

Tender Addendum 1

File	Tender	Tender No.
225022	Ullswater Community Centre Kitchen System Upgrades	T-2025-40
Date	Owner	
September 2, 2025	Township of Muskoka Lakes	
	Message to Bidder	
	ressage to blade.	
Instructions to Bidders	Part 1 - Tender closing date to be revised to September 9,	2025 at 2:00 pm.
		·

to Bidders Attachments

Instructions

Please find attached the following revised drawings:

All ESA costs are to be included in bid.

- Drawing M.1 Mechanical Schedules, Legend, Specifications, and Details, Issued for Addendum 1.
- Drawing M.2 Mechanical Demolition and Installation Layouts, Issued for Addendum
- Drawing E.2 Electrical Building Layouts, Issued for Addendum 1.
- Drawing E.3 Electrical Specifications, Issued for Addendum 1.

Terms & Conditions

Except as to and to the extent that they are amended by the foregoing, all terms and conditions of the tender document remain in full force and effect, and time shall be of the essence.

Directions to Bidder

The Bidder shall:

- sign this Addendum in the space provided below and submit this Addendum to the Owner in the same envelope as the Tender
- enter this Addendum number in the Tender Form

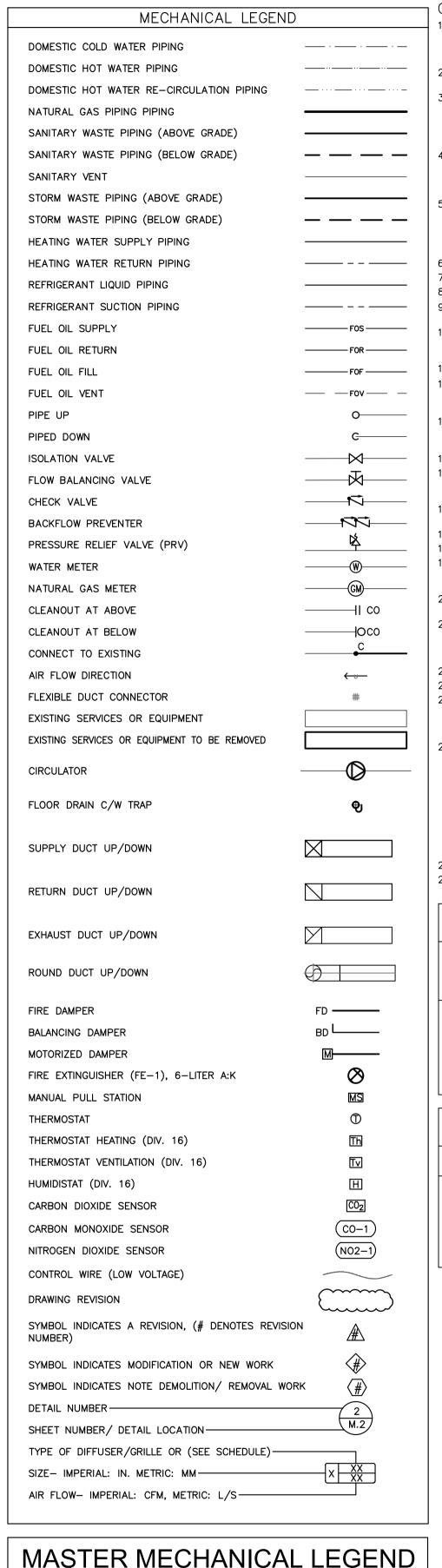
Signature of Bidder	Date	

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GENERAL SPECIFICATIONS

REVIEW WORK AREA AND READ DRAWINGS IN CONJUNCTION WITH ALL DISCIPLINES BEFORE COMMENCING WORK. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND POTENTIAL ISSUES ON WORK-SITE. NO ADDITIONAL PAYMENTS WILL BE MADE RELATED TO CLAIMS FOR ITEMS THAT WOULD HAVE BEEN APPARENT IF THE WORK AREA AND ALL PLANS WERE REVIEWED PRIOR

TO PRICING THE WORKS. THE GENERAL CONTRACTOR SHALL OBTAIN AND PAY FOR NECESSARY PERMITS PERTAINING TO THE INSTALLATION OF THEIR WORK

AND PROVIDE ANY CERTIFICATES AND SIGN-OFFS AS CIRCUMSTANCES REQUIRE. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE, ONTARIO FIRE CODE, OCCUPATIONAL HEALTH AND SAFETY ACT, AND AUTHORITIES HAVING JURISDICTION. MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE CANADIAN STANDARDS ASSOCIATION, AND AUTHORITIES HAVING JURISDICTION. STANDARDS SET OUT IN DESIGN

AS REQUIRED BY AUTHORITIES HAVING JURISDICTION AT NO COST TO THE OWNER. SUBMIT ELECTRONIC SHOP DRAWINGS FOR EQUIPMENT LISTED ON THE SCHEDULES FOR REVIEW PRIOR TO ORDERING. REVIEW OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES TO PROVIDE A COMPLETE WORKING SYSTEM CONSISTENT WITH THE INTENT OF THE DESIGN DRAWINGS. CONTRACTOR SHALL REVIEW DESIGN DRAWINGS, EQUIPMENT SCHEDULES 4. PROVIDE MESH FILTER IN HOOD. AND SHOP DRAWINGS FOR ERRORS AND OMISSIONS AND ELEMENTS RELATING TO WORKS/ASSEMBLY ON-SITE.

AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE MARKED UP RECORD DRAWINGS AND OPERATION AND MAINTENANCE MANUALS. THE FIRST PAGE OF THE OPERATION AND MAINTENANCE MANUAL SHALL BE A TYPE WRITTEN DOCUMENT EXPLAINING THE DETAILED MAINTENANCE REQUIREMENTS AND SCHEDULE FOR THE SYSTEM AND ANY OTHER INFORMATION THAT IS SPECIFIC TO THIS PROJECT. GENERIC OPERATIONS AND MAINTENANCE MANUALS WITH NO PROJECT SPECIFIC INFORMATION WILL

NOT BE ACCEPTED 6. PROVIDE TRAINING FOR THE OPERATOR OR OWNER'S REPRESENTATIVE. PROVIDE COMMISSIONING SERVICES AS REQUIRED. LABEL ALL EQUIPMENT, PIPING, CONDUIT ETC.

8. THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND SECURITY OF MATERIALS AND EQUIPMENT ON THE JOB SITE.

9. THE OWNER'S PROPERTY MUST BE KEPT IN TIDY CONDITION. PROMPTLY REMOVE GARBAGE FROM THE SITE. CLEAN WORK AREA PRIOR TO ALL INSPECTIONS AND KEEP SITE IN A SAFE CONDITION. 10. DESIGN DRAWINGS ILLUSTRATE THE GENERAL LAYOUT OF THE WORK ONLY. COORDINATE THE INSTALLATION OF WORK WITH OTHER 12. INSTALLATION AND CLEARANCES OF ALL KITCHEN COOKING APPLIANCES SHALL BE TO MANUFACTURER'S RECOMMENDATIONS.

