

Appendix J

Draft Specifications

PART 1 GENERAL

1.1 Definitions

- .1 Process Water: wash water, meltwater collection, rinse water resulting from cleaning of barrels, fuel tanks and pipelines, and water from dewatering contaminated soil areas.
- .2 Sewage: liquid and solid waste generated from camp activities. Refer to Section 01 54 00 - Camp Facilities for disposal requirements.
- .3 Contact Water: water that has come into contact with contaminated or potentially contaminated materials in the normal course of work and may have become contaminated as a result. Contaminated water discharging from mine openings is not considered contact water.

1.2 Regulatory Requirements

- .1 Comply with federal, provincial, territorial, and local anti-pollution laws, ordinances, codes, and regulations when disposing of waste materials, debris, and rubbish.

1.3 Submittals

- .1 All submittals in accordance with Section 01 33 00 - Submittal Procedures.

1.4 Equipment Decontamination

- .1 Decontaminate equipment after working in potentially contaminated Work areas and prior to subsequent Work or travel on clean areas. Remove all loose soil, contain and dispose of with like potentially contaminated soils.
- .2 Remove potentially contaminated. Contain and dispose of any rinsate created during the removal process as contact water. Contain and dispose of soil removed from equipment with like potentially contaminated soils.
- .3 Furnish and equip personnel engaged in equipment decontamination with protective equipment including suitable disposable clothing, respiratory protection, and face shields.
- .4 Perform final decontamination of construction facilities, equipment, and materials which may have come in contact with potentially contaminated materials prior to removal from site.

1.5 Soil Stockpiling Facilities

- .1 Provide, maintain, and operate storage/stockpiling facilities as required.
- .2 Department Representative will obtain baseline samples of proposed stockpile locations prior to placement of contaminated soil, and will obtain samples once contaminated soil is removed to verify removal of contaminants.

1.6 Process Water Treatment Facility Design Requirements

.1 Submit design details of process water treatment facilities conforming to requirements of Authorities Having Jurisdiction (AHJ) sixty (60) days after contract award date. Process water treatment facility designs will be stamped by an Engineer registered or licensed to practice in the Northwest Territories.

.1 Design Process Water Treatment Facility to meet the following parameters:

Parameter	Maximum Allowable Concentration
Volatile Hydrocarbons	15 mg/L
Extractable Hydrocarbons	5 mg/L
Non-Aqueous Phase Liquid / Free Product	Not Present
Phenols	20 µg/L
pH	6 to 9
Arsenic (total)	100 µg/L
Cadmium (dissolved)	10 µg/L
Chromium (total)	100 µg/L
Cobalt (dissolved)	50 µg/L
Copper (dissolved)	200 µg/L
Lead (dissolved)	50 µg/L
Mercury (total)	0.6 µg/L
Nickel (dissolved)	200 µg/L
Zinc (total)	1,000 µg/L

.2 Process Water Treatment Facility:

.1 Design water filtering plant capable of filtering water generated from contact with contaminants, including wash water and dewatering excavations and Work areas to meet discharge requirements of Authority Having Jurisdiction (AHJ) capable of removing oil, suspended solids, particulates, and asbestos fibres, and filter water through 5-micron particulate filter prior to discharge.

.2 Ensure that discharges from site are in compliance with applicable permit requirements and limitations.

.3 Provide piping to transfer liquid/solid mixtures generated by dewatering operations which require water filtering to water filtering plant.

.4 Design water filtering operations capable of receiving liquid/solid mixtures and not causing delay to dewatering operations.

.5 Provide adequate storage for wastewater such that samples of wastewater can be obtained and analyzed prior to discharge.

.1 Use of tanks on site is permitted, provided that the tanks are empty and clean prior to use, and are reviewed by Departmental Representative, prior to use.

.2 Wastewater storage ponds meeting all requirements of AHJ are permitted.

