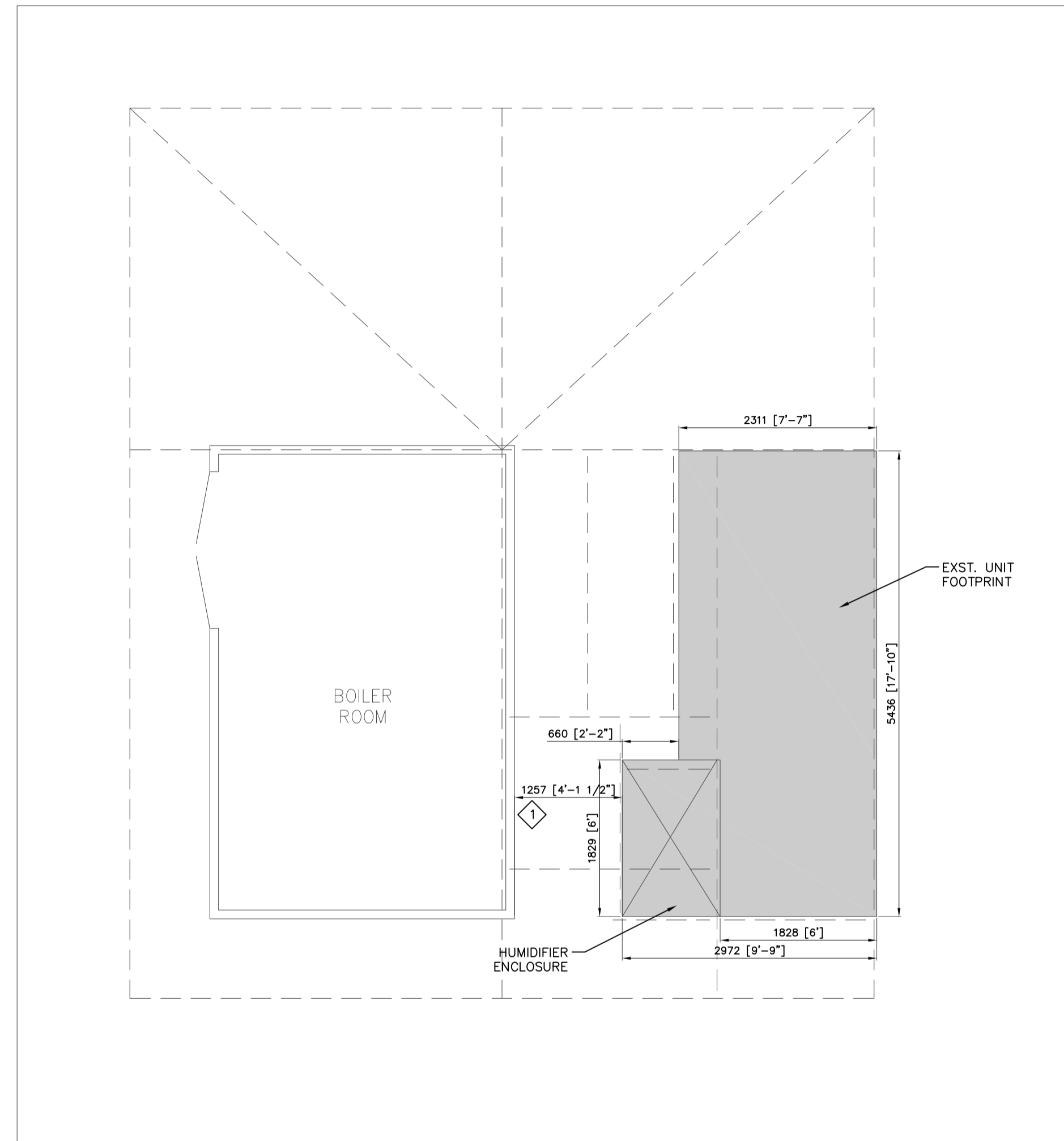
| | | | |
|---------------|----------|-----------------|--------|
| SCALE: | AS NOTED | PROJECT NUMBER: | 242503 |
| DATE PLOTTED: | 24/12/20 | DRAWING NUMBER: | M-101 |
| DRAWN BY: | A.V. | CHECKED BY: | Z.D. |

1 LAB ROOF - PART PLAN
 M-101 1:50

NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL.
 CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.
 ALL PREVIOUS EDITIONS OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISIONS.
 ALL DRAWINGS AND SPECIFICATIONS REMAIN PROPERTY OF Zdesign+ LTD.



