

**GENERAL NOTES**

- SUPPLY, INSTALL, AND PROVIDE ALL LABOUR, EQUIPMENT, MATERIALS, TOOLS, SPRING VALVES AND CONTROLS TO COMPLETE SYSTEMS SHOWN ON THE DRAWINGS. THIS RENDERING A COMPLETE AND FUNCTIONING INSTALLATION. THE SYSTEMS SHALL BE TESTED AND LEFT COMPLETE AND IN SATISFACTORY OPERATION SUBJECT TO THE APPROVAL OF THE AUTHORITIES HAVING JURISDICTION AND THE OWNER'S REPRESENTATIVE.
- THIS CONTRACTOR SHALL ARRANGE AND PAY FOR THE REMOVAL OF HIS DEBRIS LEFT OVER FROM MECHANICAL EQUIPMENT SPECIFIED ON DRAWINGS.
- APPLY FOR, OBTAIN, AND PAY FOR ALL FEES, PERMITS, LICENSES, INSPECTIONS AND EXAMINATIONS PERTINENT TO THE MECHANICAL WORK. FORWARD OR SUBMIT TO THE OWNERS FINAL UNCONDITIONAL ACCEPTANCE CERTIFICATE OF THE AUTHORITIES HAVING JURISDICTION.
- VISIT AND EXAMINE THE SITE AND ALL OTHER PERTINENT DRAWINGS TO VERIFY THAT THE WORK CAN BE PERFORMED AS INDICATED AND ADVISE THE OWNERS REPRESENTATIVE OF ANY DISCREPANCIES. THE TENDERING PARTIES SHALL NOTIFY THE ENGINEER OF ANY ERRORS OR OMISSIONS IN THE PLANS AND SPECIFICATIONS, IN WRITING, MINIMUM 3 WORKING DAYS PRIOR TO TENDER CLOSING, SO THAT SAME MAY BE PROPERLY DEALT WITH BEFORE THE CLOSING DATE OF TENDERS. NO ALLOWANCES WILL BE MADE FOR FAILURE TO DO SO AND FOR ANY OBVIOUS OVERSIGHTS.
- ALL EQUIPMENT AND INSTALLATION TO COMPLY WITH CURRENT PROVINCIAL AND MUNICIPAL BY-LAWS, CODES, FIRE REGULATIONS, AND STANDARDS OF THE AUTHORITIES HAVING JURISDICTION PERTINENT TO THIS CONTRACT. INSTALLATION ALSO TO MEET MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS. ALL EQUIPMENT TO BE CSA APPROVED.
- EXCEPT WHERE INDICATED ON THE DRAWINGS TO BE USED EXISTING MATERIAL, ALL MATERIALS USED FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE NEW, CSA APPROVED AND OF REASONABLE STANDARD AND QUALITY. WORKMANSHIP SHALL BE THE ACCEPTED STANDARD OF THE INDUSTRY, UNLESS INDICATED. ALL EXISTING EQUIPMENT AND MATERIAL, NOT RE-USED OR OTHERWISE NOTED AS FOR DISPOSAL, BECOME THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE JOB SITE.
- REFER TO THE ARCHITECTURAL/INTERIOR LAYOUT DRAWINGS AND THE OTHER DRAWINGS THAT MAKE UP A COMPLETE TENDER DRAWING SET FOR EQUIPMENT LOCATIONS AND EXACT LAYOUTS BEFORE PROCEEDING WITH ANY WORK. THE GENERAL ARCHITECTURAL SPECIFICATION FORMS AN INTEGRAL PART OF THE MECHANICAL CONTRACTS. ALL REQUIREMENTS OF THE ARCHITECTURAL SPECIFICATION PERTAINING TO MECHANICAL WORK MUST BE COMPLIED WITH, PRIOR TO INSTALLATION. EQUIPMENT RELOCATION AND INSTALLATION EQUIPMENT SHALL ENTAIL NEITHER AN EXTRA NOR A CREDIT.
- PROVIDE JAMAICAN NAME PLATES FOR ALL EQUIPMENT USING A MINIMUM OF 1/4" HIGH LETTERING. THE NAME PLATES SHALL IDENTIFY THE EQUIPMENT USING THE ID TAG UTILIZED ON THE DESIGN DRAWING, AND SHALL ALSO INDICATE THE SYSTEM SERVICED BY THE EQUIPMENT.
- BE RESPONSIBLE FOR CARE OF THE BUILDING. DO ALL CUTTING, PATCHING AND PAINTING REQUIRED FOR THE WORK OF THIS TRADE. PROVIDE ACCESS DOORS FOR ALL CONCEALED DEVICES. CONTRACTOR TO BE RESPONSIBLE FOR THE MECHANICAL CONTRACTORS EXPENSE TO CLEAN UP ALL DEBRIS UPON COMPLETION OF CONTRACT. COOPERATE WITH ALL OTHER TRADES.
- ARRANGE FOR X-RAY INSPECTION OF ALL CONCRETE SLABS FOR RE-INFORCING STEEL AND CONDUIT ETC. LOCATIONS PRIOR TO ANY CORE DRILLING.
- PROVIDE FOR THE MAINTAINING OF ALL FIRE SEPARATIONS PRESERVED BY ANY MECHANICAL SYSTEM COMPONENT ASSOCIATED WITH THIS CONTRACT.
- COORDINATE WITH OWNER'S PERSONNEL FOR CONNECTIONS TO ALL EQUIPMENT AND SERVICES ASSOCIATED WITH THIS PROJECT.