TRADES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LAYOUT OF EQUIPMENT AND MATERIALS AND ENSURING THERE ARE NO INTERFERENCES WITH OTHER SYSTEMS I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THEIR WORK.

12. EQUIPMENT SHALL BE INSTALLED, STARTED, TESTED, AND ADJUSTED AS PER THE MANUFACTURERS' INSTRUCTIONS, AND AS NECESSARY TO ENSURE OPTIMUM PERFORMANCE. EQUIPMENT SHALL BE INSTALLED TO ALLOW FOR EASY ACCESS AND

OF SUBSTANTIAL COMPLETION. ENSURE THAT ALL EQUIPMENT IS WARRANTED BY THE MANUFACTURER FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. 14. MATERIALS AND EQUIPMENT SHALL BE NEW, TOP QUALITY AND SPECIFICATION GRADE, EXCEPT WHERE NOTED OTHERWISE.

THE CONTRACTOR SHALL GUARANTEE WORK PERFORMED UNDER THIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE

15. THIS SPECIFICATION SHALL BE CONSIDERED TO BE THE BASE BID SPECIFICATION AND CONTRACTORS MUST CARRY THE BASE BID MANUFACTURERS IN THEIR QUOTATION. ALTERNATE MANUFACTURERS OF EQUIPMENT CAN ONLY BE OFFERED AS PROPOSED ALTERNATES WITH THE CORRESPONDING PRICE REDUCTIONS PASSED ALONG TO OWNER.

THE CONTRACTOR SHALL NOT WELD TO OR MAKE A HOLE IN A STRUCTURAL MEMBER WITHOUT REVIEW FROM THE STRUCTURAL

ENGINEER. ATTACHMENTS TO STRUCTURAL MEMBERS SHALL BE MADE WITH SUITABLE CLAMPS OR CLIPS.

17. THE GENERAL CONTRACTOR SHALL PROVIDE ALL OPENINGS AND REINFORCEMENT FRAMING AS REQUIRED. 18. ALL MATERIALS IN CEILING SPACE USED FOR RETURN AIR PLENUM MUST BE PLENUM RATED.

19. CONFIRM FIRE SEPARATIONS WITH ARCHITECTURAL DRAWINGS AND GENERAL CONTRACTOR. ALL PENETRATIONS THROUGH FIRE SEPARATIONS SHALL BE FITTED WITH EXPANSION SLEEVES AND ULC CERTIFIED FIRE STOPPING. ACCEPTABLE MATERIAL: HILTI OR APPROVED EQUIVALENT

20. THE OWNER RESERVES THE RIGHT TO MAKE MINOR ALTERATIONS TO THE LOCATION OF EQUIPMENT ETC AT NO ADDITION TO THE CONTRACT AMOUNT.

THESE DRAWINGS ARE SCHEMATIC IN NATURE AND INTENDED TO SERVE AS A GUIDE SHOWING QUANTITIES AND GENERAL ARRANGEMENTS AND ARE NOT NECESSARILY WORKING DRAWINGS FROM WHICH MEASUREMENTS CAN BE TAKEN. EXCEPT WHERE DIMENSION FIGURES ARE SPECIFICALLY SHOWN. INFORMATION INVOLVING ACCURATE MEASUREMENTS OF BUILDING SHALL BE TAKEN FROM ARCHITECTURAL BUILDING DRAWINGS OR FROM THE SITE.

22. MAINTAIN ADEQUATE LIABILITY INSURANCE TO PROTECT OWNER AND ALL CONTRACTORS. 23. TEMPORARY LIGHTING AND POWER FOR CONSTRUCTION BY GENERAL CONTRACTOR.

24. ALL EQUIPMENT, PIPING, CONDUIT, WIRING, JUNCTION BOXES, HARDWARE, ETC. INSTALLED IN OPEN CEILING SPACES SHALL BE INSTALLED IN AN INCONSPICUOUS AND AESTHETICALLY PLEASING MANNER UP TO THE SOLE DISCRETION OF THE OWNER AND ENGINEER. ALL EQUIPMENT, PIPING, CONDUIT, WIRING, JUNCTION BOXES, HARDWARE SHALL BE INSTALLED IN CHASES, ABOVE

ADJACENT CEILINGS WHERE POSSIBLE SUITABLE ACCESS DOORS MUST BE PROVIDED WHERE NECESSARY TO ACCESS VALVES, JUNCTION BOXES, CLEAN OUTS, FIRE DAMPERS, AND OTHER EQUIPMENT AND APPURTENANCES. ALL ITEMS REQUIRING ACCESS PANELS ARE NOT NECESSARILY SHOWN, CARRY A REASONABLE COST ALLOWANCE. COORDINATE EXACT LOCATION OF COMPONENTS REQUIRING ACCESS AND SELECT SIZES WHICH ARE SUITABLE FOR MAINTENANCE

25.1. FOR GYPSUM WALLS AND CEILINGS IN OCCUPIED AREAS, PROVIDE CONCEALED DOORS WITH 5/8" RECESS TO RECEIVE DRYWALL, ACCEPTABLE MATERIAL: FOR STANDARD CEILINGS AND WALLS ACUDOR DW-5015 OR EQUIVALENT, FOR 90 MINUTE FIRE RATING ACUDOR FW(C)-5015 OR EQUIVALENT, FOR GREATER RATING, CONTACT ENGINEER AND ARCHITECT.

25.2. FOR GYPSUM, PLASTER, MASONRY OR TILE WALLS AND CEILINGS IN UTILITY AND STORAGE AREAS. PROVIDE UNIVERSAL FLUSH ACCESS DOOR, ACCEPTABLE MATERIAL: FOR STANDARD CEILINGS AND WALLS ACUDOR UF-5000 OR EQUIVALENT, FOR 90 MINUTE FIRE RATING ACUDOR FW-5050, FOR GREATER RATING, CONTACT ENGINEER AND ARCHITECT.

26. PAY FOR AND COORDINATE ALL UTILITY LOCATES AS REQUIRED. 27. PROVIDE WATER-PROOFING OF BUILDING OPENINGS RELATED TO THE WORK OF ALL TRADES.

