

1 **NON-FREEZE OUTDOOR DRINKING FOUNTAIN DETAIL**  
SCALE: N.T.S

MECHANICAL LEGEND	
PLUMBING	
SYMBOL	DESCRIPTION
SAN	SANITARY DRAINAGE - ABOVE GROUND
SAN	SANITARY DRAINAGE - UNDERGROUND
CO	DOMESTIC COLD WATER SUPPLY
CO	CLEANOUT IN FLOOR/BELOW GRADE
MH	MANHOLE
WC-1*	DENOTES FIXTURE TYPE PER SPECIFICATION

THIS LEGEND IS GENERIC. ALL SYMBOLS LISTED MAY NOT BE APPLICABLE FOR THIS PROJECT. REFER TO FLOOR PLANS TO DETERMINE USED DEVICES AND EQUIPMENT.

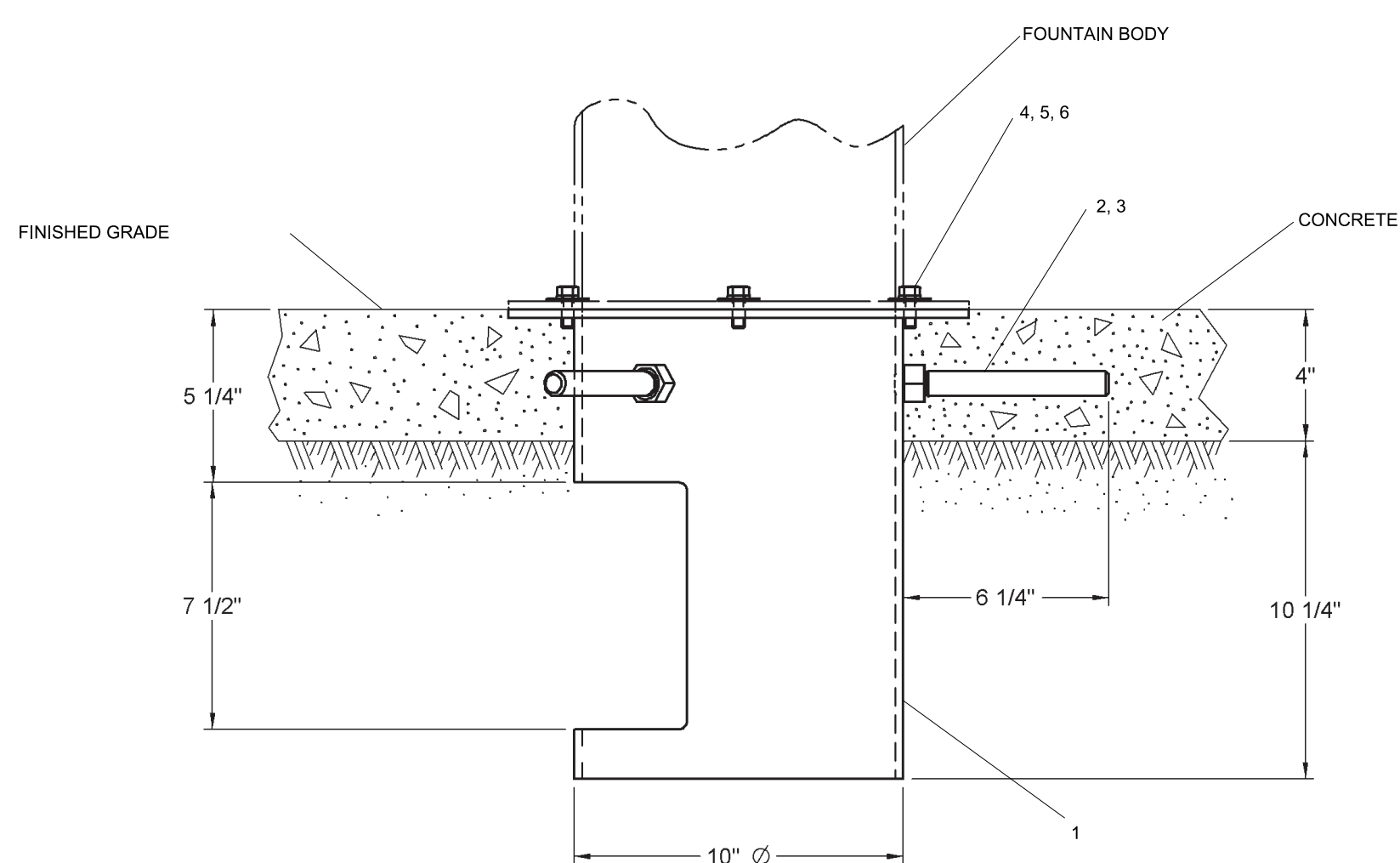
DRAWING LIST	
M-001	DRAWINGLIST, LEGEND, PLUMBING AND DETAIL
M-002	MECHANICAL SPECIFICATIONS