**H.V.A.C. SPECIFICATION**

- WHERE MODIFICATION OF EXISTING FACILITIES IS REQUIRED ASSUME FULL RESPONSIBILITY FOR ANY DISRUPTION OF EXISTING SYSTEMS. PROVIDE ALL TEMPORARY CONNECTIONS REQUIRED TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING NORMAL OPERATING HOURS. SHUT DOWN OF EXISTING SYSTEMS MAY ONLY BE MADE AS DIRECTED BY OWNERS REPRESENTATIVE. MAKE GOOD ALL MECHANICAL, ELECTRICAL, AND OTHER DAMAGE CAUSED BY THE CONTRACTOR'S WORK AND COMPONENTS TO ACCOMMODATE NEW WORK NECESSARY TO ALLOW COMPLETION OF THE SYSTEMS AS INDICATED.
- WHERE NOTED FOR EQUIPMENT TO BE DISCONNECTED, THE EQUIPMENT SHALL BE REMOVED, THE EQUIPMENT AND REMOVED FROM THE SITE UNLESS OTHERWISE NOTED. ALSO REMOVE ALL ASSOCIATED MECHANICAL AND ELECTRICAL FEEDS, BREAK BACK, CAP AND MAKE SHUTE IN, CONCEALED GROUNDING, CEILING CLEANING, RELATED AREA, NAMELY TO AID OTHER TRADES IN CONTINUANCE OF WORK.
- WHERE NOTED FOR EQUIPMENT TO BE RELOCATED, THIS CONTRACTOR SHALL RELOCATE NOTED EQUIPMENT ASSEMBLY AND EXTEND ALL ASSOCIATED UTILITIES TO NEW LOCATION, CONCEAL UTILITIES WHEREVER POSSIBLE. CLEAN, REFURBISH AND MAKE OPERATIONAL. CONTRACTOR TO BE RESPONSIBLE FOR OPERATIONAL COSTS, INCLUDING REPAIR, TO MATCH EXISTING WITH BRUSHED ON RUSTOLEUM OR TREMCLAD PRODUCT.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ALL GAS, PLUMBING, HVAC EQUIPMENT-RELATED MECHANICAL SYSTEMS AS REQUIRED TO FACILITATE THE REMOVAL, REPLACEMENT OR INSTALLATION OF NEW EQUIPMENT. MAINTAIN THE OPERATION OF TEMPORARILY RELOCATED SERVICES AS REQUIRED UNTIL INSTALLATION OF OTHER EQUIPMENT IS COMPLETED. RELOCATE ALL AFFECTED SYSTEMS BACK TO ORIGINAL LOCATION IF MAINTAINING MAINTENANCE CLEARANCES AROUND EQUIPMENT, OR TO ADJACENT LOCATION AS REQUIRED TO MAINTAIN ALL MAINTENANCE CLEARANCES AROUND NEW EQUIPMENT.
- THIS CONTRACTOR IS RESPONSIBLE FOR CONFACING IN WRITING BOTH THE OWNERS PROJECT MANAGER AND THE CONSULTANT PRIOR TO MAKING ANY CHANGES TO THE DESIGN SPECIFICATION OR DESIGN INTENT. FAILURE TO CONSULT AND SEEK WRITTEN APPROVAL FOR THE CHANGE, INCLUDING OFFERING RELATED CREDITS, PLACES ALL ASSOCIATED COSTS OF REPLACING THE INSTALLATION COMPLETELY ON THE CONTRACTOR. CONTRACTOR TO BE RESPONSIBLE TO ALL WORK AND EQUIPMENT RELATED TO THIS CONTRACT, WHETHER NOTED IN SITE VISIT REPORTS OR NOT.
