Request For Proposals
Iqaluit Airport Utilidor Inspection
Air Sampling/Monitoring Program
Iqaluit, Nunavut

Transport Canada
Prairie And Northern Region
Programs
Environmental Affairs
20 February 2006

1.0 Introduction

The Government of Nunavut submitted a proposal to Transport Canada (TC) under the Airport Capital Assistance Program (ACAP) requesting funds for upgrading the runway and apron. As part of the proposal, a request for funding was made to reconfigure the drainage channels due to water ponding on the runway and Aprons from snow melt and rain. The proposed location to reconfigure the drainage channels intersects an abandoned utilidor on the airport property. The proposal identifies the removal of a 110m section of the utilidor. The utilidor is located approximately 10m north of Apron I (see diagram).

Utilidor construction practices consisted of insulation containing asbestos. TC undertook an investigation in August 2005 to confirm this. A consultant with asbestos abatement expertise was contracted to investigate and sample the utilidor. The report indicated it contained aircell insulation composed of 50-75% chrysotile asbestos and sweatwrap insulation composed of 50-75% chrysotile asbestos. The condition of the pipe insulation is poor and exposed to the environment. The utilidor will need to be demolished and removed prior to the Government of Nunavut proceeding with reconfiguring the drainage channels. The utilidor consists of a concrete culvert beneath the road and taxiway, tin sheeting, foam and fibrous insulation, steel and metal piping. The tin sheeting is used to enclose and protect the piping inside of the utilidor. A section of the utilidor runs beneath the road and taxiway that is contained in a concrete culvert. The culvert is being used as both drainage for the ditch and passage of the utilidor beneath the road.

Transport Canada now requires the services of an experienced Environmental Consultant in the form of on site inspection and air monitoring, during the remediation of Asbestos containing materials and transportation of hazardous waste for disposal.

2.0 Scope Of Work

The work comprised in the proposal would cover resident supervision comprising of inspection and air monitoring during asbestos and lead paint abatement activities, packaging of asbestos waste and Inspection of waste disposal.

A copy of the specifications for abatement and demolition are attached as Annex "A".

The estimated time frame of the work to be completed in is three (3) weeks, based on a seven (7) day workweek. Works to commence in the summer of 2004.

3.0 Methodology

A minimum of one (1) Phase Contrast Microscopy (PCM) air sample per work shift shall be collected during all asbestos disturbances. For budgetary purposes it is estimated that twenty-one (21) asbestos samples will have to be analyzed.

Daily site inspection reports shall be filed with the local Airport Manager and with Transport Canada detailing the day's activities, the results of any air sampling conducted, general compliance with the project specification and any concerns that arise and any site instructions that may have been issued.

Weekly project summary reports shall be forwarded to the project manager for review and comment. The summary report shall contain a summary of the weekly activities as well as attached copies of the daily inspection reports.

4.0 Quality Assurance

The individual inspector assigned to the project, shall be certified under either the American Industrial Hygiene Association's Asbestos Analyst Registry (AAR), the Canadian Asbestos Quality Assurance Program (AQAP) or the Institut de Recherche Robert-Sauvé en Santé et en Sécurité du Travail (IRSST) for the analysis of airborne asbestos dust by Phase Contrast Microscopy (PCM) using NIOSH method 7400.

The inspector assigned to the project shall be under the supervision of a registered Occupational Hygienist who shall be responsible for quality assurance and final interpretation of air sampling data.

Evidence of the above certifications shall be attached as an appendix to the proposal.

Analysis of all air samples collected must be performed on-site, with results made available to all parties within four (4) hours following their collection.

5.0 Experience

The inspection agency shall have as a minimum 10 (10) years prior experience in the field of asbestos/lead remediation. The individual inspector assigned to the project, shall have a minimum of five (5) years prior inspection experience in the field of asbestos remediation.

Provide as an appendix to the proposal, a list of key projects of similar size and complexity that were performed in remote communities, which demonstrates both prior experience, and capabilities of the inspection agency and the individual inspector assigned to the project.

6.0 Regulatory Framework

The consultant shall observe all applicable Federal, Provincial, and Municipal legislation, regulations, guidelines and codes of practice. In case of conflict or discrepancy, the more stringent requirement shall apply. The consultant shall meet or exceed requirements of contract documents, specified standards, codes and referenced

documents. The consultant shall be responsible for all reporting requirements as stipulated by all or any regulatory requirements.

7.0 Handling and Transportation of Dangerous Goods

The consultant will observe and enforce all Acts, Regulations, and Guidelines required by the regulatory agencies of the federal, territorial, and potentially provincial governments including but not limited to Environment Canada and Transport Canada Transportation of Dangerous Goods Act and Regulations. In the case of conflict, the more stringent requirements will apply. The consultant will maintain complete records that shall be produced by the contractor, including Bills of Lading, Manifests, and descriptions of any actions undertaken under the handling and transportation of dangerous goods.