MECHANICAL LEGEND	
GENERAL	
SYMBOL	DESCRIPTION
[Symbol]	EXISTING TO REMAIN
[Symbol]	EXISTING TO BE DEMOLISHED
[Symbol]	EXISTING TO BE REMOVED FOR RELOCATION
[Symbol]	EXISTING RELOCATED IN NEW WORK
[Symbol]	NEW WORK
[Symbol]	CONNECT TO EXISTING
[Symbol]	AIRFLOW / PIPE FLOW DIRECTION
[Symbol]	PIPE TURNING DOWN
[Symbol]	PIPE TURNING UP
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	ROOM THERMOSTAT
[Symbol]	ROOM HUMIDISTAT
[Symbol]	PUMP
[Symbol]	CONTROL VALVE - TWO WAY
[Symbol]	CONTROL VALVE - THREE WAY
[Symbol]	ISOLATION VALVE
[Symbol]	BALANCING VALVE
[Symbol]	CHECK VALVE
[Symbol]	STRAINER - OVER 50MM WITH VALVED FLUSHING DRAIN
[Symbol]	PIPE BRANCH OFF TOP
[Symbol]	PIPE BRANCH OFF BOTTOM
[Symbol]	RELIEF VALVE
[Symbol]	VACUUM BREAKER VALVE
[Symbol]	VENTURI VALVE
[Symbol]	PRESSURE GAUGE
[Symbol]	TEMPERATURE GAUGE
[Symbol]	BRAIDED FLEXIBLE HOSES
[Symbol]	CAP
[Symbol]	SOLENOID VALVE
[Symbol]	FUSIBLE LINK VALVE
[Symbol]	ELECTRIC HEAT TRACING