- IN THE EVENT OF ANY EXTRA OR ADDITIONAL WORK OF ANY NATURE BEING REQUIRED DURING THE PROGRESS OF THE WORK, THIS SUB-CONTRACTOR SHOULD BE AWARE THAT IN ORDER TO SECURE SETTLEMENT FOR SUCH EXTRA AT THE TIME HE IS REQUESTED TO DO THE WORK, UNLESS THEY ARE APPROVED BY THE ENGINEER, THEY WILL NOT BE ALLOWED.
- THE CONTRACTOR SHALL PROVIDE A WRITTEN WARRANTY COVERING ALL PRODUCTS AND WORKMANSHIP WHICH SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. EQUIPMENT SUPPLIED WITH AN EXTENDED WARRANTY SHALL BE GUARANTEED BY THE TRADE FOR SUCH EXTENDED PERIOD AND THE TRADE SHALL ARRANGE FOR REPLACEMENT OR REPAIR OF ANY ITEM REQUIRING REPLACEMENT UNDER AN EXTENDED WARRANTY, AFTER THE FIRST YEAR.
- AT THE COMPLETION OF THE PROJECT THE MECHANICAL CONTRACTOR SHALL PROVIDE 3 COPIES OF AN OPERATING AND MAINTENANCE MANUAL FOR THE INSTALLED EQUIPMENT AND SYSTEMS. THIS INFORMATION SHALL INCLUDE A COPY OF THE WRITTEN WARRANTY PROVIDED. FROM THE AUTHORITIES HAVING JURISDICTION, COPIES OF ALL TESTING AND BALANCING RESULTS, EQUIPMENT/SYSTEM SPECIFICATION SHEETS, EQUIPMENT/SYSTEM OPERATING AND MAINTENANCE MANUALS, AND A SET OF AS-BUILT DRAWINGS. THIS MANUAL SHALL BE PRESENTED IN A 3-RING BINDER, WITH INDIVIDUAL TABS FOR EACH SECTION, AND INCLUDING A TITLE PAGE INDICATING THE CLIENT, PROJECT LOCATION, CONSULTANT, GENERAL CONTRACTOR, SUB-CONTRACTOR, AND THE SUBSTANTIAL COMPLETION DATE.
- ALL NEW DUCTWORK SHALL BE MADE OF GALVANIZED SHEET STEEL, CONSTRUCTED AND SUPPORTED IN COMPLIANCE WITH SMACNA AND ASHRAE STANDARDS.
- ALL JOINTS SHALL BE MADE AIR TIGHT WITH LAPS IN DIRECTION OF AIR FLOW. DUCT LEAKAGE SHALL NOT EXCEED THE MAX. AMOUNT LISTED IN SMACNA.
- ALL DUCTS HAVING ANY SIZE OVER 300MM (12") SHALL COMPLY TO SMACNA STANDARDS.
- ALL TEES, BENDS, OR ELBOWS SHALL BE MADE WITH A CENTER-LINE RADIUS OF NOT LESS THAN 1.5 TIMES THE WIDTH OF THE DUCT, WHERE INDICATED ON DRAWINGS OR WHERE SPACE CONDITIONS DO NOT PERMIT. SQUARE THROUGH FITTING ARE TO BE USED EQUIPPED WITH DOUBLE THICKNESS TURNING VANES.
- DUCTS SHALL BE SUPPORTED BY HANGERS FASTENED TO THE SIDE AND BOTTOM OF THE DUCT BY BOLTS, RIFETS OR METAL SCREWS. DUCT HANGERS SHALL BE SUSPENDED FROM STRUCTURAL BEARINGS SUCH AS BEAMS, TOP CHORDS OF JOISTS OR STRUCTURAL CONCRETE SLABS. WHERE STRUCTURAL BEARINGS DO NOT EXIST, THE CONTRACTOR SHALL PROVIDE ANGLE OR CHANNEL IRON MEMBERS FROM THE NEAREST STRUCTURAL BEARINGS TO SUPPORT HANGERS. ALL EQUIPMENT IN CEILING SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS INDEPENDENTLY FROM CEILING.
