1. SPECIFIC REQUIREMENTS

1.1 GENERAL

.1 ALL CONTRACT'S CLAUSES, ALL DEPARTMENTAL REPRESENTATIVE CLAUSES, ALL CLAUSES PERTAINING TO THE MECHANICAL SPECIFICATIONS, THE INDICATIONS ON ALL DRAWINGS RELATIVE TO THIS DOCUMENT AS WELL AS ALL THE ADDENDA ARE AN INTEGRAL PART OF THE PROJECT.

.2 COMPLY WITH THE DEPARTMENTAL REPRESENTATIVE'S INSTRUCTIONS REGARDING THE BID FORM TO ADOPT.

1.2 LAWS, REGULATIONS, AND INSURANCES

.1 COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS AS WELL AS REQUIREMENTS OF THE COMPETENT AUTHORITY. MAKE ALL PERMIT AND INSPECTION REQUESTS AND PAY ALL FEES.

.2 MAINTAIN ALL REQUIRED INSURANCE POLICIES COVERING "CONSTRUCTION RISKS" AND COMPLY WITH THE WORKERS' COMPENSATION ACT. PROVIDE THE CERTIFICATES STATING THAT THE RULES OF THE "COMMISSION DES NORMES, DE L'ÉQUITÉ, DE LA SANTÉ ET DE LA SÉCURITÉ DU TRAVAIL" (CNESST) HAVE BEEN COMPLIED WITH AND THAT THE NECESSARY LIABILITY INSURANCES ARE IN FORCE.

.3 ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF APPLICABLE FEDERAL, PROVINCIAL, MUNICIPAL, OR OTHER STANDARDS AND CODES.

1.3 SITE VISIT AND DRAWINGS

.1 VISIT THE SITE AND EXAMINE THE LOCAL CONDITIONS. REVIEW ARCHITECTURAL, MECHANICAL, ELECTRICAL, EQUIPMENT, OR OTHER APPLICABLE DRAWINGS BEFORE BIDDING.

.2 NO SUPPLEMENT WILL BE GRANTED FOR IGNORANCE OF THESE LOCAL CONDITIONS.

.3 TAKE ACCURATE MEASUREMENTS ON SITE BEFORE FABRICATING.

1.4 DEPARTMENTAL REPRESENTATIVE'S REQUIREMENTS

.1 COMPLY WITH THE DEPARTMENTAL REPRESENTATIVE'S REQUIREMENTS FOR THE PERFORMANCE OF THE WORK, ACCESS TO THE SITE, TRANSPORTATION OF MATERIALS, ACCESS TO THE WORK SITE, OR ANY OTHER CONTROL THAT MAY BE REQUIRED.

.2 BE AWARE OF THE REQUIREMENTS BEFORE BIDDING.

.3 RESPECT SCHEDULE AND COORDINATE WORK WITH OTHER TRADES.

.4 COORDINATE WORK SCHEDULES AND SERVICE INTERRUPTIONS (AT LEAST 24 HOURS IN ADVANCE) WITH DEPARTMENTAL REPRESENTATIVE.

1.5 CONTRACTOR'S RESPONSIBILITY

.1 SUBMIT FOR VERIFICATION, SIX (6) HARD COPIES OR DIGITAL FORMAT (.PDF), SHOP DRAWINGS OF ALL NEW MECHANICAL EQUIPMENT.

.2 PROVIDE A WRITTEN GUARANTEE FOR A PERIOD OF AT LEAST ONE (1) YEAR FROM THE DATE OF PROVISIONAL ACCEPTANCE OF THE WORK.

.3 DURING THE WARRANTY PERIOD, REPAIR OR REPLACE ALL MATERIALS AND REDO DEFECTIVE WORK, AT NO COST TO THE DEPARTMENTAL REPRESENTATIVE.

.4 AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE THE DEPARTMENTAL REPRESENTATIVE WITH THREE (3) HARD COPIES OF THE INSTRUCTION, OPERATION, AND MAINTENANCE BOOKLETS FOR THE EQUIPMENT AND SYSTEMS, INCLUDING SHOP DRAWINGS AND ANNOTATED "AS_BUILT" DRAWINGS. ALL INFORMATION SHALL BE BOUND IN A HARDCOVER NOTEBOOK.