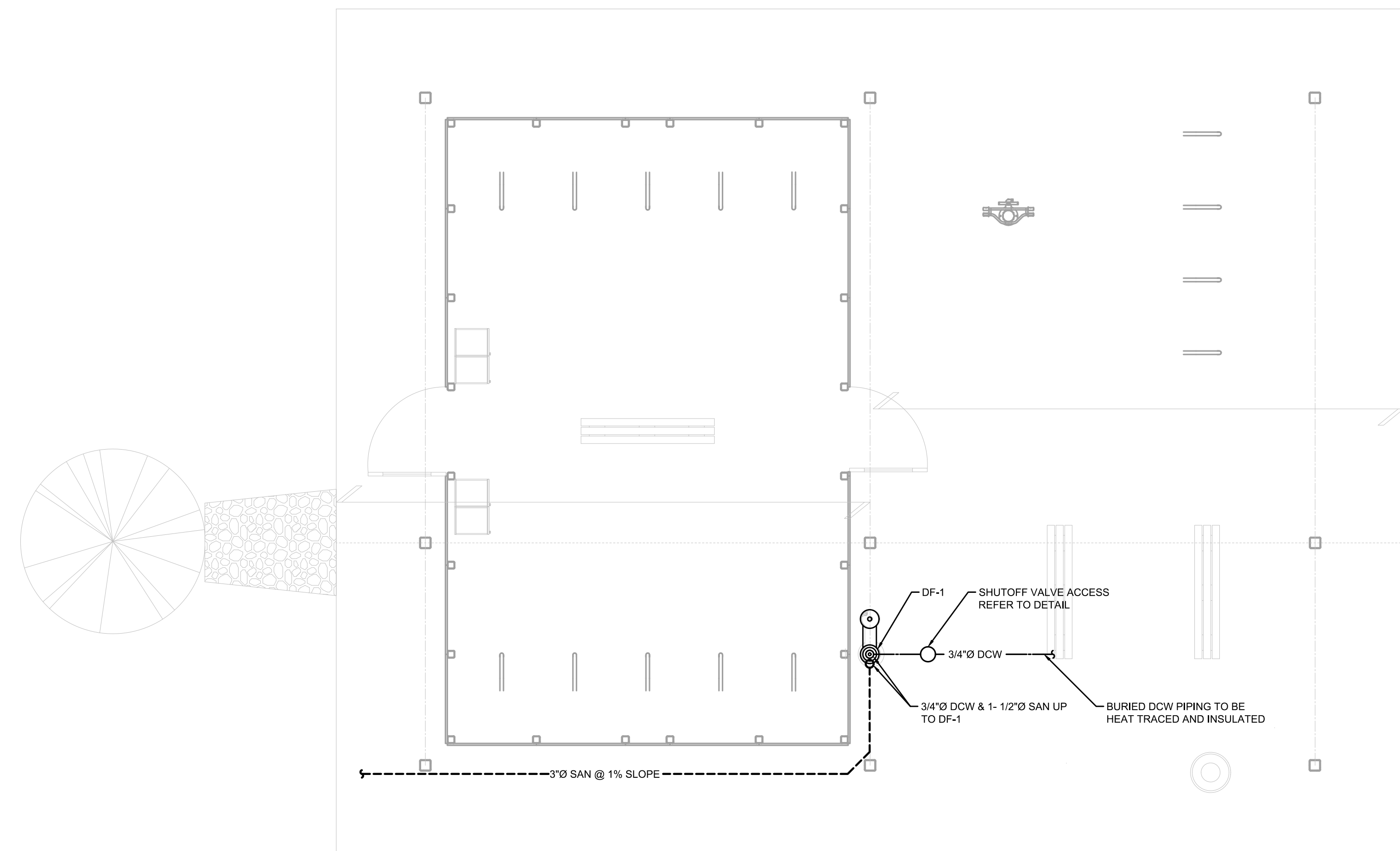
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HEAT TRACING SCHEDULE								
HEAT TRACING CIRCUIT	MANUFACTURER	MODEL	LOCATION	TOTAL LENGTH (FT)	TOTAL WATTAGE	CB SIZE (A)	V/PHz	REMARKS
DOMESTIC COLD WATER	CHROMALOX	CPRS-1CR	BELOW GROUND	PER LENGTH TO SUIT LOCATION OF STRUCTURE	UNDER 400 W	15	120/1/60	1, 2, 3, 4, 5, 6

**NOTE:**  
 1. LOCKABLE WATER PROOF ENCLOSURE COMPLETE WITH REMOTE TEMPERATURE SENSOR, TIMER BREAKER AND DISPLAY.  
 2. PROVIDE FT-66 FIBERGLASS INSTALLATION TAPE PCN512680 WITH PRESSURE SENSITIVE THERMOSETTING ADHESIVE. 3/8" WIDE, 310F RATING.  
 3. PROVIDE WL-05 ELECTRIC HEAT TRACING WARNING LABELS, WEATHER RESISTANT.  
 4. PROVIDE RG-PK-1 R&G POWER CONNECTION KIT PCN 386206 WITH ONE END SEAL AND TWO WARNING LABELS.  
 5. PROVIDE RG-SK-1 R&G SPLICE KIT PCN 386214.  
 6. PROVIDE LN-10 LINE SENSING HEAT TRACE RTD PCN 512607.  
 7. PROVIDE GROMA-FPI-BN FREEZE PROTECTION CONTROLLER PCN 532470, 1 CONTACTOR ( 1-2P @ 30A ), 120V.



2 **DIRECT BURY FOUNTAIN ADAPTER 97890C**  
SCALE: N.T.S



3 **FLOOR PLAN - PLUMBING**  
SCALE: 1/4" = 1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

No.	Description	Date
1	ISSUED FOR 90% CLIENT REVIEW	2026-03-12
2	ISSUED FOR CLASS B COSTING	2026-03-20

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CANADORE COLLEGE ACTIVE TRANSPORTATION HUB

CANADORE COLLEGE  
**LEGEND, DRAWING LIST, PLUMBING AND DETAIL**

Project number 5436

**M-001**

Scale AS SHOWN

**00 PROCUREMENT AND CONTRACTING REQUIREMENTS**

**00 30 00 - AVAILABLE INFORMATION**

**1.0 EXISTING CONDITION INFORMATION**

1.1 Review with Owner if existing drawings are available for review. The Consultant does not warrant them for accuracy nor for completeness, and it remains the Contractor's responsibility to verify field conditions inferred from such materials.