.3 Provide separate storage for wastewater generated by camp operations and wastewater generated from remediation activities

- .3 Piping: Suitable material type, of sufficient diameter and structural thickness for purpose intended; satisfactorily tested for leaks with potable water in presence of Departmental Representative before handling process water.
- .4 Installation:
 - .1 Provide labour, materials, and equipment and do Work required for setup and construction of water filtering plant.
 - .2 Setup in a previously disturbed area as approved by Departmental Representative where possible. Cut vegetation to ground level.
 - .3 Install component systems in accordance with installation procedures and as indicated.
 - .4 Following installation of system, implement initial operation test in accordance with procedures developed by Contractor and submitted to Departmental Representative for review.
 - .5 Install piping in accordance with manufacturer's instructions and test for leakage using potable water prior to commencing dewatering and filtering operations.
- .5 Operation:
 - .1 Obtain and analyze influent and effluent samples required to operate the system. Submit all sample results to Departmental Representative for review.
 - .2 Make system modifications required for effluent to satisfy discharge criteria based on analytical results.
 - .3 Operate Process Water Treatment Facility by experienced, qualified personnel in accordance with manufacturer's instructions and procedures submitted by Contractor and approved by Departmental Representative.
 - .4 Operate the Process Water Treatment Facility such that storage tanks and storage ponds are either empty at the end of the construction season or have allowances for expansion of water due to freezing.
 - .5 Discharge treated water onto the ground at a location that is a minimum of 30 metres from natural drainage courses and 100 metres from fish bearing waters, in accordance with AHJ.
- .6 Decommissioning/Dismantling:
 - .1 Decontaminate and remove salvageable components of water filtering plant including water filtering system, pumps, piping, and electrical equipment.
 - .2 Dispose of non-salvageable equipment and materials at approved off-site disposal facility. Decontaminate salvageable equipment within facility area as required prior to removal from site.
- .7 Dispose of any post treated liquid effluent not conforming to these guidelines or discharge requirements set out in Water License at Contractor's expense.

1.7 Drums

- .1 Storage of Liquid Waste: 200 L steel drums meeting Transportation and Dangerous Goods Act, closable lids, complete with labels for marking contents and date filled.
- .2 Storage of Solid Waste: 200 L steel drums meeting Transportation and Dangerous Goods Act, closable lids, complete with labels for marking contents and date filled.

1.8 Dust and Particulate Control

- .1 Execute Work by methods to minimize raising dust from construction operations.
- .2 Implement and maintain dust and particulate control measures during construction and in accordance with all applicable regulations and AHJ.

1.9 Water Control

- .1 Maintain excavations free of water.
- .2 Protect site from standing or running water. Grade site to drain. Provide erosion control measures as required to protect native soils from erosion and permafrost from degradation.
- .3 Prevent surface water runoff from leaving Work areas.
- .4 Do not discharge water that exceeds the applicable discharge criteria.
- .5 Direct surface waters that have not contacted potentially contaminated materials to existing surface drainage systems.
- .6 Dispose of water in manner not injurious to public health or safety, to property, or to any part of Work completed or under construction.
- .7 Provide, operate, and maintain necessary equipment appropriately sized to keep excavations, staging pads, and other Work areas free from water.
- .8 Contain water from stockpiled waste materials. Transfer potentially contaminated surface waters to wastewater storage facilities for processing. Use of tanks on site is permitted, provided that the tanks are empty and clean prior to use, and are reviewed by Departmental Representative prior to use.
- .9 Have on hand sufficient pumping equipment, machinery, and tankage in good working condition for ordinary emergencies, including power outage, and competent workers for operation of pumping equipment.
- .10 Employ temporary diversions or containment of outflow water during construction of mine opening improvements or closures. Temporary diversions will discharge to original drainage course or as directed by Departmental Representative.
- .11 Remove all temporary diversions when work complete.