.5 ALSO PROVIDE INSPECTION AND ACCEPTANCE CERTIFICATES ISSUED BY THE COMPETENT AUTHORITIES AS WELL AS GUARANTEES.

.6 SPECIALIZED CONTRACTORS SHALL PERFORM ALL MECHANICAL WORKS.

1.6 SCOPE OF WORK

.1 PROVIDE REQUIRED LABOR, MATERIALS, AND TOOLS TO PERFORM WORKS SHOWN ON THE DRAWINGS. THESE WORKS INCLUDE SUPPLY, INSTALLATION, AND CONNECTION OF EQUIPMENT AND DUCTS, SUPPLY AND INSTALLATION OF SUPPORTS, ACCESSORIES, INSULATION, ETC., AS SUMMARIZED HEREAFTER, AS WELL AS THE REMOVAL OF DUCTS AND EXISTING ACCESSORIES NOT REUSED, AS INDICATED ON DRAWINGS.

.2 ALL MECHANICAL WORK NECESSARY FOR THIS REFIT IS DESCRIBED ON THE DRAWINGS. ALL WORK SHALL BE DONE ACCORDING TO THE REQUIREMENTS AND DETAILS APPEARING ON THESE DRAWINGS AND ON THE ARCHITECTURAL DRAWINGS PREPARED FOR THIS PROJECT.

1.7 MISCELLANEOUS WORK AND OPENINGS

.1 CONCRETE POURING WORK, OPENINGS, REINFORCEMENT OF OPENINGS, AND SEALING REQUIRED FOR STRUCTURES, ETC., ARE UNDER THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. HOWEVER, HOLES OF 100 MM IN DIAMETER AND LESS ARE UNDER THE RESPONSIBILITY OF THE VARIOUS SPECIALIZED CONTRACTORS AND ARE TO BE EXECUTED USING A ROTARY DRILL.

.2 SEAL ALL RESIDUAL SPACES AROUND PIPES AND DUCTS PASSING THROUGH WALLS AND FLOORS TO MAINTAIN THE HOMOGENEITY AND INTEGRITY OF THE ELEMENTS INVOLVED AS WELL AS FIRESTOP DIVISIONS.

.3 DRILLING OR CUTTING IN ANY STRUCTURAL MEMBER SHALL BE SUBJECT TO THE SUPERVISION OF THE DEPARTMENTAL REPRESENTATIVE WHO SHALL PROVIDE APPROVAL.

.4 WHEN WORKS ARE CARRIED OUT IN AN EXISTING BUILDING, TAKE THE APPROPRIATE MEANS TO DETECT THE PRESENCE OF CONDUITS IN THE SLABS. ANY DAMAGE TO EXISTING CONDUITS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

.5 IDENTIFY ALL MECHANICAL EQUIPMENT BY MEANS OF BLACK PLASTIC PLATES WITH LETTERING ENGRAVED IN WHITE, FIXED WITH SCREWS OR RIVETS, AND NOT JUST GLUED. PLATES OF CONTROL ELEMENTS CAN BE ATTACHED USING CHAINS.

1.8 START-UP AND TESTING

.1 PERFORM NECESSARY PROOFS AND TESTS IN THE PRESENCE AND TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE TO DEMONSTRATE THE PROPER OPERATION OF MECHANICAL AND ELECTRICAL SYSTEMS AND EQUIPMENT.

.2 EACH SYSTEM SHALL BE SWITCHED ON TO ENSURE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE INDICATIONS ON DRAWINGS AND SPECIFICATION.

1.9 EXISTING INSTALLATIONS

.1 IN THE CASE OF AN EXISTING BUILDING, A SITE VISIT IS REQUIRED SO THAT THE CONTRACTOR BECOMES FAMILIAR WITH WHAT COULD HINDER THE PERFORMANCE OF HIS WORK. NO CLAIMS DUE TO IGNORANCE OF LOCAL CONDITIONS WILL BE TAKEN INTO CONSIDERATION.