**2.0 EXISTING HAZARDOUS MATERIAL INFORMATION**

2.1 Review with Owner if existing Designated Substance Survey (DSS) report is available for review.

**00 70 00 - GENERAL CONDITIONS**

**1.0 INTENT**

1.1 Include all material, labour, equipment, and plant construction as necessary to make a complete installation as shown and specified hereinafter.

1.2 The organizational structure of the Specifications does not imply how the work is assigned to various design disciplines, trades, or subcontractors. The MasterFormat numbering system is not intended to determine which particular elements of the project manual are prepared by a particular discipline. Similarly, it is not intended to determine what particular work required by the project manual is the responsibility of a particular trade. It shall be the Contractor's responsibility to ensure that the systems specified hereafter are complete and operative.

**2.0 DRAWINGS AND SPECIFICATIONS**

2.1 The drawings and specifications are complementary each to the other, and what is called for by one, is to be binding as if called for by both.

2.2 Should any discrepancy appear between the drawings and specifications which leaves the Contractor in doubt as to the true intent and meaning, a ruling is to be obtained from the Consultant in writing before submitting Tender. If this is not done, the maximum, the most expensive alternate or option, will be provided in Base Tender Bid.

2.3 The drawings provide design intent, and are not to be used to measure or quantify material. Contractor is to coordinate installation of work so as to meet the design intent.

**00 73 00 - SUPPLEMENTARY CONDITIONS**

**1.0 GENERAL**

1.1 The requirements of the Supplementary General Conditions apply to this Specification as though written in full herein.

1.2 Refer to Architectural drawings for exact location of dimensioned equipment and devices.

1.3 Refer to Architectural drawings for additional notes which complement these specifications.

**2.0 HEALTH AND SAFETY REQUIREMENTS**

2.1 Be responsible for the safety of workers and the equipment on the project in accordance with all applicable safety legislation passed by federal, provincial, and local authorities governing construction safety. The more stringent regulations prevail.

**01 GENERAL REQUIREMENTS**

**01 10 00 - SUMMARY**

**1.0 SPECIFICATIONS LANGUAGE AND STYLE**

1.1 These specifications are written in the imperative mood and in streamlined form. The imperative language is directed to Contractor, unless stated otherwise.

1.2 Complete sentences by reading "shall", "Contractor shall", "shall be", and similar phrases by inference. Where a colon (:) is used within sentences and phrases, read the words "shall be" by inference.

1.3 Fulfill and perform all indicated requirements whether stated imperatively or otherwise.

1.4 When used in the context of a Product, read the word "provide" to mean "supply and install to result in a complete installation ready for its intended use".

**01 31 00 - PROJECT MANAGEMENT AND COORDINATION**

**1.0 PROJECT COORDINATION**

1.1 Read specifications and drawings of other trades, and conform with their requirements before proceeding with any work specified here as related to other trades. Cooperate with all other trades on the job, so that all equipment can be satisfactorily installed, and so that no delay is caused to any other trades.

1.2 Prior to fabrication and installation of equipment, ensure that such items can be installed as indicated without interference with the structure, or the work of other trades. If any materials are fabricated or installed prior to the investigation and reaching of a solution to the possible interference problems, necessary changes shall be made at the Contractor's expense.

1.3 Provide code or manufacturer required clear space for servicing, disassembly, and removal of equipment and components.

**2.0 FACILITY SERVICES COORDINATION**

2.1 Maintain all operational building services; shutdown of services shall only take place as authorized by base building and request to be in writing.

2.2 Co-ordinate with Property Management for scheduling of all work required to be done after office hours and weekends, i.e., drilling through slab, power shutdowns, interfacing to life safety systems, etc. all costs involved, including work to be done by the Property Management's approved fire alarm and life safety systems contractor, etc., shall be at Tenant Contractor's expense.