RANGE HOOD SCHEDULE										
			DIMENSIONS (IN)			EXHAUST				
TAG	TAG MAKE MODEL	MODEL	LENGTH W	WIDTH HEI	HEIGHT	IEIGHT VOLUME (CFM)	E.S.P. (IN WC)	COLLAR SIZE (IN)		ACCESSORIES/REMARKS
				WIDTH	TIT HEIGHT			WIDTH	LENGTH	
RH-1	BROAN	BCS330WWC	19-5	29-7	6	210	0.1	3-1	10	COLOUR: WHITE, C/W WALL CAP EXCLUDING INTEGRAL BACK DRAFT DAMPER, INSULATED DUCT TO EXTERIOR

FIRE SUPPRESSION SYSTEM SCHEDULE				
DESCRIPTION	MODEL	ACCESSORIES/REMARKS		
RESTAURANT COOKING AREA FIRE SUPPRESSION SYSTEM	BUCKEYE	BFR5-5K FIRE SUPPRESSION AGENT CYLINDER,, MB-1 CYLINDER MOUNTING BRACKET, BFR-VLV VALVE, BFR-DAK DISCHARGE ADAPTER KIT, BFR-CAP VALVE CAP, SRM2 MECHANICAL SYSTEM RELEASING MODULE (TWO MS-DPDT MICROSWITCHES INCLUDED), SM-120 SOLENOID MONITOR, RPS-M REMOTE MECHANICAL PULL STATION, FLB-1 FUSIBLE LINK BRACKET, BFR-SC-100 SHIELDED CABLE INTERFACE, 2x N-1HP NOZZLE, 2x N-SA SWIVEL NOZZLE ADAPTOR		

KITCHEN VENTILATION SYSTEM SPECIFICATIONS:

THE PROPOSED KITCHEN EXHAUST HOOD LAYOUT SHOWN ON THESE DRAWINGS ARE TO ILLUSTRATE THE GENERAL LOCATIONS OF EQUIPMENT. A KITCHEN EXHAUST HOOD AIRFLOW RATE OF 100 CFM MINIMUM, 300 CFM MAXIMUM WAS USED TO ESTABLISH THE EXHAUST FAN AND MAKE-UP AIR SIZING. THIS AIRFLOW RATE SHALL BE CONFIRMED WITH THE FINAL KITCHEN LAYOUT PROVIDED BY THE OWNER. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF SHOP DRAWINGS FOR SYSTEM INSTALLATION INCLUDING HOOD. EXHAUST DUCT, APPLIANCES, FIRE DETECTORS, PIPING, NOZZLES, APPLIANCE SHUTOFF DEVICES, FIRE SUPPRESSION AGENT STORAGE CONTAINERS AS WELL AS CONTROLLER, AND MANUAL ACTIVATION DEVICES. SHOP DRAWINGS AND CERTIFICATION THAT INSTALLATION IS IN COMPLIANCE WITH THE TERMS OF THE LISTING AND MANUFACTURER'S INSTRUCTIONS SHALL BE SUBMITTED TO OWNER'S ENGINEER AND AHJ FOR REVIEW. SHOP DRAWINGS TO BE IDENTIFIED AS PRE-ENGINEERED AND UL300 LISTED, OR BE STAMPED BY A PROFESSIONAL ENGINEER

DRAWINGS SHALL NOT BE REDUCED BY CONFORMANCE TO APPLICABLE CODES AND STANDARDS. MAKE ALL MINOR MODIFICATIONS WORK MUST BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO ELECTRICAL SAFETY CODE, ONTARIO BUILDING CODE, ONTARIO FIRE CODE, OCCUPATIONAL HEALTH AND SAFETY ACT, AND LOCAL CODES.

HOODS SHALL BE SIZED TO MATCH THE WIDTH OF THE KITCHEN RANGE.

PROVIDE DUCTWORK WITH SLOPE BACK TO THE KITCHEN HOOD, DO NOT INSTALL WITH DIPS OR TRAPS, DO NOT TIE IN WITH ANY OTHER DUCTWORK SYSTEMS.

PROVIDE ALL DUCT SUPPORT HARDWARE, JOINTS (TELESCOPING AND BELL JOINTS).

PROVIDE SUITABLE WEATHER PROTECTIVE COATING ON ALL DUCTWORK ON EXTERIOR OF BUILDING

LIGHTING UNITS IN HOODS SHALL BE LISTED FOR USE IN COOKING APPLICATIONS AND SHALL BE WIRED THROUGH KITCHEN HOOD. PROVIDE READILY ACCESSIBLE MEANS OF MANUAL ACTIVATION LOCATED AT 48" (1.2m) AFF. DEVICE SHALL BE INDEPENDENT OF AUTOMATIC ACTIVATION AND SHALL BE FULLY MECHANICAL. POST INSTRUCTIONS FOR MANUAL OPERATION OF FIRE EXTINGUISHING SYSTEM IN CONSPICUOUS LOCATION IN KITCHEN.

10. PROVIDE K-CLASS PORTABLE FIRE EXTINGUISHER IN COOKING AREAS TO NFPA 10.

11. AUTOMATIC FIRE EXTINGUISHING SYSTEMS SHALL COMPLY WITH UL300 AND NFPA 12, NFPA 13, NFPA 17, NFPA 17A.

13. PROVIDE SHUNT TRIP BREAKERS FOR ALL ELECTRICAL COOKING APPLIANCES.

14. WHERE OCCUPANCY IS PROTECTED BY FIRE ALARM SYSTEM, PROVIDE SUPERVISORY EQUIPMENT/SIGNAL TO FIRE ALARM SYSTEM WHERE ELECTRICAL POWER IS REQUIRED TO OPERATE AUTOMATIC FIRE EXTINGUISHING SYSTEM.

15. VENTILATION NORMAL OPERATION. 15.1. UPON VENTILATION SYSTEM START SIGNAL FROM THE KITCHEN HOOD MANUFACTURER SUPPLIED SWITCH, THE INTERNAL EXHAUST

FAN SHALL TURN ON. 15.2. UPON VENTILATION SYSTEM STOP SIGNAL FROM THE KITCHEN HOOD MANUFACTURER SUPPLIED SWITCH, THE INTERNAL EXHAUST FAN

SHALL TURN OFF. 16. UPON ACTIVATION OF FIRE EXTINGUISHING SYSTEM THE FOLLOWING SEQUENCE OF OPERATION SHALL OCCUR

16.1. ALL SOURCES OF FUEL AND POWER SHALL BE AUTOMATICALLY SHUT OFF TO THE RANGE. ALL SHUTOFF DEVICES SHALL REQUIRE A MANUAL RESET

16.2. AUDIBLE AND/OR VISUAL ALARM SHALL BE ACTIVATED. 16.3. WHERE OCCUPANCY IS PROTECTED BY FIRE ALARM SYSTEM, ACTIVATION SHALL TRIGGER FIRE ALARM SYSTEM BY MEANS OF

16.4. HOOD EXHAUST FAN SHALL STAY RUNNING AFTER EXTINGUISHING SYSTEM HAS BEEN ACTIVATED UNLESS FAN SHUTDOWN IS

REQUIRED BY A LISTED COMPONENT IN THE AUTOMATIC FIRE EXTINGUISHING SYSTEM. 16.5. ELECTRICAL POWER TO ELECTRICAL COOKING APPLIANCES SHALL BE TURNED OFF VIA A SHUNT TRIPPER FROM THE FIRE

SUPPRESSION CONTROLLER. 16.6. EXHAUST HOOD LIGHTS SHALL BE TURNED OFF VIA A CONTROL RELAY FROM THE FIRE SUPPRESSION CONTROLLER.

