Part 1 SCOPE:

1.1 ARCHITECT OR ENGINEER

.1 Wherever the word Architect or Engineer or Architect is used in the construction specifications, it shall be replaced with Contract Administrator as defined in GC.1.01(8) of the General Conditions, or his agent.

Part 2 COORDINATION AND COOPERATION:

2.1 OTHER TRADES

.1 Further to GC:6.1, Specifications shall be read by all trades to acquaint them with the nature of the Work required. Failure to do so will not relieve them of any responsibilities for cooperation in coordinating the Work and preventing delay and for the supply and installation of materials required for this Work.

2.2 CUTTING AND PATCHING

- .1 Each trade shall do all necessary cutting and patching required for their Work. Existing adjacent surfaces shall be accurately matched. Cutting through any structural member shall only be done with the prior approval of the Contract Administrator.
- .2 Perform all cutting and patching required to make the several parts of the Work come together properly.

Part 3 MATERIALS:

- 3.1 C.S.A.
 - .1 All materials, where applicable, shall be CSA approved.

Part 4 SUBMITTALS:

- 4.1 SHOP DRAWINGS
 - .1 Further to GC:6.9, the Contractor shall submit for approval, at least five (5) sets of detailed shop drawings for all Work as requested by the Contract Administrator at the initial Site meeting and as required thereafter.

Part 5 QUALITY CONTROL:

- 5.1 INSPECTING AND TESTING MATERIAL
 - .1 The City reserves the right to inspect and test all materials at its own expense and to reject any materials which are not in accordance with the requirements of the specifications. The Contractor shall furnish, at the Contractor's expense, such specimens and samples of materials as may be required for testing.

- .2 The Contractor shall allow the City to test any equipment, and shall provide power, fuel or material required for these standard performance tests on the equipment.
- .3 Independent inspection/testing agencies may be engaged by the City for the purpose of inspection and/or testing portions of Work. All payments for such services shall be processed by change order from the Cash Allowance.
- .4 Employment of inspection/testing agencies does not relax the Contractor's responsibility to perform Work in accordance with the Contract Documents.
- .5 The Contractor shall allow the inspection/testing agencies access to all portions of Work. Cooperate to provide for such access.
- .6 Contractor will pay from the Cash Allowance , for services of testing laboratory except for the following:
 - .1 Inspection and testing required by laws, ordinances, rules, regulations or orders of public authorities.
 - .2 Inspection and testing performed exclusively for Contractor's convenience.
 - .3 Testing, adjustment and balancing of conveying systems, mechanical and electrical equipment and systems.
 - .4 Mill tests and certificates of compliance.
 - .5 Tests specified to be carried out by Contractor under the supervision of Contract Administrator.
- .7 Where test or inspections by designated testing laboratory reveal Work not in accordance with Contract requirements, Contractor shall pay costs of additional tests or inspections as Contract Administrator may require to verify acceptability of corrected Work..
- .8 Contractor shall furnish labour and facilities to:
 - .1 Provide access to Work to be inspected and tested.
 - .2 Facilitate inspections and tests.
 - .3 Make good Work disturbed by inspection and test.
 - .4 Notify Contract Administrator sufficiently ton advance of operations to allow for assignment of laboratory personnel and scheduling of test.
 - .5 Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.
 - .6 Pay costs for uncovering and making good Work that is covered before required inspection or testing is completed and approved by the Contract Administrator.

Part 6 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS:

6.1 SITE PROTECTION

- .1 The Contractor shall provide adequate protection to prevent any damage to existing structures, furnishings, finishes, etc. during construction. Temporary ramps, barricades, hoardings as required shall be provided to the approval of the Contract Administrator.
- .2 The Contractor shall exercise care in the operations relative to the Site. Any unnecessary destruction of the Site will not be permitted. The Contractor shall exercise care in the movement of equipment and materials especially during wet weather. The Contractor shall be held responsible for the repair of damages to the Site, boulevards, roads, other pavements, etc. in the surrounding area of the immediate Site.

6.2 LAYOUT OF WORK

.1 The Contactor shall verify all dimensions and elevations on the drawings and report any discrepancies on the drawings or with existing Site conditions to the Contract Administrator before starting the Work.

6.3 EXISTING SERVICES AND UTILITIES

.1 Further to GC.3. (3.1) of the General Conditions, it shall be the responsibility of the Contractor to verify the location of all existing utilities, pipes and other objects and, if encountered, to adequately protect them during the construction period, and if disturbed or damaged by the Contractor, to have them replaced or reset in their original position after construction has been completed at the Contractor's cost.

6.4 SANITARY FACILITIES

- .1 Provide sanitary facilities for Work force in accordance with governing regulations and ordinances.
- .2 Post notices and take such precautions as are required by local health authorities. Keep area and premises in sanitary condition.