.2 CONCERNING THE RETROFIT, THE CONTRACTOR SHALL REMOVE AND RELOCATE EXISTING EQUIPMENT AS INDICATED ON THE DRAWINGS.

.3 ALL EQUIPMENT REMOVED AND NOT REINSTALLED SHALL BE OFFERED TO THE DEPARTMENTAL REPRESENTATIVE AND REMOVED FROM THE PREMISES, FREE OF CHARGE, IF THE LATTER DOES NOT WISH TO KEEP THEM.

.4 THE CONTRACTOR SHALL PROVIDE FOR, AT NO ADDITIONAL COST, THE DISMANTLING AND REASSEMBLY OF MINOR INSTALLATIONS THAT MAY BE DETRIMENTAL TO THE PERFORMANCE OF HIS WORK.

1.10 CONTINUITY OF SERVICES IN EXISTING BUILDINGS

.1 THE CONTRACTOR SHALL WORK CLOSELY WITH THE DEPARTMENTAL REPRESENTATIVE FOR ANY INTERRUPTION OF SERVICE. THESE INTERRUPTIONS SHOULD BE MINIMIZED SO AS TO CAUSE THE LEAST POSSIBLE INTERFERENCE TO THE PROPER FUNCTIONING OF THE BUILDING'S ROUTINE ACTIVITIES. NO PARTIAL OR TOTAL INTERRUPTION IS TO BE PERFORMED WITHOUT THE DEPARTMENTAL REPRESENTATIVE PERMISSION.

1.11 INSPECTION OF EXISTING INSTALLATIONS

.1 THE CONTRACTOR SHALL, BEFORE COMMENCING WORK, CHECK ALL EQUIPMENT WHOSE SERVICE WILL REQUIRE INTERRUPTION TO ALLOW THE EXECUTION OF THE WORK.

.2 THE CONTRACTOR SHALL FIRST VERIFY THAT THE SYSTEMS OPERATE NORMALLY. HE SHALL ALSO INFORM THE DEPARTMENTAL REPRESENTATIVE OF ANY ANOMALIES DETECTED DURING THIS EXAMINATION.

.3 THE CONTRACTOR SHALL RESTART ALL SYSTEMS AT THE END OF THE REPAIR WORKS AND DEMONSTRATE THAT THE SYSTEMS OPERATE AS BEFORE.

.4 IF, AT THE TIME OF THE PRELIMINARY EXAMINATION OR AUDIT, THE CONTRACTOR FINDS ANY DEFICIENCY WHATSOEVER, HE SHALL IMMEDIATELY NOTIFY THE DEPARTMENTAL REPRESENTATIVE WHO WILL TAKE THE NECESSARY MEASURES.

1.12 ANCHORING ELEMENTS

.1 PERFORATED METAL STRIPS ARE PROHIBITED.

.2 RAMSET TYPE IMPACT ANCHORS AND DROP-IN ANCHORS ARE PROHIBITED.

.3 ANCHORING ELEMENTS FOR CONCRETE SUSPENSION: HILTI, KWIK HUS-EZI AND HILTI, KWIK BOLT TZ.

2. PLUMBING

2.1 SCOPE OF WORK

.1 SUPPLY, INSTALL, CONNECT, AND MODIFY ALL EQUIPMENT AND APPARATUS AS INDICATED ON DRAWINGS, AND AS DESCRIBED BELOW.

.2 WORKS INCLUDE, AMONG OTHERS, THE FOLLOWING:

.1 RELOCATION OF THE MAIN WATER INLET;

.2 DEMOLITION OF THE SANITARY SYSTEM AS INDICATED ON DRAWINGS;

.3 THE SUPPLY, INSTALLATION AND START-UP OF NEW SANITARY WARE AS INDICATED ON THE PLANS. CONNECTION OF EXISTING DEVICES TO NEW DOMESTIC WATER AND DRAINAGE NETWORKS ;

.4 SUPPLY AND INSTALLATION OF DOMESTIC WATER, DRAINAGE AND VENT PIPING AS INDICATED ON DRAWINGS.