1.10 Dewatering

- .1 Dewater various parts of Work including, without limitation, excavations, structures, foundations, and Work areas.
- .2 Employ construction methods, plant procedures, and precautions that ensure Work, including excavations, are stable, free from disturbance, and dry.
- .3 Provide sufficient and appropriate labour, plant, and equipment necessary to keep Work free of water including standby equipment necessary to ensure continuous operation of dewatering system.
- .4 Take precautions necessary to prevent uplift of any structure or pipeline and to protect excavations from flooding and damage due to surface runoff.
- .5 Test and analyze water generated from dewatering activities and treat to meet required discharge or disposal criteria.

1.11 Progress Cleaning

- .1 Maintain cleanliness of Work and surrounding site to comply with federal, territorial, and local fire and safety laws, ordinances, codes, and regulations.
- .2 Coordinate cleaning operations with disposal operations to prevent accumulation of dust, dirt, debris, rubbish, and waste materials.

1.12 Removal and Disposal

- .1 Remove surplus materials and temporary facilities from site.
- .2 Dispose of non-contaminated waste materials, litter, debris, and rubbish in the on-site landfill unless otherwise indicated by Departmental Representative.
- .3 Do not burn rubbish and waste materials on site unless approved by Departmental Representative.
- .4 Do not discharge wastes into streams or waterways.
- .5 Dispose of hazardous materials resulting from construction activities at Contractor's approved off-site Designated Hazardous Waste Disposal Facility.

1.13 Measurement of Payment

- .1 Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the cost breakdown specified in Section 01 32 18 -Construction Progress Schedules - Bar (GANTT) Chart.

PART 2 PRODUCTS

2.1 Not Used

.1 Not Used.

PART 3 EXECUTION

3.1 Temporary Containerization of Process Water

.1 If on-site transportation of process water is required, temporarily contain for transport to a central processing facility operated by Contractor.

.2 Containerize process water in accordance with requirements of AHJ within approved containers as per Section 02 61 33 – Hazardous Waste Materials.

END OF SECTION

PART 1 GENERAL

1.1 Definitions

- .1 Separated Work Group: a work crew of any number of personnel working at a location where immediate medical attention from site medical personnel may not be possible due to environmental, mechanical or other factors.

1.2 Site Specific Health and Safety Requirements

- .1 Maintain and complete all health and safety, fire safety, and environmental compliance activities in accordance with applicable sections and Authorities Having Jurisdiction (AHJ).
- .2 Establish a Safety Committee and schedule a compliance meeting on a weekly basis.
- .1 The intent of the compliance meeting is to review reporting and inspection requirements to meet the intent of the **NWT Safety Act, NWT Mine Health and Safety Act**, Canadian Labour Code (CLC), the Water License, the Land Use Permit, and the Quarry Permit, regulatory, and other requirements as may be required.
- .2 Compliance meetings to be held at the Work site.
- .3 Contractor will record minutes, chair the meeting and distribute minutes to parties of record prior to the next Scheduled meeting.
- .4 Prepare brief report of meeting to present at weekly Site Meeting.
- .5 Attendees:
- .1 Contractor: Manager and / or Supervisor(s), representatives of major Sub-Contractors, and others as necessary.
- .2 Departmental Representative, and Departmental Representative's Authorized Personnel.
- .3 INAC representative(s).
- .6 Agenda:
- .1 Review and approval of minutes of previous meeting.
- .2 Review of items of significance that could affect Work.
- .3 Inspect the site on a monthly basis, or more or less often, as determined by the Departmental Representative or as dictated by the AHJ.
- .4 Identify and record field observations, problems, and conflicts that must be noted in reports required by the AHJ.
- .5 Identify corrective measures and procedures to regain approval from AHJ.
- .6 Identification of requirements for maintenance of quality standards needed for compliance with applicable Codes and Legislation.
- .7 Review site safety and security issues.
- .8 Review environmental and regulatory compliance.
- .9 Other topics for discussion as appropriate to current status of the Work.