6.5 POWER

- .1 Arrange, pay for and maintain temporary electrical power supply in accordance with governing regulations and ordinances.
- .2 Existing electrical power and lighting systems may be used for construction requirements with prior approval of City provided that guarantees are not affected. Pay all costs and make good damage.

6.6 LIGHTING

.1 Arrange, pay for and maintain temporary lighting to interior and exterior Work for safety purposes.

6.7 WATER SUPPLY

- .1 Arrange, pay for and maintain temporary water supply in accordance with governing regulations and ordinances.
- .2 Existing permanent water supply system may be used for construction requirements with prior approval of City provided that guarantees are not affected. Pay all costs and make good damage.

6.8 HEATING AND VENTILATING

- .1 Pay for costs of temporary heat and ventilation used during construction, including costs of installation, fuel, operation, maintenance and removal of equipment. Use of direct-fired heaters discharging waste products into Work areas <u>will not be permitted</u>.
- .2 Furnish and install temporary heat and ventilation in enclosed areas as required to:
 - .1 Facilitate progress of Work.
 - .2 Protect Work and products against dampness and cold.
 - .3 Prevent moisture condensation on surfaces.
 - .4 Provide ambient temperatures and humidity levels for storage, installation, and curing of materials
 - .5 Provide adequate ventilation to meet health regulations for safe Working environment.
- .3 Maintain minimum temperature of 10°C or higher where specified and as soon as finishing Work is commenced. Maintain until acceptance of the project.
- .4 Ventilation:
 - .1 Prevent hazardous accumulations of dust, fumes, mist, vapours, or gases in areas occupied during construction.
 - .2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
 - .3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
 - .4 Ventilate storage spaces containing hazardous or volatile materials.
 - .5 Ventilate temporary sanitary facilities.
 - .6 Continue operation of ventilation and exhaust system for time after cessation of Work process to assure removal of harmful elements.

- .5 Maintain strict supervision of operation of temporary heating and ventilating equipment to:
 - .1 Conform with applicable codes and standards.
 - .2 Enforce safe practices
 - .3 Prevent abuse of services.
 - .4 Prevent damage to finishes.
 - .5 Vent direct-fired combustion units to outside.

Part 7 CONTRACTOR TO NOTIFY UTILITIES AND OTHER AUTHORITIES

- 7.1 UTILITIES
 - .1 Whenever the Work requires that a public street or lane be cut for underground Works, the Contractor shall before entering on the Work Site, make application to each utility, or other authorities, and shall give to the Superintendent of Traffic Services, Traffic Operations Section of the Streets and Traffic Branch in the Streets and Transportation Department of the City of Winnipeg, not less than 48 hours written notice of the date on which Work is to commence. A copy of the application and of all notices are to be given to the Contract Administrator.
 - .2 The Contractor shall be responsible for all costs of the Work to be done in the cut, the Work to restore all underground structures to their "as found condition", and to restore the surface area to its original condition, or better.
 - .3 The Contractor shall supply, erect and maintain all applicable traffic control devices in accordance with the provisions of the latest edition of the "Manual of Temporary Traffic Control in Work Areas on City Streets" issued by the City of Winnipeg. The manual is available from the Public Works Department, Customer Services Division, 1155 Pacific Avenue, of the City of Winnipeg.

Part 8 PROJECT INFORMATION SIGNS

- 8.1 SIGNS
 - .1 No project information signs shall be allowed without the written approval of the Contract Administrator. Any project information signs approved during construction are to be removed by the Contractor upon completion of the project.
 - .2 The Contractor shall be required to install a Canada-Manitoba Infrastructure Site sign as provide by the Infrastructure Secretariat. This sign will be delivered to the job Site and will be a minimum of 1200 x 4800 on size.

Part 9 REQUIREMENTS FOR SUBSTANTIAL PERFORMANCE:

9.1 INSTRUCTION MANUALS

.1 The Contractor shall provide the Contract Administrator with four copies of all

manuals showing:

- a) Service Instruction including a list of spare parts and replacement parts and the names and addresses of all suppliers.
- b) Maintenance Instructions.
- c) Installation Instructions.
- d) Operating Instructions.
- e) Electric Schematics.
- .2 Detailed electrical and electronic circuit diagrams (wiring and schematic) showing all wiring connections; all electrical component values; all component parts manufacturers; and servicing procedure for all electrical and electronic equipment utilized to approval of the City. <u>Total Performance of the equipment</u> is contingent on the provision of the above information.

9.2 OCCUPANCY PERMIT

.1 The Contractor shall obtain the Occupancy Permit required under the Building By-Law, along with the mechanical and electrical Certificate of Inspection from the City of Winnipeg Environmental Building Inspection Department.