1 STEEL SUPPORT PLATFORM
 M-102 1:50



2 EXISTING UNIT DIMENSIONS
 M-102 1:50

GENERAL:

- 1 DIMENSIONS ARE SHOWN FOR REFERENCE ONLY, SITE VERIFY.
- 2 EXISTING SUPPORT STEEL STRUCTURE TO BE REUSED AS-IS.

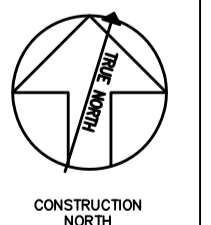
NOTES:

- 1 MAINTAIN EXISTING CLEARANCE BETWEEN BOILER ROOM AND NEW UNIT. XXX

| DATE | ISSUED FOR | REV. |
|-------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |
| (yy/mm/yy) | | |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
 181 Carlaw Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2236

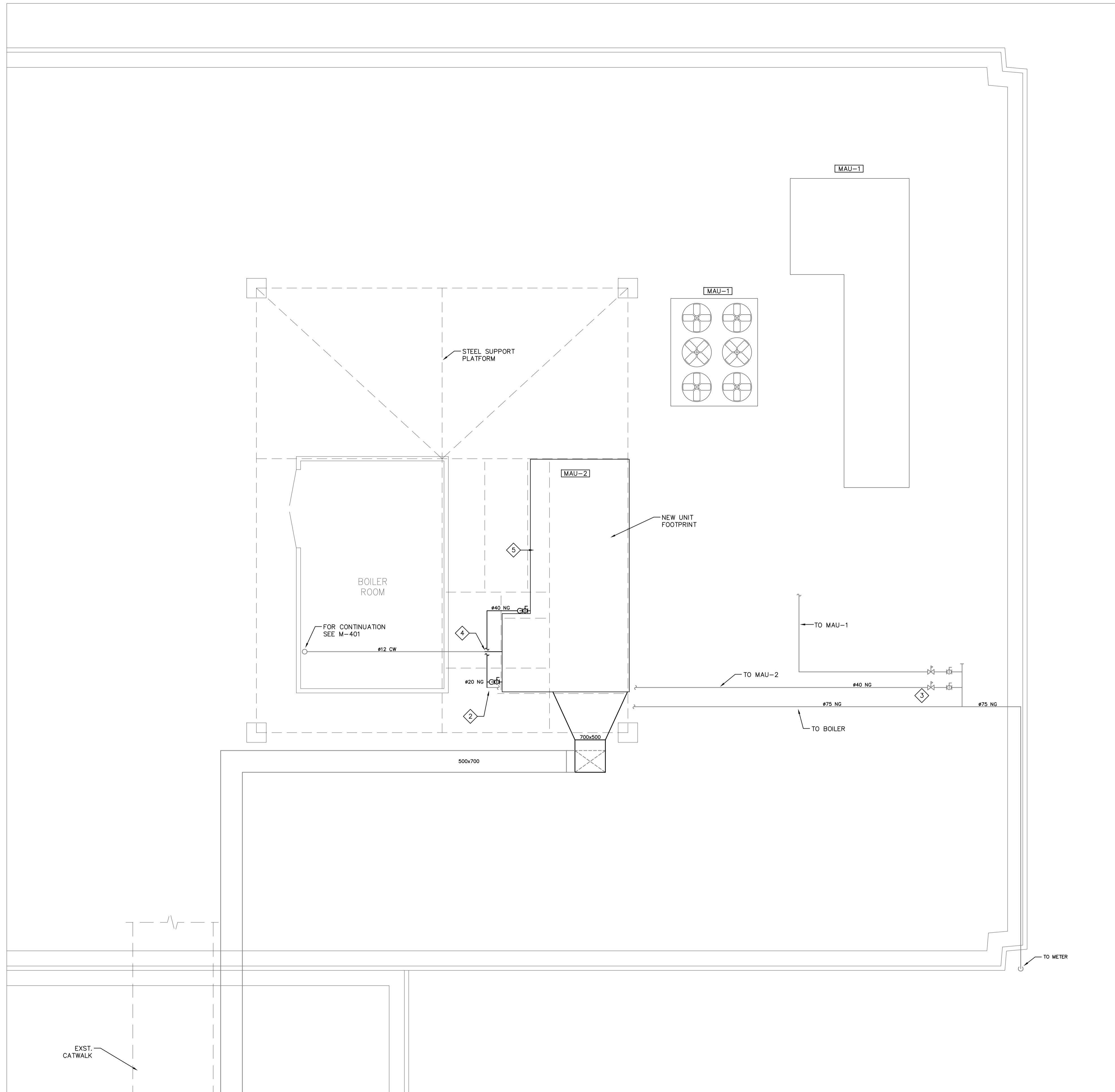


CLIENT:
 CAMH
 250 College Street, Toronto, M5T 1R8

PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 DEMOLITION 2/2

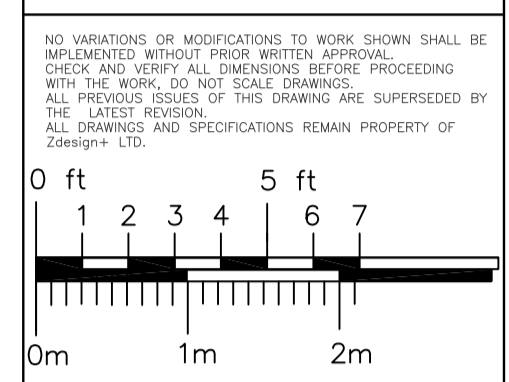
SCALE: AS NOTED PROJECT NUMBER: 242503
 DATE PLOTTED: 24/12/20 DRAWING NUMBER:
 DRAWN BY: A.V. CHECKED BY: Z.D. M-102



- LEGEND:**
- #20 CW EXISTING PIPING
 - #75 NG NEW PIPING
 - 500x300 EXISTING DUCTWORK
 - 500x300 NEW DUCTWORK

- GENERAL:**