HVAC SPECIFICATIONS

1. DUCTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE, ONTARIO FIRE CODE, AND THE ASHRAE AND SMACHA STANDARDS, PROVIDE PRE DEMOLITION AIRFLOW MEASUŘEMENTS ON EXISTING FAN. MEASUREMĚNTS TO INČLUDE AMPERAGE READING ON FAN MOTÓR. SUBMIT PRE-DEMOLITION MEASUREMENTS TO CONSULTANT FOR REVIEW. THE BALANCING MUST BE PERFORMED BY AN INDEPENDENT, NEBB CERTIFIED FIRM, SPECIALIZING IN THIS WORK. THE MECHANICAL CONTRACTOR SHALL TURN OVER THE BALANCING REPORT PRIOR TO SUBSTANTIAL COMPLETION BEING AWARDED

. VOLDWE DAMPERS MUST BE INSTALLED IN THE AIR DISTRIBUTION SYSTEMS AS SHOWN ON THE DRAWINGS AND AS NECESSARY TO ALLOW PROPER BALANCING.

4. DUCTS MUST BE SEALED TO PREVENT AIR LEAKAGE. SEAL TO SMACNA AND ASHRAE 90.1 STANDARDS. FOR UNPAINTED DUCTS INSTALLED IN VISIBLE SPACES, THE DUCT MASTIC IS TO BE APPLIED TO THE INTERIOR OF DUCT JOINTS AND PENETRATIONS AND SHALL NOT BE VISIBLE FROM THE EXTERIOR. MASTIC MAY BE APPLIED TO THE EXTERIOR OF DUCTS ONLY IN AREAS WHERE IT IS NOT VISIBLE TO OCCUPANTS. EXPOSED MASTIC SHALL BE PAINTABLE AND IS TO BE APPLIED NEATLY WITH THE EXCESS REMOVED. REFER TO ARCHITECT'S DRAWINGS TO CONFIRM WHETHER OR NOT DUCTS ARE TO BE PAINTED.

5. FLEXIBLE DUCT CONNECTIONS SHALL BE USED TO CONNECT FANS OR AIR HANDLERS TO RIGID DUCT TO REDUCE THE TRANSFER OF NOISE

6. FINAL CONNECTIONS TO DIFFUSERS SHALL BE MADE USING HARD ELBOWS CONNECTED TO FLEXIBLE ALUMINUM DUCTS TO MINIMIZE NOISE VIBRATION WHERE SHOWN. MAXIMUM 5' OF FLEXIBLE DUCT.

7. FIRE DAMPERS MUST HAVE A FIRE PROTECTION RATING IN ACCORDANCE WITH THE NFPA AND MUST BEAR THE ULC LABEL. USE DYNAMIC AND TYPE 'B' FIRE DAMPERS ONLY.

8. INSTALL R-8 FOIL BACKED VAPOUR RETARDANT FIBERGLASS INSULATION WITH JOINTS AND SEAMS SEALED WITH 3" FOIL TAPE ON DUCTS IN UNCONDITIONED SPACES. 9. PROVIDE TWO (2) SETS OF FILTERS FOR EQUIPMENT. ONE (1) SET FOR USE DURING CONSTRUCTION, AND ONE (1) SET TO BE INSTALLED

IMMEDIATELY PRIOR TO BALANCING. 10. DUCT SIZES ARE SHOWN IN INCHES AND DO NOT INCLUDE FOR INTERNAL INSULATION.

11. PIPES AND EQUIPMENT MUST BE INSTALLED SO AS TO MINIMIZE THE TRANSFER OF VIBRATION TO THE BUILDING AND ALSO TO ALLOW FOR EXPANSION AND CONTRACTION AS NECESSARY. 12. EQUIPMENT SHALL BE ASHRAE 90.1 COMPLIANT.

13. LINE VOLTAGE STARTERS, CONTROLS AND EQUIPMENT SAFETY SWITCHES SHALL BE SUPPLIED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED ON THE ELECTRICAL DESIGN DRAWINGS. LOW VOLTAGE STARTERS AND CONTROLS SHALL BE SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. 14. ELECTRICAL WIRING, CONDUIT, JUNCTION BOXES, BACK BOXES, MOUNTING HARDWARE ETC. ABOVE 24V TO BE SUPPLIED AND INSTALLED BY

ELECTRICAL CONTRACTOR. CONTROLS WIRING, CONDUIT, JUNCTION BOXES, BACK BOXES, MOUNTING HARDWARE ETC. 24V AND BELOW TO BE INSTALLED BY MECHANICAL CONTRACTOR (MECHANICAL CONTRACTOR MAY SUB-CONTRACT THIS WORK TO ELECTRICAL CONTRACTOR). 15. THERMOSTATS AND CONTROLLERS INTENDED TO BE OPERATED BY THE OCCUPANT AND LOCATED IN A BARRIER-FREE PATH OF TRAVEL. SHALL

BE MOUNTED 4FT (1200MM) ABOVE THE FINISHED FLOOR. 16. THE MECHANICAL CONTRACTOR SHALL INSTALL PIPE WITH SLEEVES IN ORDER TO PREVENT CONTACT WITH CONCRETE, MASONRY OR SIMILAR

17. ROOF CURBS AND FLASHINGS ARE TO BE SUPPLIED BY THE MECHANICAL CONTRACTOR, INSTALLED BY THE GENERAL CONTRACTOR/ROOFER.

18, ALL EQUIPMENT SHALL BE INSTALLED IN SUCH A MANNER THAT MANUFACTURER'S RECOMMENDED CLEARANCES ARE MAINTAINED. THE CONTRACTOR SHALL LAY OUT THE WORK BASED ON THE MANUFACTURER'S RECOMMENDED CLEARANCES AND ADVISE ENGINEER IMMEDIATELY IF ANY SITE CONDITIONS NEGATIVELY AFFECT THE PROPER INSTALLATION OF ALL EQUIPMENT

19. ALL DOOR UNDERCUTS INDICATED SHALL BE MIN 3/4". COORDINATE WITH GENERAL CONTRACTOR.

DATE

20. THIS CONTRACTOR SHALL REVIEW AND CONFIRM ALL EXISTING INDOOR METALLIC PIPING SYSTEMS ARE BONDED. PROVIDE BONDING FOR ALL NEW INDOOR METALLIC PIPING SYSTEMS AND EXISTING SYSTEMS WITHOUT PROPER BOND. BONDING SHALL BE INSTALLED TO THE REQUIREMENTS OF OESC 10-406. THE GENERAL CONTRACTOR SHALL DETERMINE IF BONDING IS BY MECHANICAL OR ELECTRICAL.