.5 THERMAL INSULATION OF ALL NEW DOMESTIC WATER PIPING AND VENT OUTLET;

2.2 BRACKETS AND SUSPENSIONS

.1 CARBON STEEL AND ELECTROGALVANIZED FINISH THREADED RODS.

.2 STEEL OR CAST-IRON PIPING, TYPE 1 ADJUSTABLE STIRRUP.

.3 COPPER PIPING, TYPE 1 ADJUSTABLE STIRRUP, COPPER FINISH.

.4 CAST-IRON EVACUATION AND VENTILATION PIPE WITH MECHANICAL JOINTS, STEEL, DOUBLE HOOK TYPE ADJUSTABLE ON BOTH SIDES OF THE JOINT.

.5 SPACING BETWEEN SUPPORTS AND SUSPENSIONS AS WELL AS THE DIAMETER OF THE SUSPENSION RODS SHALL COMPLY WITH THE STRICTEST OF THE FOLLOWING REQUIREMENTS:

.1 COPPER PIPING DN ½ AND UNDER: ONE (1) SUPPORT EVERY 1.5 M;

.2 CAST-IRON PIPING SHALL BE SUPPORTED AT ALL JOINTS OR AT EACH INTERLOCKING. THE DISTANCE BETWEEN TWO SUPPORTS SHALL NOT EXCEED 3,000 MM. THIS DISTANCE SHALL BE REDUCED TO 1 M WHEN ADJACENT FITTINGS SPACED 300 MM OR LESS ARE INSTALLED IN MECHANICAL JOINT PIPING;

.3 SUPPORT WITHIN 300 MM OF EACH HORIZONTAL BEND.

2.3 PIPING

.1 ABOVE GROUND POTABLE HOT AND COLD WATER, HARDENED COPPER, TYPE "L".

.1 THREADED CONNECTIONS IN CAST BRONZE, GRADE 125, OR WELDED CAST COPPER, OR WELDED COPPER AND COPPER ALLOY. SOLDERING (SOFT) TIN/ANTIMONY 95/5. TEFLON TAPE FOR SCREWED JOINTS.

.2 SANITARY AND VENTILATION EVACUATION, ABOVE GROUND, DN LESS THAN 3, AND RELATED FITTINGS, "DWV" TYPE, COPPER.

.1 CAST BRASS OR WROUGHT COPPER FITTINGS. SOFT WELDING: TIN/ANTIMONY 95/5.

.3 SANITARY AND VENTILATION EVACUATION, ABOVE AND UNDERGROUND, DN EQUAL TO OR GREATER THAN 3, AND RELATED FITTINGS, CAST IRON.

.1 MECHANICAL SEALS WITH NEOPRENE OR BUTYL RUBBER GASKETS. 0.2 MM THICK STAINLESS_STEEL COLLARS AND T-304 STAINLESS-STEEL CLAMPS.

2.4 VALVES

.1 FOR COPPER POTABLE WATER PIPING, VALVES WITH WELDED CONNECTIONS DN 2 OR LESS AND FLANGED FOR DN 2½ AND GREATER.

.1 ACCEPTABLE PRODUCTS:

.1 CHECK VALVE DN 2 AND LESS: CRANE NO. 1342; NIBCO S 433 B; NILWAUKEE NO. 1510T; NEWMAN HATTERSLEY A61M; TOYO-R/W NO. 237; KITZ NO. 23.

.2 BALL VALVE DN 2½ AND LESS: CRANE NO. F9222; ANVIL F 171 S; MILWAUKEE NO. BA-150; NEWMAN HATTERSLEY 1999; TOYO_R/W NO. 5049 A; KITZ NO. 59.

2.5 SPECIAL EQUIPEMENT

.1 CLEANOUT: ZURN, Z-1445; WATTS-DRAINAGE CO460; JAY R. SMITH, 4510.

.2 RAE-1: OUTDOOR WATERING VALVE.