8.0 Confidentiality

All information data, material, etc. gathered as part of this project shall be treated as confidential, the property of Transport Canada and shall only be discussed with the Project Manager and Transport Canada personnel unless otherwise directed and authorized by the Project Manager.

9.0 Security

The works covered under this scope are located in restricted areas. The consultant will be responsible for obtaining and fulfilling the necessary access requirements from the Government of the Northwest Territories Department of Transportation, Airports Division.

Only persons employed on the project will be allowed normal access to the site. Unauthorized persons will be permitted on-site only with approval of Project Manager or consultant.

The consultant shall not disrupt Airport business except as permitted by the Airport representative.

10.0 Reporting

The consultant, upon completion of the site work shall present a comprehensive written report, which will include the results of all tests and work conducted.

The report issued as a result of this investigation will be user friendly for effective management purposes. The report and findings will be fully justified and detailed in engineering terms with laboratory results as appendices. Do not duplicate existing information unless otherwise directed by the Project Manager.

Two (2) copies of a draft report will be submitted to the project manager, within four (4) weeks of the completion of the project, for review and comment. Three (3) hard copies bound and One (1) electronic copy on CD-ROM, of the final report are required within

two (2) weeks of receipt of comments from the Project Manager and should be submitted to Mr. W.R. Ferguson, Manager, Environmental Affairs, Programs, Prairie And Northern Region, P.O. Box 8550, 3rd Floor - 344 Edmonton Street, Winnipeg, Manitoba, R3C 0P6.

11.0 Fee Structure

The consultant shall address each of the following items separately in the fee proposal:
A separate cost for each phase of the contract;
Mobilization/Accommodation costs;
Separate sub-totals for professional services;
Report costs;
Laboratory work for tests;
Contingency Allowance:
Per Diem rates for extension of proposed schedule.

12.0 Project Management

The Project Manager for this project is;
Mike Molinski
Environmental Officer
Transport Canada
Environmental Affairs
Programs, Prairie & Northern Region

13.0 Questions/Clarification

Any questions or clarification regarding this statement of work shall be directed and cleared through the Contracting Authority.

14.0 Mandatory Requirements

1. Insurance requirements.
2. Bid Bond
3. Submission of field and laboratory QA/Qc program.
4. A detailed list of twelve (12) similar projects and experience that reflects the contractor and assigned personnel are qualified for the project.
5. Laboratory certification.

Annex A

Iqaluit Airport Utilidor Inspection
Air Sampling/Monitoring Program
Iqaluit, Nunavut
Specifications

1.0 GENERAL

1.1 General and Related Work

.1 Read this Section in conjunction with all other sections so as to comply with the requirements of Division 1 and the General Conditions of the Contract.

.2 Related work specified elsewhere and procedures to execute the work specified:

Division 2, Section 02060 Demolition

.3 The intent of these Specifications is to demolish the existing Utilidors, associated piping and transfer shacks.

1.2 Schedule

.1 Provide within ten (10) days after award of Contract, schedule showing anticipated work progress stages.

.2 Contractor will not commence site work until receipt of written permission by the Project Manager to do so.

1.3 Co-ordination

.1 Co-ordinate all work with Transport Canada representative or designee.

.2 Co-ordinate with other Contractors working on the site. Other trades working on the site may include trades performing asbestos removal.

1.4 Existing Conditions

.1 The Utilidors are abandoned and were once used to house electrical and mechanical services for various buildings. The Utilidors are a stand alone structure constructed with metal walls, ceiling and floor. Fiberglass insulation insulates the walls, ceiling and floor. Some sections of the Utilidors are within steel or concrete culverts that run under roadway and apron crossings.

.2 Asbestos-containing pipe insulation and debris are known to be present within the Utilidors.

.3 Abandoned mechanical piping and culverts is within and outside of the Utilidors.

.4 Where Utilidors travel to various buildings, a transfer shack is present. Asbestos -containing materials and piping are present within these shacks. These transfer shacks form a part of the Utilidors and are included in the scope of the work.

.5 The Utilidors are situated on Iqaluit Airport property.

.6 Flowing water is present under sections of Utilidors running under roadways and apron crossings.

.7 Utilidors running under sections of roadway and apron crossings are within steel or concrete culverts.

2.0 SCOPE OF WORK

2.1 General

.1 Investigate site and structures to determine dismantling, processing and storage logistics required prior to commencement of work.

.2 Employ necessary means to assess existing conditions and structures to determine quantity and location of hazardous materials.

.3 Develop strategy for demolition to facilitate optimum salvage of reusable and recyclable materials.

.4 Prepare and provide copies to the engineer a detailed safety plan for all work.