22. DUCTWORK CONNECTIONS TO OUTDOOR AIR HANDLING UNITS WITH HORIZONTAL DISCHARGE SHALL BE EQUIPPED WITH WEATHER-TIGHT GASKETS

KITCHEN VENTILATION SYSTEM FIRE SUPPRESSION SCHEMATIC

REFER TO KITCHEN VENTILATION SYSTEM SPECIFICATIONS ON DRAWING M1 FOR

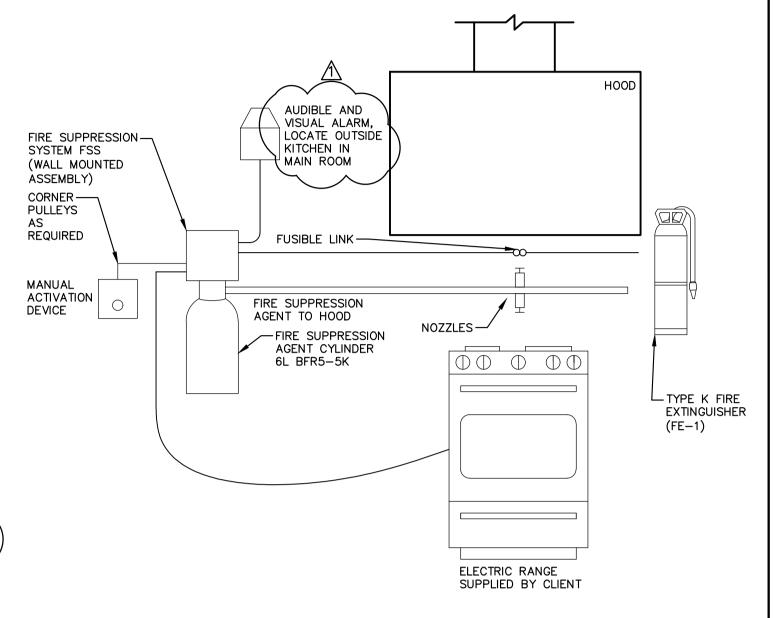
SEQUENCE OF OPERATIONS.

BY ENGINEER PER SPECIFICATION DRAWING M1.

DETAILED DESIGN BY SUPPLIER/CONTRACTOR. SUBMIT SHOP DRAWINGS FOR REVIEW

SCHEMATIC IS GENERAL ONLY. REFER TO MANUFACTURER'S INSTALLATION MANUAL FOR DETAILED WIRING INFORMATION

PROVIDE FACTORY PRE-PIPED NOZZLES FOR WET CHEMICAL FIRE SUPPRESSION SYSTEM CONFORMING TO NFPA 96, NFPA 17A, ULC 1254 AND AHJ REQUIREMENTS. BALLOON TEST REQUIRED, FIRE DEPARTMENT SHALL BE PRESENT TO WITNESS TEST.