1.3 Submittals

- .1 Submit Site Specific Health and Safety Plan no later than 30 days after contract award to the to AHJ to ensure all the elements required by the NWT, OSHA Regulations, other AHJ, and Contract Specifications have been addressed. Any items, which are identified as missing, will be added and the plan revised, so as to incorporate the additional items. The revised safety plan, will be submitted to Departmental Representative including all AHJ recommendations.
- .2 All submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .3 The Site Specific Health and Safety Plan will include, but is not limited to the following sections:
 - .1 A Statement of Contractor's Safety Policy.
 - .2 Safety Responsibilities of all on-site personnel.
 - .3 Safe Work Practices and/or Job Procedures.
 - .4 Camp Rules and their enforcement.
 - .5 Results of safety and health risk or hazard analysis for camp and construction activities.
 - .6 Procedures for, but not limited to, cold weather survival, remote Work and general worker health and safety.
 - .7 Procedures for confined space entry.
 - .8 Name and telephone number of Contractor's corporate Safety Officer and on-site Safety Representative.
 - .9 Contingency Plan.
 - .10 Emergency Response Plan.
 - .11 Fire Safety Plan.
 - .12 Spill Contingency Plan.
 - .13 Confined Space Procedures
 - .14 Drilling Safety
 - .15 Blasting Cap Handling.
 - .16 Lockout/Tagout procedures for equipment that could become energized.
- .4 Submit prior to Pre-Construction Meeting, on site Contingency and Emergency Response Plan addressing standard operating procedures to be implemented during emergency situations.
 - .1 Keep the Site Specific Health and Safety Plan on site, and available to site personnel and updated after each Safety Meeting.
 - .2 Co-ordinate with the Environmental Health and Safety Policy requirements.
- .5 Conduct and submit to Departmental Representative, a site assessment of deficiencies in health, safety, medical/first aid supplies. Submit to Departmental Representative a Schedule for upgrading deficiencies to meet requirements of AHJ.

1.4 Construction Safety Measures

- .1 Designate a resident Health and Safety Officer to oversee Contractor's Site Specific Health and Safety Plan with the authority to enforce policies and procedures set out in the Site Specific Health and Safety Plan. Health and Safety Officer to have a minimum of five (5) years' acceptable experience in administering construction health and safety programs.

- .2 Observe and enforce construction safety measures required by the latest revisions of: Canada Labour Code, National Building Code of Canada, National Fire Code of Canada, Workers' Compensation Board, the applicable Occupational Health and Safety Regulations, and Territorial and local statutes and authorities.
- .3 In the event of discrepancies between any requirements of the above listed authorities, the more stringent requirements will govern.
- .4 Arrange regular safety meetings, to be held no less frequently than once per week. Record the minutes of such meetings and maintain a complete file for review by the appropriate authorities. Submit a copy of these meeting minutes to Departmental Representative within three (3) days of the meeting.
- .5 Maintain at the site, five safety hats with liners, and five safety hi-visibility vests for use by Departmental Representative and visitors. Maintain a supply of ear plugs, gloves and safety glasses.
- .6 Maintain a supply of Tyvek or equivalent suits of various sizes as required for Contractor's staff, Departmental Representative and up to three visitors for the duration of the Work.
- .7 Comply with all applicable health and safety policies and procedures of Departmental Representative.
- .8 Departmental Representative or his representative has the authority to stop Work on the contract if, in his/her opinion, the Work is being performed in an unsafe manner as required by the applicable safety legislation. **No claims will be entertained for work stoppages as a result of unsafe work.**
- .9 Prepare and coordinate a Contingency and Emergency Response Plan with contributions from appropriate authorities including Government of NWT, Hospitals, RCMP, Ministry of Transportation, and Ministry of Health. Plan will identify off site Emergency Response Coordinator through whom all information and coordination will flow in the event of an incident.
- .10 Verify that emergency procedures including appropriate First aid facilities and First Aid personnel are in place at the Work Site. First aid facilities and First Aid personnel must be in compliance with AHJ requirements.
- .11 Verify that procedures meet the WCB and HRSDC requirements.
- .12 Develop, as part of Site Specific Health and Safety Plan written Contaminated Site Working and Decontamination procedures. Working procedures to outline personal protective equipment (PPE) requirements for various parts of site and for different operations.
- .13 Working Procedures and Decontamination procedures consistent with requirements OSHA's 29 CFR 1910.120 HAZWOPER and territorial environmental regulations for:

- .1 Working activities, where employees are likely to be exposed to 50% of Threshold Limit Values (TLV) listed by American Conference of Governmental Hygienists (ACGIH), TLVs and BEIs based on documentation of Threshold Limit Values (TLV) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEI) 2004 and amendments thereto.

.14 Hazardous Material Discovery

- .1 Immediately stop Work and notify Departmental Representative for further instructions with respect to abatement procedures required for asbestos conditions encountered when Work occurs in areas having materials resembling asbestos during course of Work.

1.5 Filing of Notice

- .1 File Notice of Work with Federal and Territorial AHJ prior to commencement of Work.

1.6 Regulatory Requirements

- .1 Comply with specified standards, regulations and orders of AHJ to ensure safe operations at sites containing hazardous or toxic materials and other hazards (such as wildlife encounters, falls, etc.).
- .2 Employ a Level 2 Supervisor on site as per GNWT WCB Mine Health and Safety Act. Level 2 Supervisor to be on site when mine openings are being inspected and when the openings are being sealed, as a minimum.
- .3 All equipment brought to the site must meet the Mine Health and Safety Act, equipment must have rotating beacons and vehicles should have beacons and buggy whips.

1.7 Responsibility

- .1 Be responsible for safety of persons and property on site and for protection of public off site and environment to extent that they may be affected by the site and conduct of Work.
- .2 Control access to the site. Persons with business at the site and who are not Contractor's employees must be briefed on site specific health and safety issues, and provided with a copy of the site specific health and safety plan.
- .3 Contractor may refuse access to the site to any person not complying with site specific health and safety standards.
- .4 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, territorial, and local statutes, regulations, and ordinances, and with Site-Specific Health and Safety Plan:

- .1 Conduct appropriate safety training for all personnel working on the site.
- .2 Conduct Work place safety inspections for all Work activities.
- .3 Maintain a log of first aid and safety supplies, and notify appropriate personnel for restocking after each incident, and periodical restocking to replace out dated or consumable (headache medicines, bandages) products.

1.8 Hazard Communication Requirements

- .1 Comply with Work Site Hazardous Materials Information System Regulations of the AHJ.
- .2 Provide Departmental Representative with Material Safety Data Sheets (MSDS) and documentation on any "hazardous" chemical that Contractor or Contractor Representatives plan to bring onto site; bound in one place and stored in accordance with the Site Specific Health and Safety Plan.

1.9 Unforeseen Hazards

- .1 Should any unforeseen or peculiar safety related factor, hazard, or condition become evident, stop Work, assess, take steps to mitigate if necessary at that time and immediately advise Departmental Representative verbally and in writing.
- .2 Monitor potential low oxygen and Lower Explosive Limits areas with oxygen/LEL monitor if workers are working in and around area. These areas include but are not limited to mine openings, trenches, excavations and areas near machinery exhaust.

1.10 Safety and Hygiene

- .1 Provide training for all persons entering the site in accordance with specified personnel training requirements, maintain log of who was trained, what training was provided and by whom the training was conducted.
- .2 Personal Protective Equipment (PPE):
 - .1 Furnish site personnel with appropriate PPE as required by legislation.
 - .2 Verify that safety equipment and protective clothing is kept clean and well maintained.
 - .3 Ensure all clothing and personal protective equipment used on site, must remain on site, to be either decontaminated or disposed of. No Work clothing is to leave Work site without having been properly decontaminated. This includes, but is not limited to working coveralls.
 - .4 Outline and designate PPE for each site and Work activity in accordance with AHJ.
- .3 Develop written PPE care and use procedures to be included in the Site Specific Health and Safety Plan and verify that procedures are strictly followed by site personnel including, but not limited to, the following:
 - .1 Provisions for prescription eyeglasses with side shields worn as safety glasses and do not permit contact lenses on site within Work zones.
 - .2 Provisions, for footwear, are steel toed safety shoes or boots and are covered by rubber overshoes when entering or working in potentially contaminated Work areas.