- PROVIDE FLEXIBLE CONNECTIONS IN SUPPLY AND RETURN DUCTWORK, AND IN EXHAUST DUCTWORK CONNECTION TO FANS, HRV'S AND GEOTHERMAL UNITS.
- USE ROUND RIGID DUCT AND RECTANGULAR DUCTING AS SHOWN ON DRAWINGS AND PLANS.
- USE RIGID DUCTS TO DIFFUSER/GRILLE.
- INSTALL 1" (25MM) ACOUSTIC DUCT LINING IN ALL RETURN AIR DUCTWORK. SEAL LEADING EDGES OF INSULATION. DUCT SIZES TO BE CLEAR INSIDE DIMENSION.
- ALL NEW DUCTWORK SHALL BE METALLIC TYPE.
- PROVIDE BALANCING DAMPERS WHERE INDICATED ON THE DRAWINGS AND WHERE REQUIRED TO BALANCE THE SYSTEMS. DAMPERS TO BE SIZED TO SUIT DUCTWORK. MANUAL BALANCING DAMPERS INSTALLED IN DUCTS UP TO 300MM (12") SHALL BE OF SINGLE BLADE TYPE AND OVER 300MM (12") SHALL BE MULTIBLADE PATTERN.
- PROVIDE BACKDRAFT DAMPERS WHERE INDICATED ON THE DRAWINGS.
- PROVIDE FIRE DAMPERS WHERE INDICATED ON THE DRAWING AND/OR REQUIRED BY THE LOCAL AUTHORITIES.
- ACCESS PANELS SHALL BE PROVIDED IN DUCTS WHERE AIR VALVES, BACKDRAFT DAMPERS, OR FIRE DAMPERS ARE INSTALLED. LOCATE PANELS UPSTREAM OF DEVICE. PROVIDE ACCESS DOORS WHERE DEVICES ARE CONCEALED IN WALLS, CEILINGS, OR FLOORS ETC.
- EXHAUST DUCT TERMINATION POINTS ON WALLS TO BE MINIMUM 10 FT BACK FROM WALL EDGE IN ANY DIRECTION, AND 10 FT FROM ANY VENTILATION AIR INTAKE LOCATION. PROVIDE INSECT SCREEN ON EXHAUST OUTSIDE TERMINATION.
- ROOF CURBS FOR NEW MECHANICAL EQUIPMENT SHALL BE CO-ORDINATED WITH GENERAL TRADES.
- ADJUST THE ROOF TOP UNIT O/A DAMPERS TO MEET THE CONTINUOUS VENTILATION RATE REQUIRED TO MEET ASHRAE STANDARDS AND AS SPECIFIED.
- ALL APPARATUS SUPPLIED BY THE MECHANICAL CONTRACTOR SHALL BE COMPLETE WITH ELECTRICAL CONNECTIONS, WIRING, AND STARTERS. ALL DISCONNECT SWITCHES, AND STARTERS, ALL COMPONENTS SHALL BE MANUFACTURED AND INSTALLED IN COMPLIANCE WITH CSA REQUIREMENTS AND CECA STANDARDS.
- HVAC EQUIPMENT SHALL NOT BE USED FOR TEMPORARY HEAT OR VENTILATION PURPOSES DURING CONSTRUCTION. EQUIPMENT SHALL NOT BE OPERATED UNTIL CONSTRUCTION IS SUBSTANTIALLY COMPLETE, AND READY FOR TESTING. THIS CONTRACTOR SHALL ARRANGE & PAY FOR ALL TEMPORARY HEATING REQUIRED DURING CONSTRUCTION. ENSURE THAT ALL DUCTWORK IS CLEAN AND FREE OF DIRT, DUST, GRIME, AND DEBRIS, ETC. BEFORE INITIAL OPERATION OF AIR SYSTEMS AFTER MODIFICATIONS.
- PROVIDE AND INSTALL NEW FILTERS FOR VENTILATION EQUIPMENT DAT PRIOR TO OPENING, AND 2 WEEKS AFTER PANEL HAS BEEN OPEN TO PUBLIC, AND EQUIPMENT HAS BEEN IN CONTINUOUS USE.