**01 33 00 - SUBMITTAL PROCEDURES**

1.1 Before delivery to site of any item of equipment, submit shop drawings complete with all data, pre-checked by the Contractor and stamped accordingly, for review by the Consultant. Indicate project name on each brochure or sheet, make reference to the number and title of the appropriate specification section, and provide adequate space to accommodate the Consultant's review stamp(s).

1.2 Submit shop drawings to the Consultant in electronic (PDF) format, as coordinated after award of contract. Where submittals are derived from digital originals, to ensure maximum quality and legibility, do not print and rescan documents; submittals made as such will be immediately rejected.

1.3 Submit a schedule of shop drawings within one week after award of contract. Group submittals by specification division as appropriate.

1.4 Submit Material Safety Data Sheet (MSDS) for all applicable products.

**01 40 00 - QUALITY REQUIREMENTS**

**1.0 PERMITS AND FEES**

1.1 Obtain and pay for all Permits and fees required for the execution and inspection of the Work and pay all charges incidental to such Permits. Submit to the Authority Having Jurisdiction the necessary number of drawings and specifications for examination and approval prior to commencement of work.

1.2 Arrange and pay for any special inspection of equipment specified if and when required.

**2.0 CODES AND STANDARDS**

2.1 Comply with current regulations of all applicable provincial and municipal codes and regulations, including, but not limited to, the

Ontario Building Code, and the requirements of any Authorities Having Jurisdiction (AHJ).

2.2 Comply with other standards as related to each trade.

**3.0 REFERENCES**

3.1 Health Canada / Workplace Hazardous Materials Information System (WHMIS), Material Safety Data Sheets (MSDS).

3.2 Ontario Building Code.

**4.0 QUALITY ASSURANCE**

4.1 Qualifications: Work to be carried out by qualified, licensed tradespersons or apprentices in accordance with Authorities Having Jurisdiction.

4.2 Only first class workmanship will be accepted, not only in regards to durability, efficiency and safety, but also in regards to neatness of detail. Present a neat and clean appearance on completion. Any unsatisfactory workmanship will be replaced at no extra cost.

4.3 Conform to the best practices applicable to the type of work. Install all equipment and systems in accordance with manufacturers' recommendations, and consistent with the general requirements of the specification.

**5.0 FIELD QUALITY CONTROL**

5.1 Carry out tests in presence of Owner, or designated representative.

5.2 Provide instruments, meters, equipment, and personnel required to conduct tests during and at conclusion of project.

**5.3 Manufacturer's Field Services**

5.3.1 Obtain written report from manufacturer verifying compliance of Work, in handling, installing, applying, protecting, and cleaning of product and submit Manufacturer's Field Reports.

**6.0 INSPECTIONS**

6.1 Furnish a Certificate of Acceptance from Inspection Department on completion of work.

6.2 The Consultant will carry out inspections and prepare deficiency lists for action by the Contractor, during, and on completion of the Project.

**01 50 00 - TEMPORARY FACILITIES AND CONTROLS**

1.1 Contractor shall assume responsibility for any disruption caused by his forces to operational building services. Should temporary connections be required to maintain services during the work, supply and install all necessary equipment. Repair any system damaged during the execution of the work.

**01 60 00 - PRODUCT REQUIREMENTS**

**1.0 GENERAL**

1.1 Products certified by a recognized testing agency accredited by the Standards Council of Canada, and bear a certification mark from that agency, for example the CSA certification mark, cUL listing, or ULC listing. Where certified or listed material and equipment is not available, obtain special approval from Authority Having Jurisdiction before delivery to project site, and submit the approval to the Consultant.

1.2 Products described in this specification are considered to be the minimum standard of acceptance.

1.3 All materials to meet flame spread rating requirements of all Authorities Having Jurisdiction.

**2.0 SUBSTITUTION OF SPECIFIED EQUIPMENT**

2.1 "Approved equal" shall be defined as an alternate approved by the Consultant.

2.2 If during the Tender bid process, the bidding Contractor wishes to substitute the specified equipment for an "approved equal", the bidding Contractor must submit Shop Drawings to the Consultant before the Tender close, for approval. If no substitution request is made, the as-specified equipment is that to be provided.

**3.0 PRODUCT STORAGE AND HANDLING REQUIREMENTS**

3.1 Store all equipment and materials in dry locations.

**01 70 00 - EXECUTION REQUIREMENTS**

**1.0 EXAMINATION AND PREPARATION**

1.1 Prior to submitting Tender, the Contractor shall carefully examine the Site and ascertain all conditions which affect the Work.