- .3 Dispose of or decontaminate PPE worn on site at end of each workday.
 - .4 Decontaminate reusable PPE before reissuing.
 - .5 Provisions for decontamination arising from entry or exit into contaminated areas.
- .4 Develop a written Respiratory Protection program to be included in the Site Specific Health and Safety Plan and ensure that the program is strictly followed by site personnel; include the following procedures as minimum:
- .1 Provide site personnel with extensive training in usage and limitations of, and qualitative fit testing for, air purifying and supplied air respirators in accordance with specified regulations.
 - .2 Monitor, evaluate, and provide respiratory protection for site personnel.
 - .3 Verify that levels of protection as listed have been chosen to be consistent with site specific potential airborne hazards associated with major contaminants identified on site.
 - .4 Immediately notify Departmental Representative when level of respiratory protection required increases.
 - .5 Verify that appropriate respiratory protection during Work activities is available and readily accessible; all personnel entering potentially contaminated Work areas will be supplied with and use appropriate respiratory protection.
 - .6 Assess ability for site personnel to wear respiratory protection.
 - .7 Verify that site personnel have passed respirator fit test prior to entering potentially contaminated Work areas.
 - .8 Verify that facial hair does not interfere with proper respirator fit.
 - .9 Submit proof of fit testing for site personnel to Departmental Representative. Update submission when new personnel are added to the Work or when new Work activities occur.
- .5 Heat Stress/Cold Stress: Implement heat stress and cold stress monitoring program as applicable and include in the Site Specific Health and Safety Plan.
- .6 Personnel Hygiene and Personnel Decontamination Procedures: provide minimum as follows:
- .1 Suitable containers for storage and disposal of used disposable PPE.
 - .2 Potable water and suitable sanitation facility.
 - .3 Access to shower facilities.
 - .4 Provisions for proper disposal of contaminated PPE.

1.11 Site Communications

- .1 Post emergency numbers near site telephones.
- .2 Train personnel in the use of "buddy" system.
- .3 Provide alarm system to notify employees of site emergency situations or to stop Work activities if necessary.

1.12 Safety Meeting

- .1 Conduct task specific safety meetings as per Project requirements and as directed by Departmental Representative.

- .2 Conduct safety meetings with workers engaged in constructing, maintaining or travelling on winter roads. Workers must be instructed on the dangers inherent with winter roads, and hazard avoidance procedures.
- .3 Conduct safety meetings with workers engaged in outdoor Work under summer or winter conditions. Topics must include hot and cold stress, exhaustion, snowmobile safety, buddy systems, wildlife awareness, and any other items inherent in working outdoors in winter in isolated environments.
- .4 Conduct mandatory daily safety meetings for personnel, and additionally as required by special or Work related conditions; include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Hold additional safety meetings on an as needed basis or as specified by the AHJ.

1.13 Fuel Management

- .1 All vehicle and equipment refuelling must be conducted by appropriately trained personnel using the effective personal protective equipment in a manner which meets or exceeds regulatory requirements including using drip pans.
- .2 Records of fuel usage by activity must be maintained.
- .3 All fuel transports including mobile refuelling trucks and fuel transport to stationary equipment such as generators or pumps or distributed storage areas, must occur in approved (CSA) containers with the notification and consent of site safety personnel.