**H.V.A.C. SPECIFICATION**

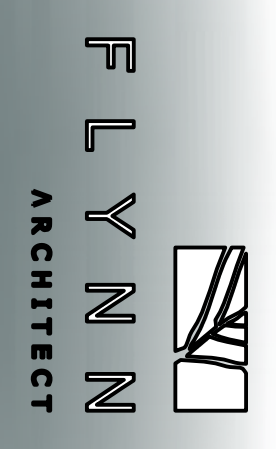
- TESTING:
  - TEST CONTROL OPERATING RANGES AND SENSITIVITIES.
  - TEST SAFETY CONTROLS.
  - CHECK SUMMER/WINTER CHANGEOVER CONTROLS.
  - BALANCE THE SYSTEM SUCH THAT TERMINAL AIR FLOWS ARE WITHIN +10%/-10% OF DESIGN VALUES.
  - TEST UNITS FOR S/A FLOW, O/F FLOW, STATUS.
  - PRESSURE ACROSS FAN, FAN RPM, AND FAN MOTOR AMPERAGE NOTING RESULTS ON BALANCING REPORT.
  - SUBMIT 3 COPIES OF FINAL COMMISSIONING REPORT TO OWNERS REPRESENTATIVE AND TO THE DESIGN CONSULTANTS.
  - MAKE ALLOWANCE FOR 2 ADDITIONAL SITE VISITS FOR COMFORT ADJUSTMENTS.
- DIFFUSERS AND GRILLES SHALL BE E.H. PRICE:
  - 24"x24" OR 12"x12" SUPPLY AIR DIFFUSER MODEL SCDA, NECK SIZE PER DRAWINGS, FINISH TO MATCH CEILING.
  - EGG CRATE RETURN GRILLE, SERIES '80', 24"x24" OR AS INDICATED. FINISH TO MATCH CEILING.
- OTHER GRILLES AND DIFFUSERS SPECIFIED ON DRAWINGS.
- ACOUSTIC INSULATION IS REQUIRED ON ALL RETURN AIR DUCTS (25mm THICK SEAL LEADING EDGES OF INSULATION). THERMAL INSULATION IS NOT REQUIRED ON SUPPLY AIR DUCTS. THERMAL INSULATION (50mm THICK G/W CANVASS JACKET) IS REQUIRED ON ALL EXHAUST/FRESH AIR DUCTS (3 METRES MINIMUM BACK FROM EXTERIOR WALL OR ROOF).