1.2 No extras will be allowed for work resulting from conditions that would have been evident upon a thorough examination of electrical closets, rooms and ceiling spaces, whether exposed or not.

1.3 Verify location and sizes of existing services prior to making new connections to ensure that the existing systems have adequate capacities to accommodate new loads.

**2.0 CUTTING AND PATCHING**

2.1 The Contractor will be responsible for all cutting and patching required for the installation.

2.2 Structural members are not to be cut without the consent of the Consultant.

2.3 Restore finishes to match existing surroundings.

**3.0 CLEANING AND WASTE MANAGEMENT**

3.1 The Contractor and associated sub trades, at all times during construction, is to keep the site free of all debris, boxes, packing, etc., resulting from performance of the Work.

3.2 At the completion of this Work, the installation is to be left in a clean and finished condition.

3.3 Clean and touch up surfaces of shop-painted equipment scratched or marred during shipment or installation, to match original paint.

3.4 Remove and dispose off-site, all materials removed, abandoned, and not to remain, designated for salvage, or be re-used in an appropriate manner acceptable to local authorities having jurisdiction, specifically equipment and materials considered hazardous to the environment, unless otherwise noted to be turned over to the Owner or to the Landlord.

**4.0 STARTING AND ADJUSTING**

4.1 Conduct acceptance tests to demonstrate that the equipment and systems meet the specified requirements. Tests may be conducted as soon as conditions permit, and consequently the Contractor is to make all changes, adjustments, or replacements required as the preliminary tests may indicate prior to the final tests. Tests are as specified in various sections of the specifications.

4.2 Carry out tests in the presence of the Consultant. Provide instruments, meters, equipment and personnel required to conduct tests during and at conclusion of Project. The Contractor shall be in charge of the plant during tests. The Contractor shall assume responsibility for damages in the event of injury to the personnel, building, equipment, and shall bear all costs for liability, repairs, and restoration in this connection. Submit test results.

4.3 Test new and interfaced systems for proper operation to ensure that the quality and reliability of the base building system is not altered or reduced.

**01 77 00 - Closeout Procedures**

**1.0 Building Permit Compliance**

1.1 Prior to requesting the Consultant's letter "Review of General Conformance" for submission to the municipal building department to allow occupancy, the following items must be complete and submitted

to the Consultant, as applicable:

**1. General**

1.1 Submit all applicable inspection reports from Authorities Having Jurisdiction.

2. Continuity of fire separations at service penetrations must be complete.

3. All seismic restraint requirements must be complete.

**2. Plumbing**

2.1 Confirmation that municipal plumbing inspector has reviewed the work and notes no deficiencies.

2.2 If any of the above items have not been completed at the time of Consultant's Inspection, and the letter of "assurance of professional field review and compliance" cannot be issued, any costs for subsequent inspections will be charged to the Contractor.

**2.0 Substantial Performance**

2.1 Prior to requesting Substantial Performance Inspection, the following items must be complete and submitted to the Consultant, as applicable:

**1. General**

1.1 Project record drawings must be submitted to Consultant for review.

2. Maintenance manuals must be submitted to Consultant for review.

2.2 If any of the above items have not been completed at the time of the Substantial Performance Inspection, and the Substantial Performance certificate cannot be issued, any costs for subsequent inspections will be charged to the Contractor.

**3.0 Project Record Documents**

**3.1 Record Drawings**

3.1.1 Maintain a drawing on Site, complete with red-line record of all revisions. Provide exact dimensions and routing of below-grade or below-slab services. Indicate the following:

**1. HVAC and Plumbing**

1.1 All pipe routing.

2. Complete record drawings accurately marked up in red ink must be submitted for review. Once reviewed, prepare as-built drawings in a neat manner, showing all deviations in work as per site red-line drawing.

**4.0 Warranties**

4.1 Submit a written guarantee to the Owner for one year from the date of acceptance. This guarantee shall bind the Contractor to correct, replace or repair promptly any defective equipment workmanship without cost to the Owner.