1.14 Vehicle and Equipment Usage

- .1 Seatbelts must be worn at all times vehicle or equipment is in operation.
- .2 Speed limits must be set and obeyed.
- .3 If road conditions are unsafe or marginally unsafe, maintain roads to acceptable standards. Do not risk property damage or injury.
- .4 Vehicles are to not be idled for longer than 10 minutes (warm up) unless explicitly used as a place of refuge during animal encounters or for personnel working outdoors during winter operations. Exceptions are to be made in consultation with Departmental Representative.
- .5 Perform vehicle maintenance and lubrication of equipment in a manner that avoids spillage of fuels, oils, grease and coolants. When refuelling equipment, use leak free containers and reinforced rip and puncture proof hoses and nozzles. Remain in attendance for duration of refuelling operation, and ensure that all storage container outlets are properly sealed after use.
- .6 Dispose of used oil, grease and coolants from Contractor's vehicle maintenance activities as hazardous waste as set out in Section 02 61 33 – Hazardous Waste Material. Include costs for disposal in this Section
- .7 Place drip pans and/or sorbent pads under stationary equipment with potential leaks.

- .8 All equipment brought to the site will have rotating beacons and vehicles will have beacons and buggy whips.

1.15 Flammable Liquids

- .1 The handling, storage and use of flammable liquids will be governed by the current National Fire Code of Canada.
- .2 Flammable liquids such as gasoline, kerosene and naphtha may be kept for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable liquids exceeding 45 litres for Work purposes, requires the permission of the permitting authority.
- .3 Do not transfer flammable liquids in the vicinity of open flames or any type of heat-producing devices.
- .4 Do not use flammable liquids having a flash point below 38°C such as naphtha or gasoline as solvents or cleaning agents.
- .5 Store flammable waste liquids, for disposal, in approved containers located in a safe ventilated area. Quantities are to be kept to a minimum and Departmental Representative is to be notified when disposal is required.
- .6 Dispose of all flammable liquids in accordance with all applicable environmental regulations and with the requirements of Section 02 61 33 - Hazardous Waste Material.

1.16 Storage and Handling of Fuel

- .1 Locate fuel storage areas as approved by Departmental Representative.
- .2 Inspect fuel storage and dispensing facilities daily. Make available fire fighting and spill response equipment for immediate access at each fuel storage location.
- .3 Store all barrels containing fuel and /or hazardous materials in an elevated position, either on their side with bungs facing 9 and 3 o'clock position, or on pallets, upright, and banded.
- .4 All barrels to be individually identified. Label will be to industry standards and will provide all information necessary for health and safety and environmental purposes. Make available, to all personnel, Material Safety Data Sheets for all materials maintained at site or along right-of-ways.
- .5 All barrels/fuel containers to be labelled with INAC's name, and Contractor's name as required by the Land Use Permit.
- .6 Treat all waste petroleum products, including used oil filters as hazardous materials.
- .7 Conduct regular inspections of all machinery hydraulic, fuel and cooling systems. Repair leaks immediately.

- .8 Pre-assemble and maintain emergency spill equipment, including at least two fuel pumps , empty 200 L barrels and absorbent material sufficient to clean up a 1000 litre spill at all fuel storage sites. Maintain spill mats or pan under mobile fuelling containers and a spill kit at the refuelling area. Replace contents of spill kits within 24 hours of use.
- .9 Remove all full and empty barrels, fuel storage facilities and associated materials and equipment from site at conclusion of Work.
- .10 All Fuel barrels, regardless of ownership will be cleaned and crushed or returned to supplier by Contractor for reuse.

1.17 Spill Contingency Plan

- .1 Submit to Departmental Representative for approval, detailed Spill Contingency Plan. Identify response capabilities by detailing response times, and types and volumes of spills to which Contractor can respond. Following information is required as a minimum:
 - .1 A description of pre-emergency planning.
 - .2 Personnel roles, lines of authority and communication, emergency phone numbers.
 - .3 Emergency alerting and response procedures.
 - .4 Evacuation routes and procedures, safe distances and places of refuge.
 - .5 Directions/methods of getting to nearest medical facility.
 - .6 Emergency decontamination procedures.
 - .7 Emergency medical treatment and First-Aid.
 - .8 Emergency equipment and materials.
 - .9 Emergency protective equipment.
 - .10 Procedures for reporting incidents.
 - .11 Spill response and containment plans for all materials that could potentially be spilled.