**SEISMIC CONTROL FOR MECHANICAL SYSTEMS**

- SEISMIC RESTRAINTS ARE TO BE PROVIDED FOR ALL NEW MECHANICAL COMPONENTS AFFECTED UNDER THIS CONTRACT.
- PROVIDE SEISMIC RESTRAINTS IN ACCORDANCE WITH CURRENT NATIONAL BUILDING CODE AND ONTARIO BUILDING CODE.
- THIS CONTRACTOR SHALL UTILIZE THE SUPPLIER FAMILIAR WITH THE DESIGN OF SEISMIC SYSTEMS TO PROVIDE A COMPREHENSIVE PACKAGE OF ISOLATION AND SEISMIC RESTRAINT FOR THE PROJECT.
- PROVIDE DETAILED SHOP DRAWINGS SHOWING THE PROPOSED RESTRAINT SYSTEM FOR ALL REQUIRED COMPONENTS ON THE PROJECT. THE SHOP DRAWINGS SHALL INCLUDE CALCULATIONS CERTIFIED BY THE SEISMIC ENGINEER.

**PLUMBING SPECIFICATION**

- EXECUTION
  - PLUMBING PIPING INSTALLATION:
    - CONFORM TO REQUIREMENTS OF ONTARIO BLDG. CODE FOR PRESSURE PIPING.
    - INSTALL PIPING STRAIGHT, PARALLEL, AND CLOSE TO WALLS AND CEILINGS WITH SPECIFIED PITCH. USE FACTORY FABRICATED FITTINGS FOR DIRECTION CHANGES. CONCEAL PIPING WHERE POSSIBLE.
    - INSTALL GROUPS OF PIPING PARALLEL TO EACH OTHER, SPACED TO PERMIT APPLICATION OF INSULATION, IDENTIFICATION, AND SERVICE ACCESS ON TRAPEZE HANGERS.
    - WHERE PIPE SIZE DIFFERS FROM CONNECTION SIZE OF EQUIPMENT, INSTALL REDUCING FITTINGS CLOSE TO EQUIPMENT. REDUCING BUSHINGS ARE NOT PERMITTED. NECESSARY FITTINGS THROUGH WALLS AND SLAB AS REQUIRED FOR NEW PIPING.
    - BRASS AND COPPER PIPE AND TUBING SHALL BE FREE FROM SURFACE DAMAGE. REPLACE DAMAGED PIPE OR TUBING.
    - REAM ENDS OF PIPES AND TUBES BEFORE ERRECTING.
    - LAY COPPER TUBING SO THAT IT IS NOT IN CONTACT WITH DISSIMILAR METAL AND WILL NOT BE KINKED OR COLLAPSED.
    - USE NON-CORROSIVE LUBRICANT OR TEFLON TAPE APPLIED TO MAKE THREAD FITTINGS.
    - GROOVED PIPE ENDS, CUT SQUARE, SEATING SURFACE CLEAN AND FREE FROM INDENT AND SCOREMARKS.
    - DISSIMILAR METALS ARE JOINED.
    - CLEAN ENDS OF PIPES OR TUBING AND ACCESSIBLE FITTINGS TO BE BRAZED OR SOLDERED. ASSEMBLE JOINTS WITHOUT BINDING.
    - INSTALL STRAIGHT PARALLEL, AND CLOSE TO WALLS AND CEILINGS WITH REQUIRED PITCH. USE STANDARD FITTINGS FOR DIRECTIONAL CHANGES.
    - WHERE PIPE SIZE DIFFERS FROM CONNECTION SIZE OF EQUIPMENT, INSTALL REDUCING FITTINGS CLOSE TO EQUIPMENT. BUSHINGS ARE NOT PERMITTED.
    - REAM ENDS OF PIPE AND TUBES BEFORE INSTALLATION.
    - SCREENED JOINT MATERIAL SHALL BE TEFLON TAPE OR AN APPROVED NON-CORROSIVE LUBRICANT APPROVED FOR SERVICE.