KITCHEN VENTILATION FIRE SUPPRESSION SCHEMATIC

- SCALE: NTS

21. CLEAN ALL EXISTING GRILLES AND DIFFUSERS WHICH ARE SHOWN TO REMAIN. AND FLASHING SHALL BE PROVIDED.

DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

COMMENCING WORK. DRAWINGS ARE NOT TO BE

ALL SYMBOLS/DEVICES LISTED MAY NOT

BENCHMARKS

NOTES

REVISION DESCRIPTION ISSUED FOR CLIENT REVIEW JUNE/2025 JULY/2025 ISSUED FOR TENDER ISSUED FOR ADDENDUM #1 AUGUST/2025



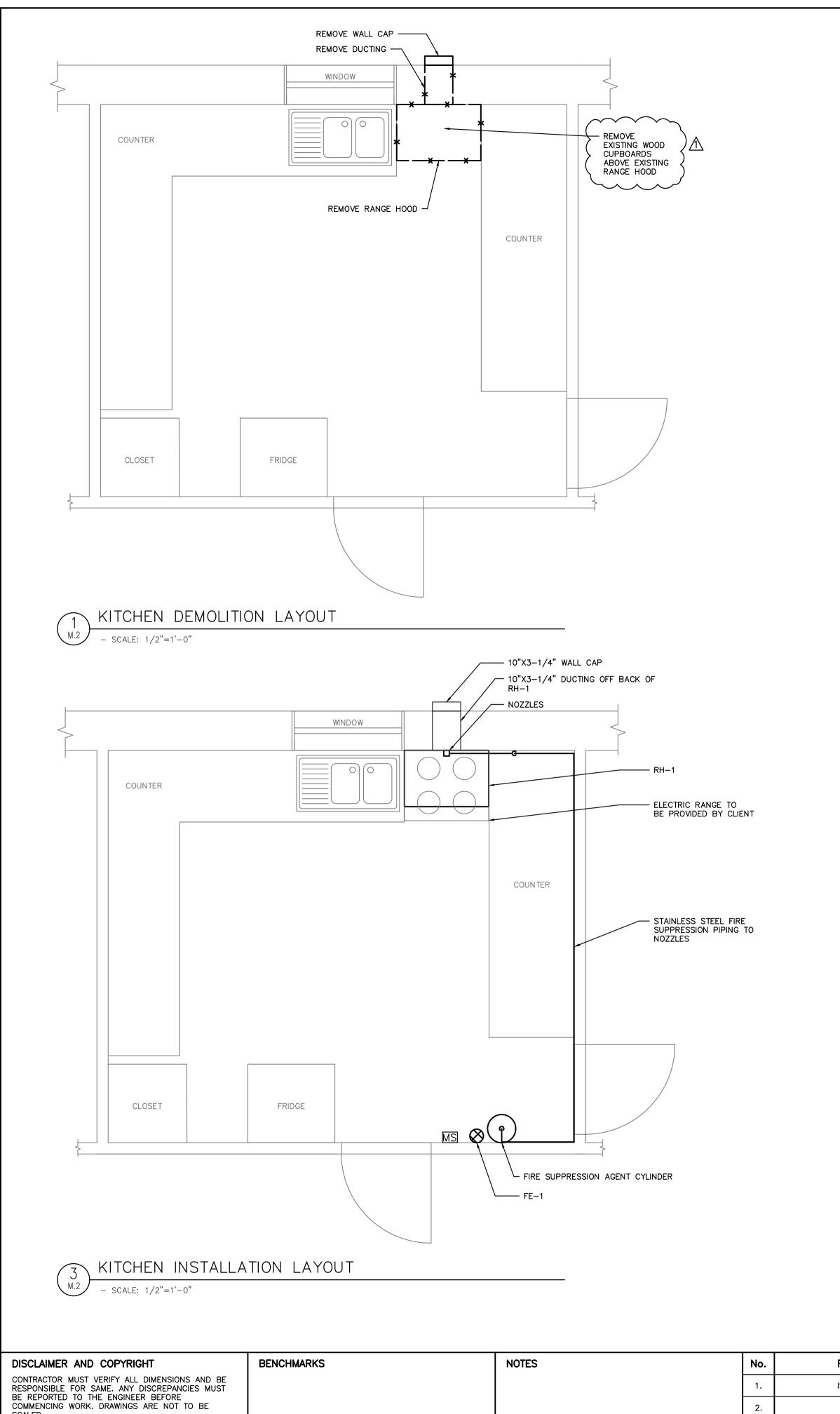


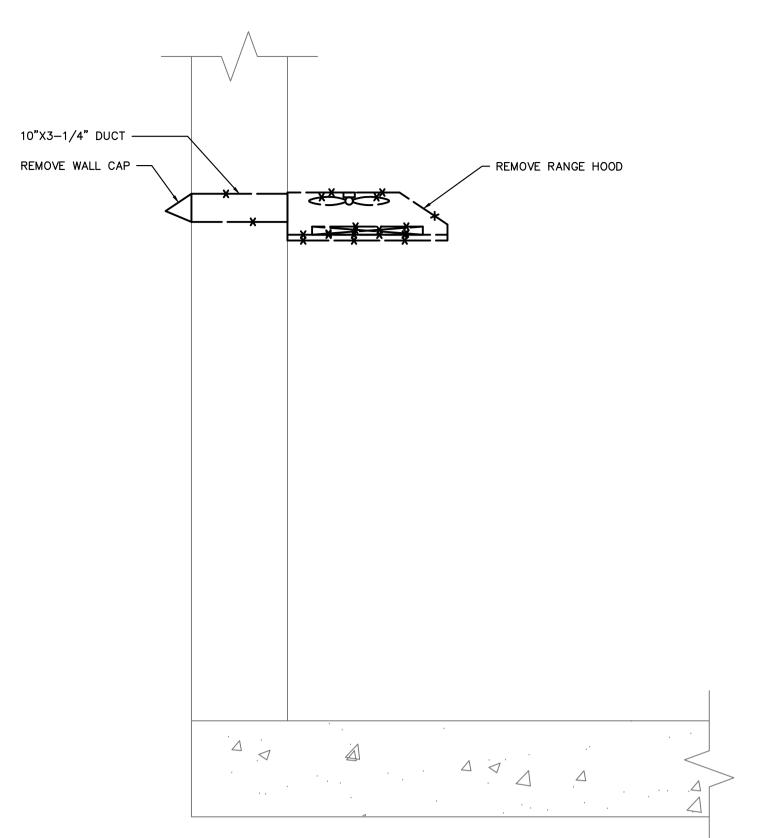




MECHANICAL SCHEDULES, LEGEND, SPECIFICATIONS, AND **DETAILS**

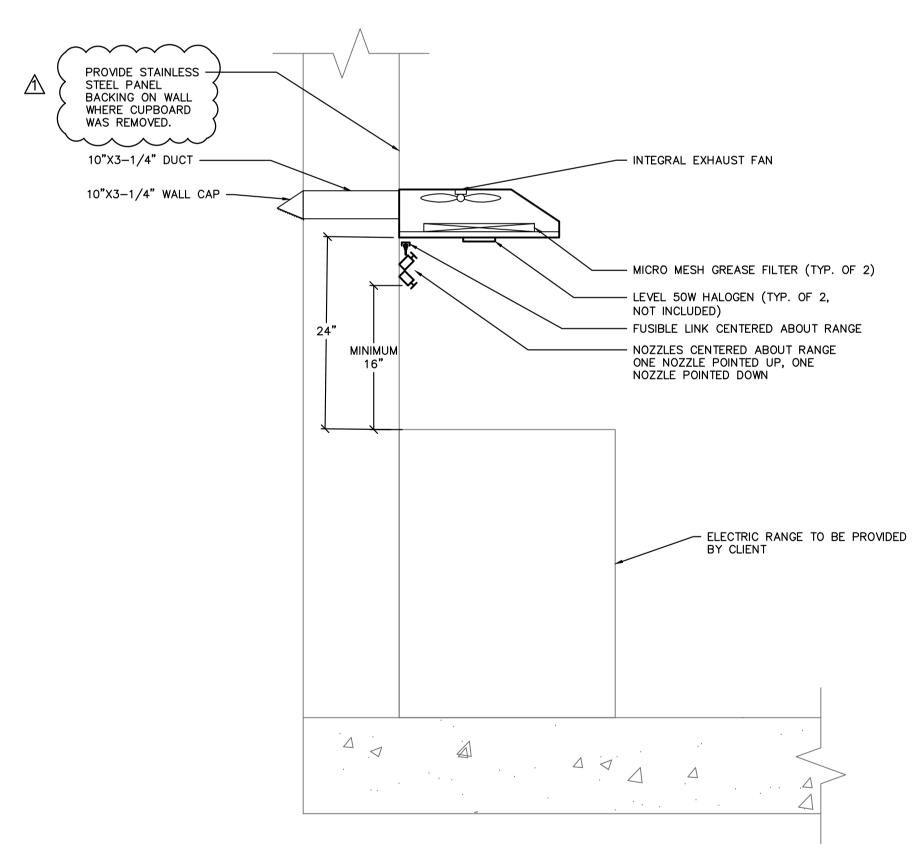
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KITCHEN DEMOLITION ELEVATION DETAIL

- SCALE: 1"=1'-0"



KITCHEN INSTALLATION ELEVATION DETAIL - SCALE: 1"=1'-0"