- 1 INSTALL NEW UNIT ON THE EXISTING SUPPORT STEEL PLATFORM. PROVIDE CRANE AND RIGGING. VERIFY ON SITE STREET ACCESS AND HOISTING REQUIREMENTS.

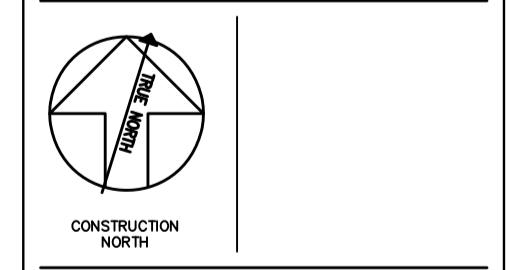
- NOTES:**
- 1 RECONNECT DUCTWORK, RESTORE INSULATION TO MATCH EXISTING.
 - 2 RECONNECT GAS PIPING TO FURNACE AND HUMIDIFIER C/W DRIP POKETS AND ISOLATION VALVES. VERIFY THE POINTS OF CONNECTION AND SIZING AS PER THE MANUFACTURERS REQUIREMENTS.
 - 3 CHECK/ADJUST REGULATOR TO SUPPLY GAS PRESSURE AS PER THE MANUFACTURER'S REQUIREMENTS.
 - 4 RECONNECT FEED WATER TO HUMIDIFIER AS PER MANUFACTURER'S REQUIREMENTS. RESTORE INSULATION TO MATCH EXISTING. RESTORE HEAT TRACING AND MODIFY TO SUIT NEW PIPING.
 - 5 RECONNECT THE CONTROL WIRING TO THE UNIT. MODIFY TO SUIT THE NEW EQUIPMENT.



| DATE | ISSUED FOR | REV. |
|-------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |
| (yy/mm/yy) | | |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
 181 Corlaw Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2236