    - HANGERS, ANCHORS AND GUIDES:
      - APPROVED ANCHORS SHALL BE PROVIDED CONSISTING OF STEEL CLAMPS SUPPORTING TO THE PIPE AND FASTENED TO THE BUILDING CONSTRUCTION OR IMBEDDED IN A CONCRETE PIER SUCH THAT ALL FORCES AND THRUSTS ACTING AT THE ANCHOR POINT ARE RESTRAINED.
      - PREVENT VIBRATION OR SWAYING.
      - SUPPORTS MADE OF WIRE, ROPE, WOOD OR ANY OTHER VULNERABLE MAKE-SHIFT MATERIAL ARE NOT PERMITTED.
      - FOR UNINSULATED COPPER PIPE OR TUBING THE CLAMPS AND SUPPORTS SHALL BE ELECTROPLATED COPPER FINISH.
      - PROVIDE ADDITIONAL SUPPORTS AT CHANGES IN PIPE DIRECTION AND FOR CONCENTRATION OF LOADS DUE TO WEIGHT OF VALVES, STRAINERS, ETC.
    - PIPE TESTING "REQUIRED":
      - TEST ALL PIPING AT 1-1/2 TIME SYSTEM OPERATING PRESSURE FOR PERIOD OF 8 HOURS.
      - TEST SYSTEMS IN ACCORDANCE TO MUNICIPAL REQUIREMENTS IN THE PRESENCE OF THE ENGINEER.
      - PROVIDE A CERTIFICATE OF ACCEPTANCE FROM INSPECTING AUTHORITY.
      - CLEAN UP:
        - ALL BRASS TRIM SHALL BE CLEANED AND POLISHED AND TOUCH-UP OTHER COMPONENTS AS REQUIRED. REMOVE ALL DEBRIS AND GARBAGE FROM SITE.
        - AFTER THE CONSTRUCTION IS COMPLETED CLEAN INTERIOR OF NEW DUCTWORK, FANS, INCLUDING GRILLES, AND DAMPERS ETC.
      - PROVIDE THERMAL INSULATION (1" THICK FOR PIPES 1-1/2" DIAMETER AND 1" THICK FOR LARGER PIPES). PROVIDE IDENTIFICATION AND CANVASS JACKET WHERE PIPING IS EXPOSED. TYPICAL ALSO FOR GEOTHERMAL PIPING.



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**GENERAL NOTES**

- DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS ONLY TO BE USED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT.
- ALL WORK DESCRIBED UNDER THIS CONTRACT SHALL BE THE MOST CURRENT EDITION OF THE NATIONAL BUILDING CODE AND/OR NATIONAL AND OTHER CODES AND BYLAWS IN EFFECT.

**ISSUE RECORD**

No	DATE	REVISION
1	13-06-2018	ISSUED FOR CLIENT REVIEW
2	28-09-2018	ISSUED FOR BUILDING PERMIT
3	27-06-2019	ISSUED FOR TENDER
4	8-11-2019	ISSUED FOR CONSTRUCTION
5	14-02-2020	ISSUED FOR CONSTRUCTION

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PROJECT TITLE:  
228 HUNTWAR DRIVE  
HUNTWAR/LADLUM DR. ENTERPRISE

DRAWING TITLE:  
MECHANICAL  
SPECIFICATIONS AND DETAILS

DRAWN BY: S.J.S.	JOB NO.:	DRAWING NO.:
CHECKED BY: J.C.L.	15-610	M-3
SCALE AS NOTED		

MECHANICAL