9.3 APPLICATION FOR SUBSTANTIAL PERFORMANCE

- .1 Upon completion of the Work or upon reaching substantial performance the Contractor shall complete form (to be supplied) C.P.10 Contractors Application for Substantial Performance.
- 9.4 INSTRUCTION
 - .1 The Contractor shall instruct the facility operating staff in the use of all the facility systems to the satisfaction, and in the presence, of the Contract Administrator.

Part 10 REQUIREMENTS FOR TOTAL PERFORMANCE:

10.1 AS-BUILT DRAWINGS

- .1 At Total Performance, the Contractor shall provide the Contract Administrator with two sets of record drawings as "As-Built" Drawings and specifications bearing notations of all changes and variations from the originals.
- .2 The accuracy of these drawings shall be the responsibility of the Contractor, who shall bear all expenses of corrections thereto. <u>Final payment shall not be made until this requirement has been fulfilled</u>.

Part 11 WORK IN OCCUPIED AREAS

11.1 OCCUPIED AREAS

- .1 Other portions of this building will be occupied during the Work of this Contract.
- .2 The following is the schedule of occupancy:
 - .1 Park Police will occupy the main floor of the South wing throughout the construction period.
 - .2 Parks and Open space will occupy the 2nd and 3rd floors of the South wing until at least May of 2006.
 - .3 Assiniboine Park Enterprises will occupy 5 offices on the 2nd floor of the South wing starting July 2006.
- .3 Schedule Work to minimize disturbance or inconvenience to building occupants.
- .4 Coordinate with Contract Administrator scheduling of services shutdown and other intrusions into regular building operations.
- .5 Schedule noisy Work to times when building occupants will not be present.
- .6 Do not block corridors or exits, provide emergency access at all times.

1.1 REQUIREMENTS INCLUDED

.1 Cash Allowances

1.2 CASH ALLOWANCES

- .1 Include in the Contract price, cash allowances stated herein.
- .2 Cash allowances, unless otherwise specified, cover the net cost of services, products, construction machinery and equipment, freight, handling, unloading, storage, installation and other authorized expenses incurred in performing the Work.
- .3 The Contract Price, and not the cash allowance, includes the Contractor's overhead and profit in connection with such cash allowance
- .4 The Contract Price will be adjusted by written order to provide for an excess or deficit to each cash allowance.
- .5 Where costs under a cash allowance exceed the amount of the allowance, the Contractor will be compensated for any excess incurred and substantiated, plus an allowance for overhead and profit as set out in the Contract Documents.
- .6 Progress payments on accounts of Work authorized under cash allowances shall be included in the Contract Administrator's monthly certificate for payment.
- .7 A schedule shall be prepared jointly by the Contract Administrator and the Contractor to show when items called for under cash allowances must be authorized by the Contract Administrator for ordering purposes so that the progress of the Work will not be delayed.

1.3 SCHEDULE OF CASH ALLOWANCES

- .1 Elevator: Cash allowance for the supply and installation of the hydraulic elevator as specified in Section 14245. All Work required to accommodate the elevator by trades other than the elevator trade shall be included in the base bid and <u>not</u> the cash allowance.
 - .1 Amount of Cash Allowance \$90,000.00
- .2 UPS: Cash allowance for the purchase of two UPS systems.
 - .1 Amount of Cash Allowance \$220,000.00
- .3 Manitoba Hydro Cash Allowance
 - .1 Amount of Cash Allowance \$10,700.00
- .4 Cash allowance for the installation of the Central Vacuum system
 - .1 Amount of Cash Allowance \$6,000.00
- .5 Cash Allowance for Interior Signage
 - .1 Amount of Cash Allowance \$2,500.00

PART 2 PRODUCTS

2.1 N/A

- PART 3 EXECUTION
- 3.1 N/A

1.1 **REQUIREMENTS INCLUDED**

.1 Requirements and limitations for cutting and patching the Work.

1.2 RELATED REQUIREMENTS

.1 Individual Sections: cutting and patching incidental to Work of the section.

1.3 SUBMITTALS

- .1 Submit written request in advance of cutting or alteration which affects:
 - .1 Structural integrity of any element of Project.
 - .2 Integrity of weather-exposed or moisture resistant elements.
 - .3 Efficiency, maintenance, or safety of any operational element.
 - .4 Visual qualities of sight-exposed elements.
- .2 Include in request:
 - .1 Identification of project.
 - .2 Location and description of affected Work.
 - .3 Statement on necessity for cutting or alteration.
 - .4 Description of proposed Work and products to be used.
 - .5 Alternatives to cutting and patching.
 - .6 Effect of Work on City of Winnipeg.
 - .7 Date and time Work will be executed.

PART 2 PRODUCTS

2.1 MATERIALS

.1 Required for original installation..