.1 ACCEPTABLE PRODUCTS : ZURN, Z1320; WATTS-DRAINAGE, HY-725; JAY R.SMITH, FIG.5509QTNB

.3 CS-1: SERVICE SINK.

.1 FLOOR-MOUNTED MOLDED STONE SINK.

.1 EXTERNAL DIMENSIONS: WIDTH OF 610 MM X DEPTH OF 610 MM X HEIGHT OF 250 MM.

.2 ACCESSORIES.

.1 VINYL BUMPER.

.2 16 MM DIAMETER, 760 MM LONG RUBBER HOSE WITH STAINLESS STEEL HOSE SUPPORT.

.3 MOP HOLDER: STAINLESS STEEL.

.4 DN 3 DRAIN BLOCK: STAINLESS-STEEL GRID.

.5 STAINLESS-STEEL WALL GUARDS.

2.6 PIPING INSULATION

.1 MATERIALS USED SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE POWER RATING OF NOT MORE THAN 50, IN ACCORDANCE WITH CAN/ULC-S102 OR S102.2. MATERIALS SHALL HAVE BEEN TESTED TO ASTM C411 STANDARD.

.2 P-1 TYPE INSULATION: PREFORMED MINERAL FIBERS; OPERATING TEMPERATURE UP TO 200°C.

.1 USAGE: DRINKING WATER,VENT ON 5 M FROM THE ROOF.

.2 RIGID MINERAL FIBER SHEATH COMPLYING WITH CAN/CGSB 51.9 WITH VAPOR BARRIER, JACKET, AND LINING MATERIAL IN ACCORDANCE WITH CGSB 51-GP-52M STANDARD.

.3 COEFFICIENT OF THERMAL CONDUCTIVITY (K-VALUE) NOT EXCEEDING 0.033 W/M°C (0.231 BTU_PO/H FT²°F) AT AN AVERAGE TEMPERATURE OF 24°C (75°F).

.4 THICKNESS OF INSULATION, ACCORDING TO TABLE 109 OF THE REGULATION RESPECTING ENERGY CONSERVATION IN NEW BUILDINGS, E-1.1, R.1.

.3 TYPE P-1 INSULATION THICKNESS.

FLUID TEMPERATURE °C (°F)	NOMINAL DIAMETER OF PIPES (DN)			
	1 and less	1¼ to 2	2½ to 4	5 and greater
	Thickness in mm (in.)			
14-49 (56-120)	25 (1)		38 (1½)	
5-13 (41-55)	25 (1)	38 (1½)		
Less than 5 (41)	25 (1)	38 (1 ½)		

Travaux publics et Services gouvernementaux Canada
Public Works and Government Services Canada
Direction générale des biens immobiliers
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Région du Québec
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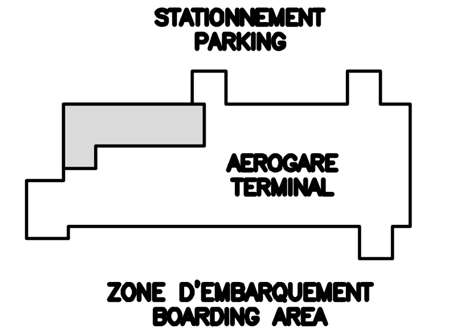

NOTE GÉNÉRALE:
LES UNITÉS DES DIMENSIONS SONT MÉTRIQUES
GENERAL NOTE :
DIMENSIONS ARE IN METRIC UNITS

CE DOCUMENT NE DOIT PAS ÊTRE UTILISÉ À DES FINS DE CONSTRUCTION/
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Projet *Project*

AEROGARE / TERMINAL
BLANC SABLON

LOURDES-DE-BLANC-SABLON

REMPLACEMENT DE LA LIGNE SANITAIRE À L'AÉROPORT DE LOURDES-DE-BLANC-SABLON / REPLACEMENT OF THE SANITARY LINE AT LOURDES - DE - BLANC - SABLON AIRPORT

Dessin *Drawing*

MÉCANIQUE
MECHANICAL

DEVIS ANGLAIS

ENGLISH DEVIS

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