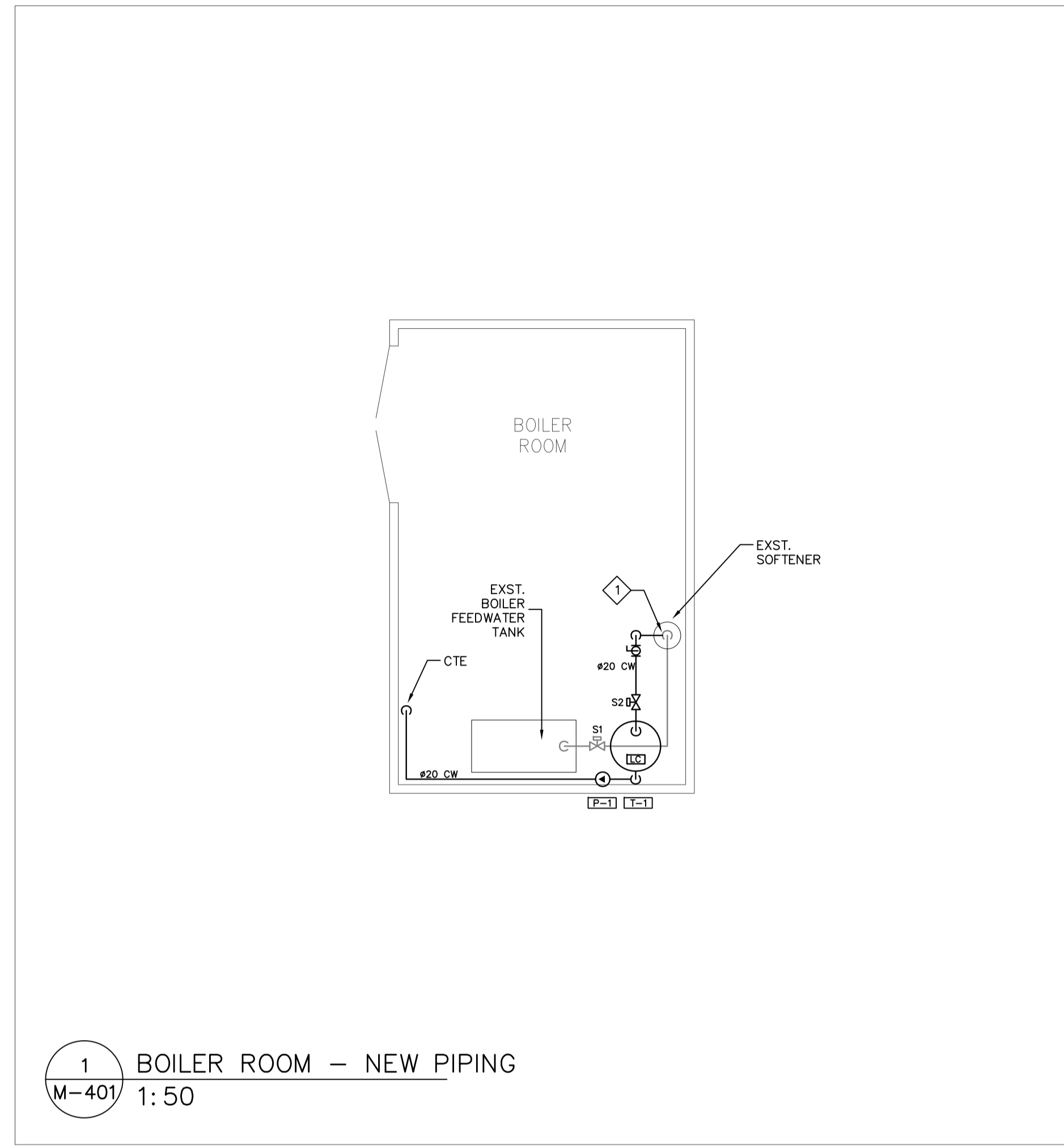
CLIENT:
camh
 CAMH
 250 College Street, Toronto, M5T 1R8

PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 DUCTWORK AND GAS PIPING

| | | | |
|---------------|----------|-----------------|--------|
| SCALE: | AS NOTED | PROJECT NUMBER: | 242503 |
| DATE PLOTTED: | 24/12/20 | DRAWING NUMBER: | M-301 |
| DRAWN BY: | A.V. | CHECKED BY: | Z.D. |