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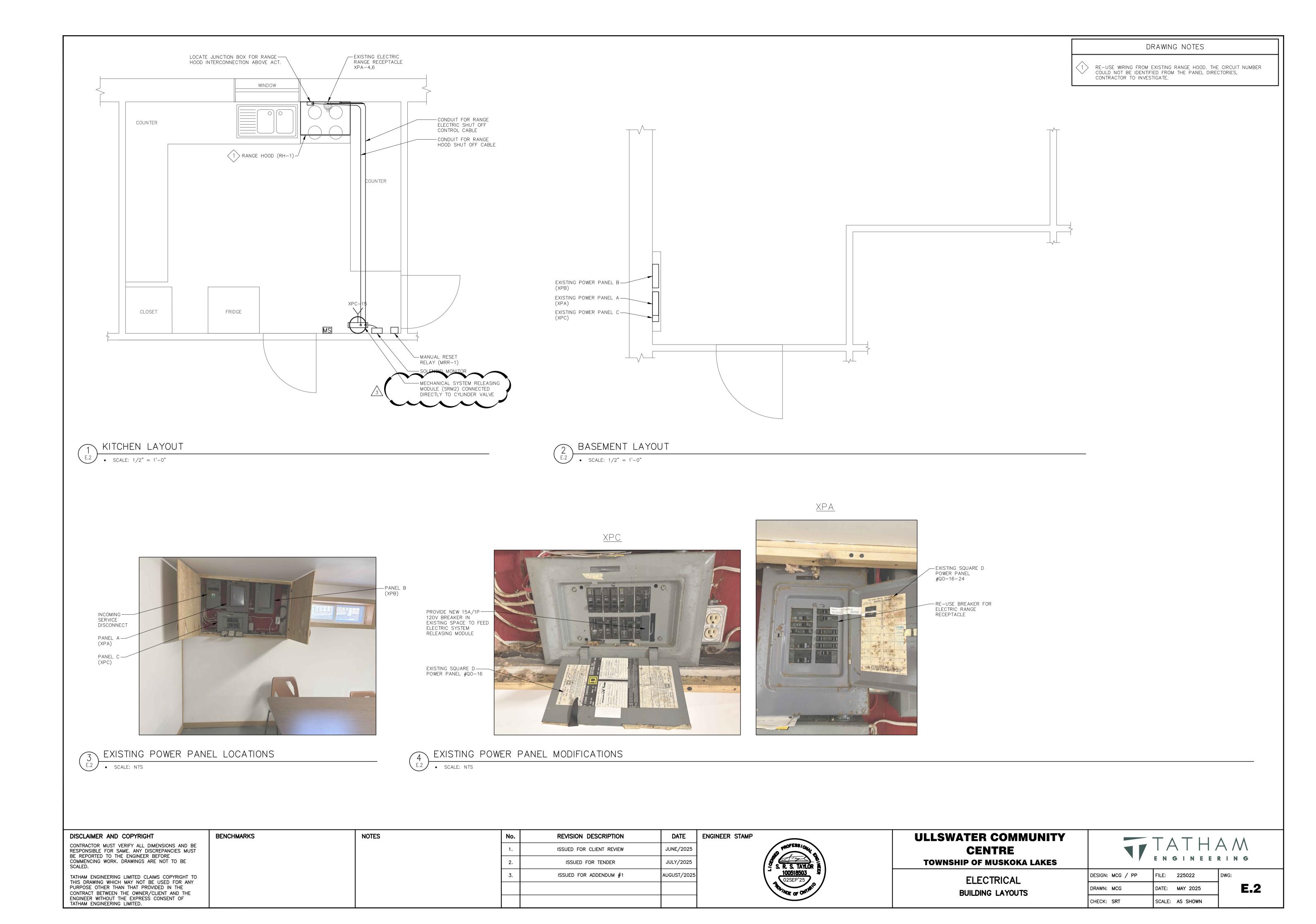
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ENGINEER STAMP