.5 Maintain all appropriate signage and project controls for the duration of the project.

.6 Locate all underground or aboveground services on or adjacent to property.

.7 Do not disrupt active or energized utilities traversing premises designated to remain operational.

.8 Remove hazardous materials and demolish existing Utilidors in accordance with project specifications.

2.2 Waste Disposal

.1 Handle waste materials not reused, salvaged or recycled in accordance with appropriate regulations and codes.

.2 All waste materials are to be segregated.

.3 Asbestos-containing materials (ACMs) are to be disposed of at an approved hazardous materials landfill facility. Check with local landfill if hazardous materials may be disposed of there. If not, hazardous materials will have to be removed off site to an approved hazardous materials handling facility.

.4 Other waste to be disposed of at a regulated landfill site.

.5 Burying of rubbish and waste materials on site is prohibited.

.6 Disposal of waste volatile materials, mineral spirits, oil paint thinners, etc., into waterways, storm or sanitary sewers is prohibited.

.7 Fires and burning of waste or materials is not permitted on site.

2.3 Storage Handling

.1 Store and handle hazardous materials and wastes in accordance with applicable Federal and Provincial laws, regulations, codes and guidelines.

.2 Store materials to be reused, salvaged or recycled in locations as directed by the Engineer.

.3 Abide by the following storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids and 5 litres for liquids.

.1 Store hazardous materials and wastes in closed and sealed containers that are in good condition.

.2 Label containers of hazardous materials and wastes in accordance with WHMIS.

.3 Store hazardous materials and wastes in containers compatible with that material or waste.

.4 Segregate incompatible materials and wastes.

.5 Ensure that different hazardous materials or wastes are not mixed.

.6 Store hazardous materials in a secure storage location.

.7 Package and store hazardous materials in a manner and location which will prevent them from spilling into the environment.

.8 Have appropriate emergency response equipment available near the storage area, including personal protective equipment.

.9 Maintain an inventory of hazardous materials and wastes, including product name and quantity.

.4 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.

.5 Report spills or accidents immediately to the Engineer. Submit a written spill report to the Engineer within 24 hours of incident.

.6 Unless otherwise specified, salvaged or recyclable materials are the possession of the Demolition Contractor and are to be removed off site at completion of work.

.7 On-site sale of salvaged materials is not permitted.

.8 Separate non-salvageable materials from salvageable materials. Transport and deliver non-salvageable materials to licensed disposal facility.

2.4 Site Remediation

.1 At the completion of demolition activities and the removal and disposal of demolished debris, clean up all other debris and landscape area to match existing. No wood, drywall, steel, concrete or other miscellaneous demolition debris is allowed.

.2 Reinstall tops of steel culverts under roadways after demolition of Utilidors, replace overburden from roadway and apron crossings and compact to 90% Standard Proctor density.

2.5 Supervision

.1 Provide on site, an Overall Superintendent, with authority to oversee all aspects of the work, including but not limited to, estimating and negotiation of changes to the contract, update of submission requirements, scheduling, manpower and equipment requirements, and direct communication and co-ordination with Transport Canada representative.

.2 Replace supervisory personnel, with approved replacements, within three (3) working days of a written request from the Project Manager. Project Manager reserves the right to request replacement of supervisory personnel without explanation.

2.6 Regulations

.1 Comply with Federal, Provincial, and local requirements, provided that in any case of conflict among those requirements or with these Specifications the more stringent requirements shall apply. Work shall be performed under regulations in effect at the time work is performed.

.2 Perform all work in accordance with all provincial health and safety regulations as set out by the territory of Nunavut

2.7 Permits

.1 Obtain all permits required for the disconnection of services, demolition, and site restoration from all authorities having jurisdiction.

2.8 Submittals

.1 Submit prior to starting work:

.1 Necessary permits for transportation of all wastes specified in this Contract.

.2 Names and credentials of the Overall Superintendent.

.2 Submit Worker's Compensation Board status and transcription of insurance.

.3 Proposed schedule of work showing:

.1 Duration of asbestos abatement, demolition, and restoration work.

.4 Location of all waste disposal sites to be used for work of this Contract.

3.0 GENERAL

3.1 General and Related Work

.1 Read this Section in conjunction with all other sections so as to comply with the requirements of Division 1 and the General Conditions of the Contract.

.2 Related work specified elsewhere:

Division 2, Section 02000 Existing Conditions and Scope

3.2 Existing Conditions

.1 Refer to Section 02000, Existing Conditions and Scope.

3.3 Outline of Work

.1 Refer to Section 02000, Existing Conditions and Scope.

3.4 References

.1 Reference CSA S350-M1980, Code of Practice of Safety in Demolition of Structures.