1 LAB ROOF -- PART PLAN
 M-101 1:50

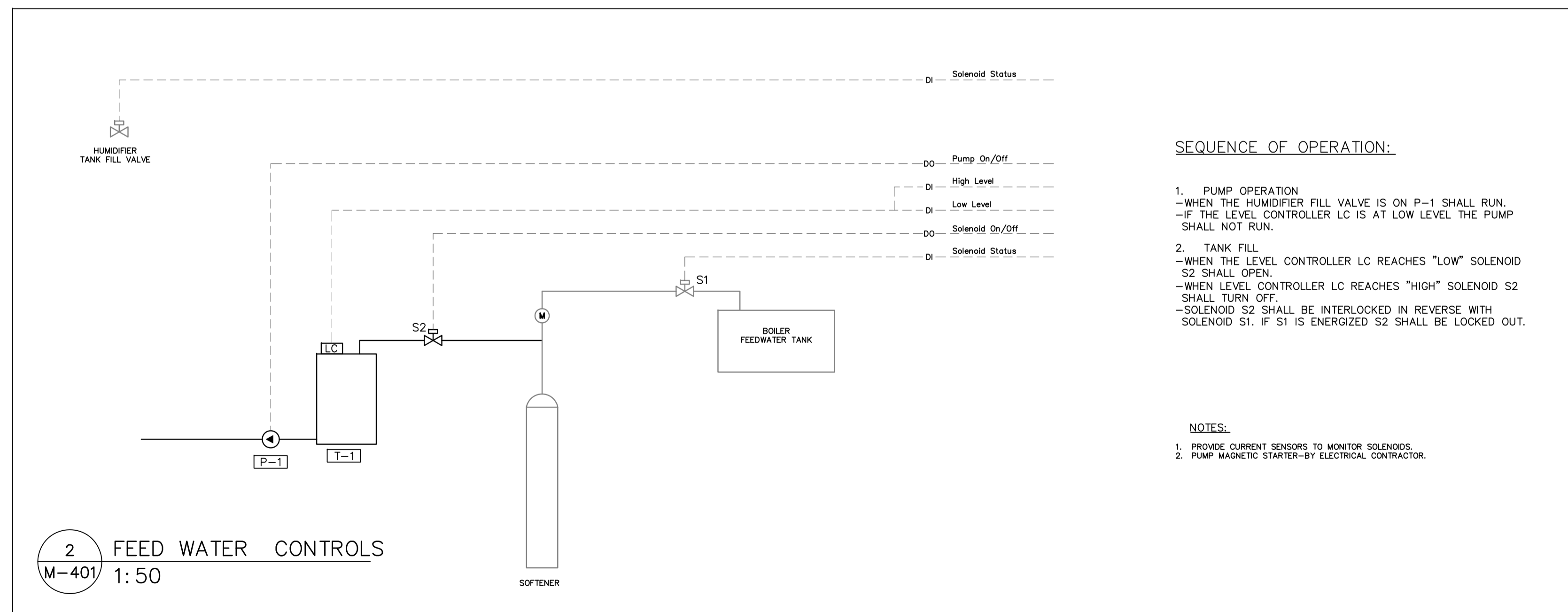


1 BOILER ROOM – NEW PIPING
M-401 1:50

LEGEND:
 #20 CW EXISTING PIPING
 #75 NG NEW PIPING

GENERAL:
 1 T-1: VERTICAL HDPE 75GAL TANK, FLAT TOP, #23X50 – ONTARIO AGRA M# VT0075-23. SUPPORT FROM ABOVE ON SQUARE UNISTRUT FRAME.
 2 P-1: BELL&GOSSETT eccocirc20-18 ECM SMART CIRCULATOR, STAINLESS, UNION. XXX
 3 S-2: 3/4" NORMALLY CLOSED BRASS SOLENOID VALVE.
 4 LG: ULTRASONIC LEVEL CONTROLLER – OMEGA M# LVCN1710, 1"NPT PROBE.

NOTES:
 4 CONNECT UNDER THE METER ON BOILER TANK LINE.