4.2 Provide extended warranties as specified.

**20 05 33 HEAT TRACING FOR MECHANICAL PIPING**

**Part 1 - General**

**1.1 SUBMITTALS**

1.1.1 Submit heating cable and control shop drawings/product data sheets, complete with control schematics.

**1.2 CLOSEOUT SUBMITTALS**

1.2.1 Submit a start-up certification letter from cable supplier as specified in Part 3 of this section.

1.2.2 Submit certified cable megger test reports as specified in Part 3 of this section.

**Part 2 - Products**

**2.1 PIPE FREEZE PROTECTION HEATING CABLE**

2.1.1 CHROMALOX "CPR5-1CR" CSA certified, self-regulating piping freeze protection cable sets as specified and/or scheduled on drawings, each set complete with:

1. Required lengths of self-regulating heating cable;

2. Power connection with end seal per circuit;

3. Tee connections with end seals as required for pipe branches;

4. Splice connections as required;

5. GT-66 glass tape to secure cable on pipe, and "Electric Traced" adhesive labels

6. Pipe temperature sensing thermostat.

7. Complete with integral ground fault protection.

8. Chroma-FP1-BN commercial freeze protection controller with integrated equipment ground-fault protection, BACnet gateway, dry contact alarm output, NEMA 4X fiber reinforced plastic enclosure, 120-277V 30A.

2. Manufacturers:

2.1 Chromalox Inc

2.2 Raychem Canada Ltd.;

2.3 Dimplex;

2.4 Tyco Thermal Controls/Pyrotexnax.

**Part 3 - Execution**

**3.1 INSTALLATION OF FREEZE PROTECTION HEATING CABLE**

3.1.1 Supply electric tracing cable sets to prevent piping from freezing.

3.1.2 Hand cable sets and accessories and cable manufacturer's installation instructions to electrical trade at site for installation on piping. Clearly identify piping to be traced. Ensure piping has been pressure tested prior to cable installation and manufacturer's installation instructions are observed.

3.1.3 Mount heat tracing controller as indicated on drawings or within 2m of start of heat tracing.

3.1.4 Hand BACNET gateway to Controls Contractor for installation in their control panels.

3.1.5 After cable installation but before application of piping insulation, megger test and commission cable in presence of the Consultant and in accordance with cable manufacturer's installation and operation manual. Replace any damaged or faulty cable, and when satisfactory results have been obtained, submit signed test reports to the Consultant.

3.1.6 When traced piping has been insulated, install "Electrically Traced" labels on opposite sides of pipe at 3 m (10') intervals.

3.1.7 When cable installations are complete, check and test operation of each cable set with heater manufacturer's representative, make any required adjustments, and have cable manufacturer certify in writing that cable sets have been properly installed and operate as intended.

**22 PLUMBING**

**22 01 00 - OPERATION AND MAINTENANCE OF PLUMBING**

**1.0 PLUMBING PIPING CLEANING**

1.1 Power wash and flush sanitary and storm piping prior to substantial completion.

**22 05 00 - COMMON WORK RESULTS FOR PLUMBING**

**1.0 REFERENCES**

1.1 Ontario Building Code, Division B, Part 7 - Plumbing.

**2.0 SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING**

2.1 Use schedule 40 steel pipe sleeves through concrete structural members, floor slabs. For sleeves through other construction - drywall, ties, masonry, etc., use minimum 22 gauge galvanized steel construction.

2.2 For all conduits passing through foundation walls, use link-seal pre-engineered mechanical seals between sleeves and pipes.

2.3 Provide sleeves for all pipes which pass through walls and floors.

2.4 Provide sleeves for insulated pipe large enough to permit free movement of pipe without crushing the insulation.

2.5 Coat exposed exterior surfaces of ferrous sleeves with heavy application of zinc rich paint to CGSB 1-GP-181M-AMDT-MAR-78. Provide firestopping material and install within annular space between pipes, insulation, and adjacent fire separation.

**3.0 GENERAL DUTY VALVES FOR PLUMBING**

**3.1 Ball Valves:**

3.1.1 NPS 2 and under, soldered:

3.1.1.1 To ANSI B16.18, Class 150.

3.1.2 Bronze body, chrome plated brass ball, PTFE teflon adjustable packing, brass gland and PTFE teflon seat, steel lever handle, with NPT to copper adaptors.