.2 Canadian Federal Legislation:

.1 Canadian Environmental Protection Act (CEPA) 1998;

.2 Canadian Environmental Assessment Act (CEAA) 1995;

.3 Transportation of Dangerous Goods Act (TDG Act) 1992, (T-19.01);

.4 National Fire Code of Canada;

.5 Transportation of Dangerous Goods Regulations (TDGR), (SOR/85-585, SOR/85-609, SOR/86-526);

3.5 Existing Conditions

.1 Take over structures to be demolished based on their condition on date that Bid is accepted. Reference Section 02000 for Existing Conditions. Structures to be demolished to be based on their condition, at time of examination prior to tendering.

3.6 Protection

.1 Take precautions to guard against movement, settlement or collapse of adjacent services, sidewalks, roadways or driveways. Be liable for such movement, settlement or collapse caused by failure to take necessary precautions. Promptly repair such damage.

.2 Maintain and protect active site services.

.3 Prevent erosion of existing site soils to areas outside of contract limits. Prevent eroded soils from entering on-site or adjacent catchbasins, drainage systems, sumps, pits, etc..

.4 Keep public roadways and sidewalks clean of mud, soil, debris and garbage. Wash tires of all vehicles leaving the site as necessary.

.5 Ensure demolition work does not adversely affect adjacent watercourses, groundwater and wildlife.

4.0 EXECUTION

4.1 Preparation

.1 Before commencing work, establish location and extent of existing services and utilities, above and below ground at the site. Disconnect existing services and utilities at locations entering any buildings.

.2 Whenever it is necessary to cut, interfere with, or connect to existing services or facility, do so at hours and times recommended by governing authorities and approved by Project Manager, and with minimum disturbance to occupants, pedestrian and vehicular traffic and public and private property. Obtain written permission and permits from applicable utility.

.3 If unknown services are encountered, immediately notify the Engineer and confirm findings in writing and/or on drawings. Obtain Engineer's written direction if such services require cutting, capping or relocation to do the work.

.4 Do not disrupt active or energized utilities designated to remain undisturbed.

4.2 Demolition

.1 Prior to the start of any demolition work, remove and dispose of contaminated or hazardous materials (i.e. asbestos) prior to any demolition activities.

.2 Remove all piping and culverts.

.3 At locations where Utilidors terminate at buildings, cut and cap all services. Where Utilidors enter the building, demolish Utilidors to the underside of the floor of the building and restore floor to match existing conditions

.4 Demolish entire Utilidor structure including spurs to the Federal Residence Building, the Maintenance Garage and First Air's Nose Dock. Include all associated piping, insulation and any other non-hazardous materials.

.5 Provide areas for collection and storage of reused, salvaged or recycled materials.

.6 Notify in writing of any materials identified as not suitable for disposal. Provide written reasons prior to approval for disposal.

.7 Demolish to minimize dust generation. Keep materials wetted. Dust suppression methods must meet the approval of the Engineer. Keep all materials contained in defined work area. Do not allow materials to migrate to other areas of the Airport property.

.8 Do not perform exterior demolition work during high winds that could cause dust or debris to blow off-site.

.9 Contain all fibrous materials (i.e. cellulose or fiberglass insulation) to minimize release while being handled or transported.

.10 Remove stockpiled materials as directed by the Engineer when it interferes with the operations of the Airport or other construction.

.11 Remove any remaining debris, rubble or crushed material from the site after completion of the work.

.12 At the end of each day's work, leave work area in a safe and stable condition.

.13 Remove tools at completion of work and leave work area in a clean and orderly fashion.

.14 Blasting operations not permitted during demolition.

.15 Do not sell or burn materials on-site.

Annex B

Iqaluit Airport Utilidor Inspection
Air Sampling/Monitoring Program
Iqaluit, Nunavut

Proposal Evaluation Criteria

Iqaluit Airport
Inspection/Air Monitoring
Proposal Evaluation Criteria

Evaluation Criteria	Criterion Weight Factor	Rating
1. Understanding of Project	**10**	
1.1 Analysis of project goals and requirements	10	
2. Scope of Services, Work Plan and Schedule	**20**	
2.1 Completeness of offered services	5	
2.2 Quality and Appropriateness of the Work Plan	5	
2.3 Project schedule and quality control methods	5	
2.4 Quality of the Proposal	5	
3. Management of the Services	**10**	
3.1 Organization and management of the team	10	
4. Qualifications	**30**	
4.1 Qualification and experience of the firm	10	
4.2 Experience on similar completed projects	10	
4.3 Qualification and experience of the site inspector	10	
Sub-Total	**70**	
Cost Assessment will be based on the following formula Lowest proposed cost x 10 = Points awarded Proposed cost Only those proposals rating 70% or over (49 of the 70) points available for technical evaluation (items 1-4) will be considered for cost evaluation. Two envelopes tender, one for technical submission, one for costs.	**30**	
Total	**100**	