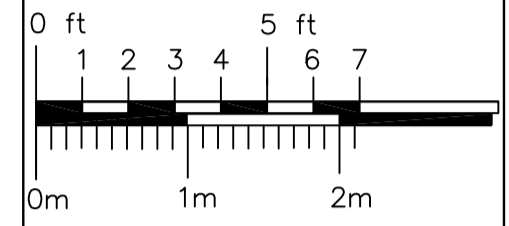


2 FEED WATER CONTROLS
M-401 1:50

SEQUENCE OF OPERATION:
 1. PUMP OPERATION
 -WHEN THE HUMIDIFIER FILL VALVE IS ON P-1 SHALL RUN.
 -IF THE LEVEL CONTROLLER LC IS AT LOW LEVEL THE PUMP SHALL NOT RUN.
 2. TANK FILL
 -WHEN THE LEVEL CONTROLLER LC REACHES "LOW" SOLENOID S2 SHALL OPEN.
 -WHEN LEVEL CONTROLLER LC REACHES "HIGH" SOLENOID S2 SHALL TURN OFF.
 -SOLENOID S2 SHALL BE INTERLOCKED IN REVERSE WITH SOLENOID S1. IF S1 IS ENERGIZED S2 SHALL BE LOCKED OUT.

NOTES:
 1. PROVIDE CURRENT SENSORS TO MONITOR SOLENOIDS.
 2. PUMP MAGNETIC STARTER-BY ELECTRICAL CONTRACTOR.

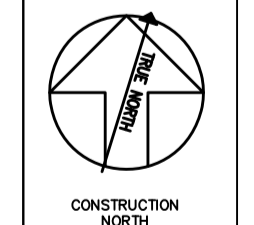
NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE UNDERTAKEN WITHOUT PRIOR WRITTEN APPROVAL. CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS. ALL PREVIOUS EDITIONS OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISIONS. ALL DRAWINGS AND SPECIFICATIONS REMAIN PROPERTY OF Zdesign+ LTD.



| DATE (yy/mm/xx) | ISSUED FOR | REV. |
|-----------------|---------------|------|
| 1. 25/01/08 | TENDER REVIEW | A |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
 181 Corlaw Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2236



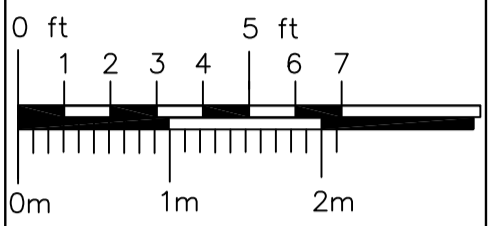
CLIENT:
camh
 CAMH
 250 College Street, Toronto, M5T 1R8

PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 HUMIDIFIER FEED WATER

| | |
|------------------------|------------------------|
| SCALE: AS NOTED | PROJECT NUMBER: 242503 |
| DATE PLOTTED: 24/12/20 | DRAWING NUMBER: M-401 |
| DRAWN BY: A.V. | CHECKED BY: Z.D. |

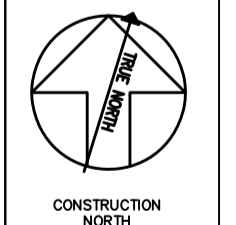
NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL.
 CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.
 ALL PREVIOUS EDITIONS OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISIONS.
 ALL DRAWINGS AND SPECIFICATIONS REMAIN PROPERTY OF Zdesign+ LTD.



| DATE (yy/mm/dd) | TENDER REVIEW | ISSUED FOR | REV. |
|-----------------|---------------|------------|------|
| 1. 25/01/08 | | | A |

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.