3.1.3 Acceptable material: Milwaukee BA, Crane, Jenkins, Victaulic 722 (threaded), or PL300 (push to connect)

3.1.4 Isolating ball valves: Crane no. 9302, Crane no. 9322, or approved equal.

3.1.5 Isolate equipment, fixtures and branches with gate butterfly ball valves.

3.1.6 Provide shut-off valves or screwdriver stops on water supplies to all plumbing fixtures.

**3.4 Concrete Inserts**

3.4.1 Use inserts placed in pre-drilled holes. Do not use powder driven inserts or self-drilling inserts. Before drilling holes, accurately locate all reinforcing bars in the affected areas using an electro-magnetic locator.

3.4.2 Do not drill through or otherwise damage reinforcing bars. If reinforcing is encountered, the inserts must be relocated. Ensure that hole diameter, depth of penetration, spacing, etc., are in strict accordance with the insert manufacturer's recommendations for the specific insert type and load condition.

**3.5 Floor supports:**

3.5.1 Provide a 150 mm (6 inch) high concrete housekeeping pad for floor mounted plumbing equipment, such as pumps and tanks.

**3.6 Buried piping:**

3.6.1 Lay in well compacted washed sand in accordance with AWWA class B bedding.

3.6.2 Bend tubing without crimping or constriction. Minimize use of fittings, by using long lengths.

3.6.3 Install buried tubing in protective conduit.

**4.0 IDENTIFICATION FOR PLUMBING SYSTEMS**

4.1 Identify all equipment with engraved phenolic nameplates, secured in place with rivets. For valve tags, install with chain.

4.2 Identify piping in accordance with applicable standards.

4.3 Identify piping in accordance with ASME A13.1.

**5.0 FACILITY DRAINAGE PIPING CLEANOUTS**

5.1 Finished areas - Jay R. Smith 4000 NB, equal by Precision Plumbing Products, or equal by Zum.

**22 07 00 - PLUMBING INSULATION**

**1.0 PIPING INSULATION**

1.1 Insulate all domestic hot and cold water piping with pre-molded low pressure glass fibre pipe insulation. Install vapour barrier on cold and hot water piping. Seal joints of vapour barrier. Provide PVC jacketing on all exposed insulated piping.

1.2 Insulation R-values and insulation thicknesses in accordance with ASHRAE 90.1-2013, or later version if called for by AHJ.

**22 08 00 - COMMISSIONING OF PLUMBING**

**1.0 TESTING**

1.1 Test piping to maintain test pressure without loss for 4 h.

1.2 Hydraulically test domestic cold water piping at 1-1/2 times system operating pressure or minimum 860 kPa, whichever is greater.

**2.0 DISINFECTION**

2.1 Flush out, disinfect and rinse system to requirements of authority having jurisdiction.

**22 10 00 - PLUMBING PIPING**

**1.0 PIPING INSTALLATION**

1.1 Cut square, ream and clean tubing and tube ends, clean recesses of fittings and assemble without binding.

1.2 Assemble all piping using fittings manufactured to ANSI standards.

1.3 Install tubing close to building structure to minimize furring, conserve headroom and space. Group exposed piping and run parallel to walls.

1.4 Connect to fixtures and equipment in accordance with manufacturer's instructions unless otherwise indicated.

1.5 Pipe equipment drains to nearest drain.

**2. INSTALLATION OF OUTDOOR BOTTLE FILL AND DRINKING FOUNTAIN STATION**

2.1 Provide site and drainage excavation as required for fountain installation.

2.2 Refer to owner's manual and mechanical details for more information.

2.3 Provide solid, well-drained surface to mount pedestal fountain with adequate support (300lb. minimum load).

2.4 Securely fasten fountain to surface and provide opening for freeze-resistant valve in ground.

2.5 Locate and install plumbing through ground as required. Provide P-trap for drainage piping.

2.6 Assemble fountain to prepared site and mounting surface.

2.7 Connect supply and water lines. Turn on water supply and check for leaks.

**22 11 00 - FACILITY WATER DISTRIBUTION**

**1.0 DOMESTIC WATER PIPING**

1.1 Type L hard copper to ASTM B75M.

1.2 Copper pipe fittings: screwed, flanged, or soldered:

1.2.1 Tin-Antimony 95/5 solder to ASTM B32.

1.2.2 Cast copper fittings: to ANSI B16.18.

1.2.3 Wrought copper fittings: to ANSI/ASME