PART 3 EXECUTION

3.1 GENERAL

- .1 Execute cutting, fitting and patching to complete the Work.
- .2 Fit the several parts together, to integrate with other Work.
- .3 Uncover Work to install ill-timed Work.
- .4 Remove and replace defective and non-conforming Work.
- .5 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.

3.2 INSPECTION

- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2 After uncovering, inspect conditions affecting performance of Work.
- .3 Beginning of cutting or patching means acceptance of existing conditions.

3.3 **PREPARATION**

- .1 Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of project from damage.
- .2 Provide protection from elements for areas which may be exposed by uncovering Work.
- .3 Conduct Work to minimize interference with operation of existing facility.

3.4 PERFORMANCE

- .1 Execute Work by methods to avoid damage to other Work and which will provide proper surfaces to receive patching and finishing.
- .2 Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements and sight-exposed surfaces.
- .3 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed without prior written approval.
- .4 Restore Work with new products in accordance with requirements of Contract Documents.
- .5 Fit Work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- .6 At penetration of fire-rated wall, ceiling or floor construction, completely seal voids with fire-rated material, full thickness of the construction element. Refer to Section 07840.
- .7 Refinish surfaces to match adjacent finishes: for continuous surfaces refinish to nearest intersection or as indicated on schedule and drawings; for equipment refinish entire unit.
- .8 Restore surfaces and finishes in areas of electrical and mechanical Work to match surrounding substrate as per above notes.

1.1 **REQUIREMENTS INCLUDED**

- .1 Verification of building dimensions.
- .2 Site measurement for new construction.

1.2 RELATED REQUIREMENTS

- .1 Section 01000 General Provisions
- .2 Individual Sections Site measurements prior to fabrication.

1.3 PROJECT CONDITIONS

.1 The drawings in these bid documents are based on drawings of existing facility, actual Site dimensions may vary.

PART 2 PRODUCTS

2.1 Not used.

PART 3 EXECUTION

3.1 SITE MEASUREMENT

- .1 Verify all fixed dimensions prior to commencing with Work.
- .2 Site check all dimensions prior to fabrication.
- .3 Notify Contract Administrator of any discrepancies between Site checked dimensions and drawing dimensions.

1.1 **REQUIREMENTS INCLUDED**

- .1 Removal of designated building equipment and fixtures.
- .2 Removal of designated construction.
- .3 Disposal of materials
- .4 Identification of utilities.

1.2 RELATED REQUIREMENTS

- .1 Section 01000 General Provisions
 - .1 Work sequence.
 - .2 Continued occupancy.
 - .3 Temporary Facilities and Controls.
 - .4 Project record documents.
- .2 Section 01045 Cutting and Patching

1.3 SUBMITTALS

- .1 Section 01000: General Provisions
- .2 Project Record Documents: Accurately record actual locations of capped utilities, and subsurface obstructions.

1.4 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for demolition Work, dust control, products requiring electrical disconnection and re-connection.
- .2 Obtain required permits from authorities.
- .3 Do not close or obstruct egress width to any building or Site exit.
- .4 Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to City of Winnipeg or Contract Administrator.
- .5 Conform to procedures applicable when hazardous or contaminated materials are discovered.

1.5 SCHEDULING

- .1 Schedule Work to coincide with new construction.
- .2 Describe demolition removal procedures and schedule.

1.6 PROJECT CONDITIONS

- .1 Conduct demolition to minimize interference with adjacent and occupied building areas. Refer to Seduction 0100 – General Provisions.
- .2 Cease operations immediately if structure appears to be in danger and notify Contract Administrator. Do not resume operations until directed.

PART 2 PRODUCTS

.1 Not Used

PART 3 EXECUTION

3.1 PREPARATION

- .1 Provide, erect, and maintain temporary barriers and partitions.
- .2 Erect and maintain weatherproof closures for exterior openings.
- .3 Erect and maintain temporary partitions to prevent spread of dust, odours, and noise to permit continued occupancy of City of Winnipeg.
- .4 Protect existing materials and fixtures which are not to be demolished.
- .5 Prevent movement of structure; provide bracing and shoring.
- .6 Notify affected utility companies before starting Work and comply with their requirements.
- .7 Mark location and termination of utilities.
- .8 Provide appropriate temporary signage including signage for exit or building egress.

3.2 DEMOLITION

- .1 Disconnect remove, cap, and identify designated utilities within demolition areas.
- .2 Demolish in an orderly and careful manner. Protect existing supporting structural members.
- .3 Remove demolished materials from Site except where specifically noted otherwise. Do not burn or bury materials on Site. Refer to demolition drawings for description of equipment to be turned over to City of Winnipeg.
- .4 Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- .5 Remove temporary Work.