Zdesign+ Ltd.
 181 Corlaw Avenue, Suite 211
 Toronto, ON, M4M 2S1
 (416) 837-2736



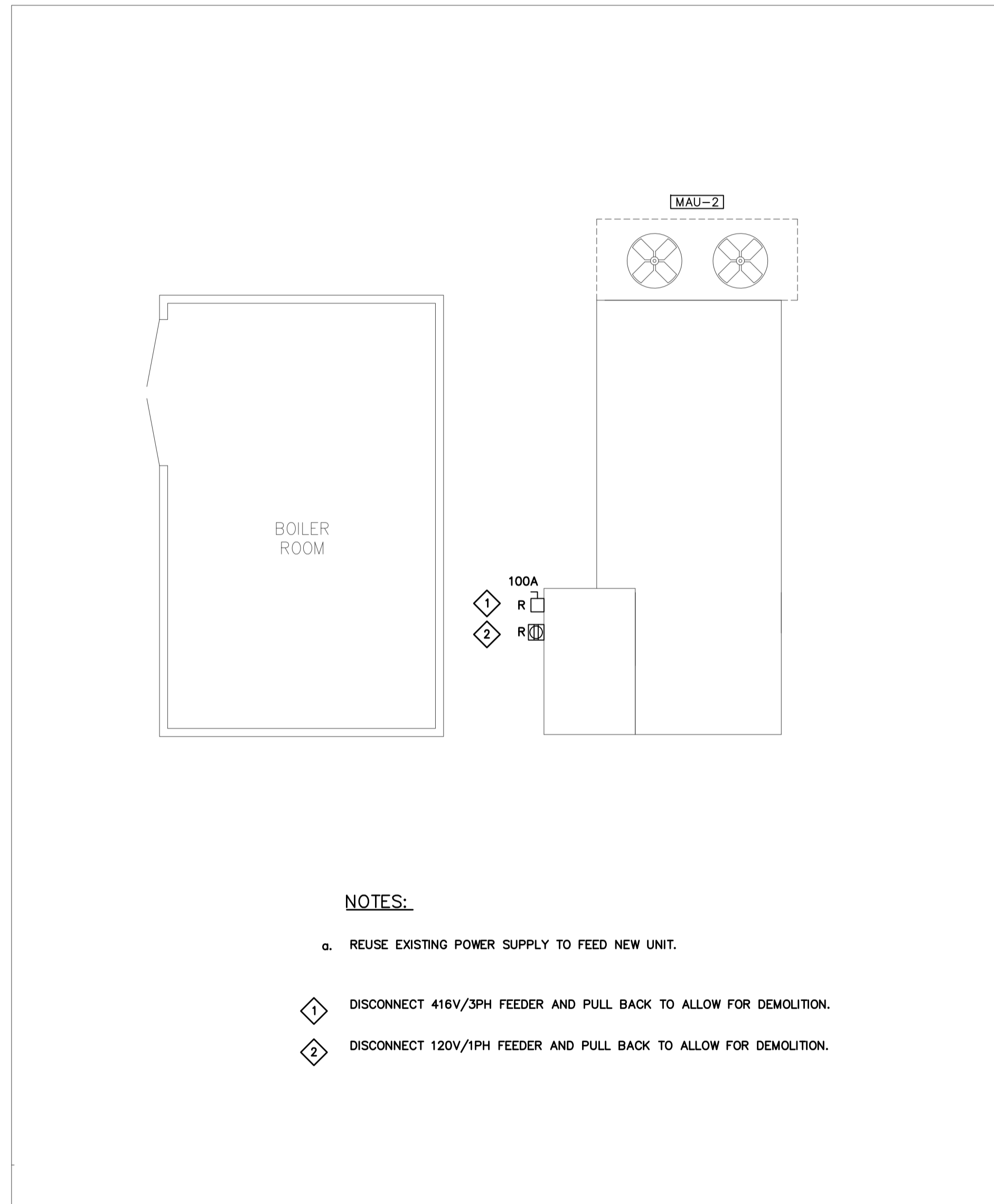
CLIENT:

 CAMH
 250 College Street, Toronto, M5T 1R8

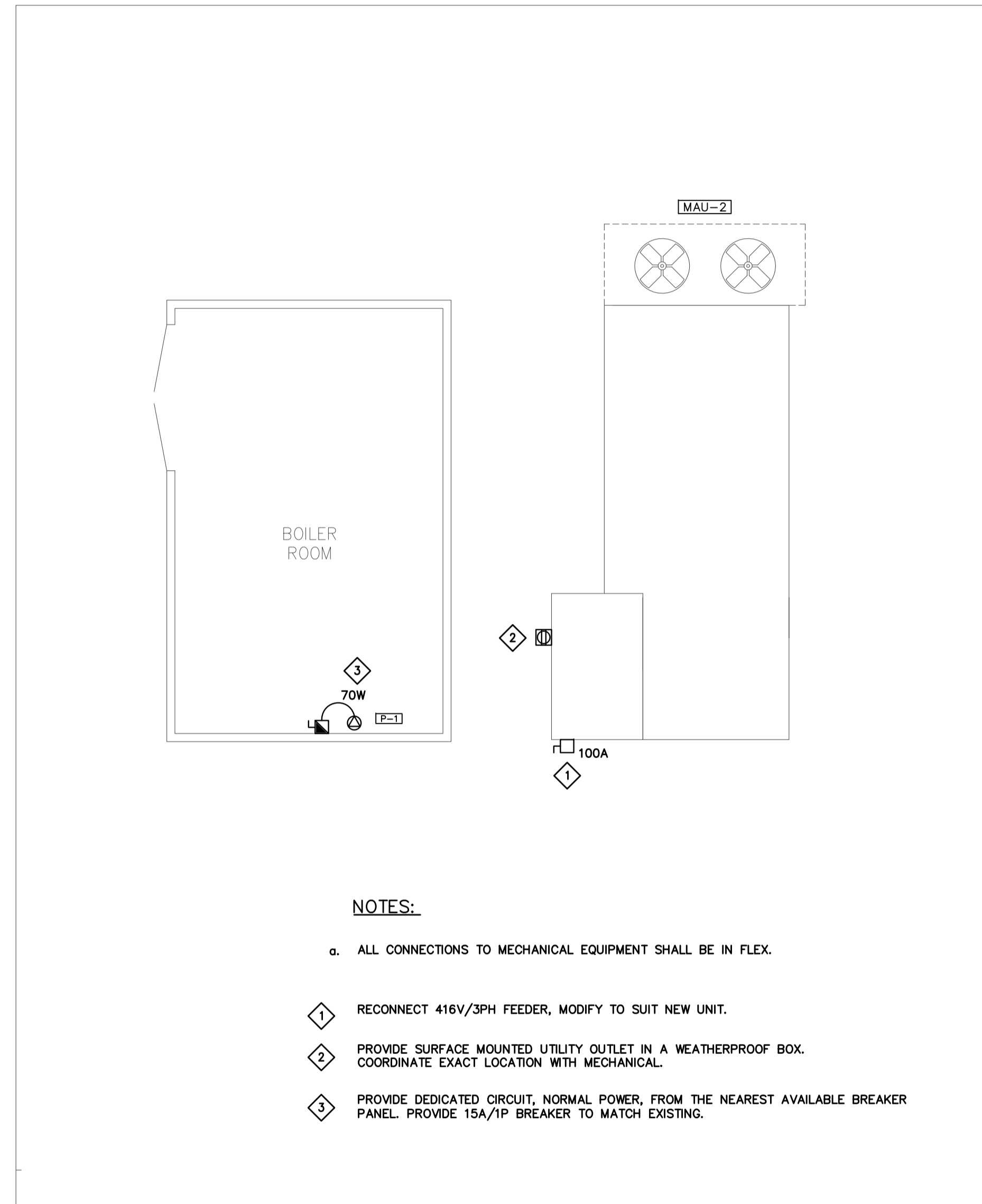
PROJECT:
 MUA-2
 REPLACEMENT

DRAWING TITLE:
 POWER

| | |
|------------------------|------------------------|
| SCALE: AS NOTED | PROJECT NUMBER: 242503 |
| DATE PLOTTED: 24/12/20 | DRAWN BY: A.V. |
| CHECKED BY: Z.D. | DRAWING NUMBER: E-1 |







1 DEMOLITION
 E-3 1:50



2 NEW WORK
 E-3 1:50

LEGEND:

-  NON-FUSED DISCONNECT
-  COMBINATION MAGNETIC STARTER
-  15A-120V, GROUNDED RECEPTACLE, SURFACE MOUNTED
-  120V CONNECTION TO EQUIPMENT, AS INDICATED