ULLSWATER COMMUNITY CENTRE TOWNSHIP OF MUSKOKA LAKES

MECHANICAL DEMOLITION AND INSTALLATION LAYOUTS

DESIGN: AB/MCG/JT FILE: 225022 DRAWN: AB/MCG DATE: MAY 2025 CHECK: JT SCALE: AS SHOWN



Electrical Specifications **Electrical Specifications Electrical Specifications** Page 1 of 5 Page 2 of 5 When drawings are returned "Conforms with Intended Design", the Contractor shall be PART 1 – GENERAL 1.4 Permits, Fees and Inspection responsible for distribution of additional copies of Shop Drawings as necessary and as requested by the Engineer. Provide all licenses, permits and certificates required by the LUC at no additional expense. The review of shop drawings by the Township or Engineer does not relieve the Contractor of their Arrange and pay for all required inspection(s), including but not limited to the Electrical Safety responsibilities for compliance with the Contract Documents. In case of a discrepancy between statement(s) or value(s) in this section or contract drawing(s), the higher statement or value takes precedence and shall govern. At end of project, provide PDF copy of the Operating and Maintenance Manuals of all equipment, Upon completion of the Work, provide the Township with final, unconditional certificates of approval by including copies of shop drawings and all test results. "Local Inspector, Inspection Department or Authority" mean agents of any authority having jurisdiction the local inspection authorities over construction and safety standards associated with any part of electrical work on site, such as ESA 1.8 Construction Record Drawings 1.5 Examination of the Site and Contract Documents "Power Supply Authority" or "LUC" means electrical local utility company responsible for delivery of Keep one set of all applicable contract (including updates) and shop drawings at the site. Examine Drawings and Specifications of the complete Project and become familiar with all local site electrical power to project site. Ensure that the latest issue drawings are marked up to reflect the work as installed and have these available for the Township's review at site. "Electrical Code" or "OESC" means Ontario Electrical Safety Code C22.1 or code in force at project Submission of Tender confirms the Contractor accepts the Contract and site conditions without location, latest edition. Upon completion of the work, transfer all revisions to a clean set of prints and submit to Consultant for "As-Built" record as part of the final job documentation. .5 "Indicated" means as shown on contract drawings or noted in contract documents. .3 Failure to determine the existing conditions or the nature of the construction shall not be a basis for "Provide" means fabricate, supply, install, test and commission the electrical system and/or equipment. granting compensation. 1.9 Finishes "Remove" or "Removed" means to disconnect, remove, and dispose of equipment, material or item. Shop-finish metal enclosures by application of rust resistant primer inside and out, and at least two 1.6 Construction Drawings coats of finishing enamel. The electrical drawings are diagrammatic, intended to convey the scope of work and indicate general 1.2 Scope of Work Clean and touch up any surfaces on shop-painted surfaces marred during shipment or installation with arrangements of equipment. Do not scale drawings unless a scale is identified. Provide new circuit breakers for new electric ranges as per contract drawings. paint selected to match the original. Have the location all equipment shown in the drawings reviewed by the Township before proceeding Provide control wiring for fire suppression system as per contract drawings. with the installation. Inform the Township of significant changes in location of equipment to meet field Wire brush and prime using a zinc-rich coating on any non-coated steel hangers, racks and fasteners conditions and receive their authorization before proceeding. Obtain from the Township the location of Site Acceptance Testing (SAT) Assistance: When system is ready for service, provide assistance with to prevent rusting. operating instructions and start-up procedures during scheduled commissioning. Provide all necessary equipment not definitely located in the drawings. assistance to place the equipment into normal operating modes and train the Township operators. 1.10 Warranty Locations of all material equipment indicated in the drawings are approximate and may be subject to Coordinate construction schedule with the Township prior to commencing work. revision found necessary or desirable by the Consultant at the time the work is installed. The Township .1 All material to warrantied for material and labour for one (1) year upon substantial completion. may at their discretion request the relocation of electrical equipment within three metres of that shown Conduit systems, as indicated, complete with wiring and terminations. prior to roughing in. This relocation shall be at no additional cost. PART 2 – PRODUCTS All conduit, fittings, outlets, field terminations, field wiring and cable as required, to provide a complete Drawings do not generally indicate the number of wires within conduits for control wiring. Provide the 2.1 Basic Materials operating system. correct wire size and quantity as required by the indicated circuitry and control diagrams. Include all necessary mounting hardware, channel supports and fasteners to provide a complete Provide all necessary mounting brackets, hangars, etc., as required for installation. 1.7 Submissions operating system. Upon delivery of equipment on site and quantities accounted for, the contractor will assume liability for Submit shop drawings in accordance with general Contract Conditions and include arrangement ESA Inspections throughout project construction stages as required. Final inspection certificate will be required for Substantial Performance. drawings, bill of materials, diagrams, nameplate drawings and product data as applicable for the Contractor is responsible for all labour and material costs for equipment failures during the warranty following equipment: 1.3 Standards .1 Circuit breakers. Tandem breakers. Provide all products and services in accordance with the latest addition of the following codes and 2.2 Circuit Breaker Fire suppression system range isolation device c/w manual reset. standards: Coordinate breaker requirements with existing panelboard manufacturer. .2 Product data sheets shall include the name of the manufacturer and be clearly marked to show which Ontario Electrical Safety Code, latest edition applicable. Canadian Standards Association items, features and options are offered. 2.3 Low Voltage Wire (1000V and Below) Ontario Building Code, Latest Edition. Shop drawings that are not presented as required will be returned for revision and resubmission. Conductors: stranded Copper conductors, with minimum power conductor size: No. 12 AWG, minimum Submittal Procedure: control conductor size: No. 14 AWG. The Contractor shall submit digital copies in PDF format to the Owner and Engineer via email. Power conductors: size as indicated, with cross linked polyethylene (XLPE) insulation rated 1000 V -All drawings are to be submitted electronically in pdf format. RW90 or RWU90, as indicated. The drawings will be returned to the Contractor stamped and marked "Conforms with Intended Design", "Conforms with Intended Design with Revisions Noted", or "Non-Conforming – Revise Provide Sunlight Resistant ("SR" type) insulated conductors where exposed to weather. and Resubmit". Control conductors: RW90, XLPE insulation rated 600V – RW90. When drawings are returned "Non-Conforming – Revise and Resubmit", make the necessary alterations and resubmit. Control wiring: copper with thermoplastic insulation type TEW rated at 600V. When drawings are returned "Conforms with Intended Design with Revisions Noted", the drawings may be used to execute the work in compliance with the Contract Documents. No 2.4 Conduits and Ducts other alterations are to be made to the drawings by the Contractor subsequent to receipt of .1 Minimum above grade conduit size: 21mm (3/4"), and minimum below grade conduit size: 27mm (1"). drawings stamped and marked as above. If further changes are made in addition to the Engineer's notations, then the drawings must be resubmitted for further review. Electrical Specifications **Electrical Specifications** Page 4 of 5 Page 5 of 5 Rigid PVC conduit, manufactured to schedule 40 wall thickness. Solvent weld compound for all PVC .3 Provide insulation test using 500V megger on all new power cables. joints. Complies with CSA C22.2 No. 211.2-06. All conduit to be UV rated. **END OF SPECIFICATIONS** Fittings: manufactured for use with conduit specified. Coating and UV rating: same as conduit. Fittings to incorporate nylon insulated throat or bushing. 4 Factory "ells" where 90° bends. Use large or utility" sweeping bends to reduce pulling cable tensions. Armoured cable is an acceptable alternative to conduit. Armoured cable must carry a Flame Test rating FT4 or minimum rating as prescribed by the suppression system and range control manufacturer. Maccellain ous Equipment Wire markers: computer printed, black letters on white background, self-laminating – vinyl markers, number of markers as required. Cable markers for cables or conductors greater than 13 mm diameter: strap-on type, rigid PVC, black letters on white background, with PVC covered aluminium straps. Terminal blocks: minimum 600 V rated, modular, sized to accommodate conductor size used. Where screw-type terminals are provided on equipment field wiring: terminate with pressure-type insulated copper fork tongue terminals. Splice connectors for wire sizes Nos. 12-10 AWG inclusive: compression spring type. Splice connectors for wire sizes No. 8 AWG and larger: split-bolt type, sized to suit number and size of conductors, c/w flame retardant foot-type insulator. Cable ties shall be nylon, one-piece, self-locking type PART 3 – EXECUTION 3.1 Installation Requirements Install circuit breaker (s) as indicated. Make power and control connections as indicated. Make grounding connections between equipment ground busses and system grounding system. Connect loads to circuits. Perform a "load balance" check after all loads are connected. Breaker sizes listed in the panelboard schedule(s) are provided as a general guide. Prior to installation, contractor to confirm all breaker sizes with final equipment loads Contractor to size all panelboard feeder wiring and conduit based on Ontario Electrical Safety Code latest edition. Include insulated ground conductor in all conduit raceways. Provide an updated typed directory for the panelboard. Check all factory-made connections for mechanical security, electrical continuity and current phasing. Provide a Lamicoid nameplate on new circuit breaker and new power panelboard. Lamicoid: 3mm thick plastic engraving sheet, black face, white core, with double-sided adhesive tape.

DISCLAIMER AND COPYRIGHT

CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE

3.2 Conduits and Wiring

3.3 Testing and Commissioning

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

BENCHMARKS NOTES

Install all wire and cable according to the drawings, with a minimum power conductor size of No. 12

Notify the Township at least three working days before the testing and commissioning is scheduled to start. The Township may request repetition of any test for which due notification was not received.

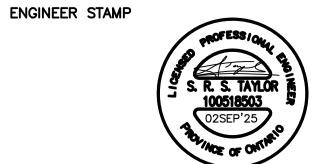
No splices shall be permitted in cable or wiring runs, and shall only be permitted in junction boxes. Identify each conductor by plastic slip-on markers at each termination with circuit or wire number.

.4 Use CSA approved lubricants of type compatible with cable jacket to reduce pulling tension.

.1 Provide testing and commissioning of all electrical work and control systems.

AWG and minimum control conductor size of No. 14 AWG.

REVISION DESCRIPTION DATE ISSUED FOR CLIENT REVIEW JUNE/2025 JULY/2025 ISSUED FOR TENDER ISSUED FOR ADDENDUM #1 AUGUST/2025



ULLSWATER COMMUNITY CENTRE **TOWNSHIP OF MUSKOKA LAKES**



ELECTRICAL SPECIFICATIONS

FILE: 225022 DESIGN: MCG / PP DRAWN: MCG DATE: MAY 2025 CHECK: SRT SCALE: AS SHOWN

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