1.18 Medical

- .1 Provide and maintain first aid and medical care and facilities for all workers as required by the Statutes of the NWT Safety Act.
- .2 Maintain first aid supplies and sick quarters separately from general living quarters when camp population normally ranges between 26 and 50 occupants.
- .3 Provide the appropriate NWT first aid kit, based on the number of workers, in accordance with the NWT Safety Act.
- .4 Establish an emergency response plan acceptable to Departmental Representative, for the removal of any injured person to medical facilities or a doctor's care in accordance with applicable legislative and regulatory requirements.
- .5 Provide proof of First Aid credentials to Departmental Representative prior to the start of each construction season. Provide the appropriate number of first aid attendants on site in accordance with the NWT Safety Act and a minimum of one person trained in Wilderness First Aid for each separated work group.
- .6 Emergency and First Aid Equipment:

- .1 Locate and maintain emergency and first aid equipment in appropriate location on site including first aid kit to accommodate number of site personnel; portable emergency eye wash; fire protection equipment as required by legislation.
 - .2 Locate sufficient self contained breathing apparatus units; blankets and towels; stretcher; and 1 hand held emergency siren in all confined access locations.
 - .3 Provide a minimum of 1 qualified first aid attendant on site at all times when Work activities are in progress; duties of first aid attendant may be shared with other light duty Work related activities.
- .7 Provide a full time EMT - Emergency Medical Technician, c/w 1000 hours of classroom and practical training, 6 weeks of practical experience with required number of emergency response calls. The EMT will be territorially certified by a required exam and refresher exams every 2 years. An EMT is a highly trained medical professional who responds to medical and trauma emergencies in the pre-hospital setting ("in-field") for the purpose of stabilizing a patient's condition before and during transportation to an appropriate medical facility.

1.19 Accidents and Accident Reports

- .1 Contractor's person in charge will immediately report, verbally, followed by a written report within 24 hours, to Departmental Representative, all accidents of any sort arising out of or in connection with the performance of the Work, giving full details and statements of witnesses. If death or serious injuries or damages are caused, report the accident promptly to Departmental Representative by telephone or facsimile in addition to any report required under federal and territorial laws and regulations.
- .2 If a claim is made by anyone against Contractor or Sub-Contractor on account of any accident, promptly report the facts in writing to Departmental Representative for information only, giving full details of the claim.

1.20 Security

- .1 Enforce the Camp Rules as provided under Section 01 54 00 - Camp Facilities.
- .2 Limit site access only to persons employed on the Project. Unauthorized persons will be permitted on site only with the approval of Departmental Representative or Contractor.

1.21 Wildlife Management

- .1 Develop a wildlife management plan, as part of the Site Specific Safety Plan, that includes bear and large mammal safety and as a minimum meets the following requirements:
 - .1 Firearms must be stored and used in accordance with all AHJ. Terms of Use for firearms must be submitted to Departmental Representative for review.
 - .2 All wildlife encounters and sightings must be reported to Departmental Representative as part of the weekly report.

- .3 A minimum of one person must be designated as a wildlife monitor for each separated work group and trained in firearms and wildlife deterrent use. Qualifications and training plans for wildlife monitors must be submitted to Departmental Representative as part of the Site Specific Safety Plan.

1.22 Wildlife Monitors

- .1 Provide for the duration of the construction seasons, full-time wildlife monitors acceptable to Departmental Representative. Provide sufficient number of wildlife monitors with firearms and ammunition to protect the safety of all workers in all areas, including Departmental Representative and Departmental Representative's support staff during site operations.
- .2 Assign a wildlife monitor to accompany Departmental Representative and Departmental Representative's support staff during all inspections and soil/material sampling activities that take place away from the construction camp area.
- .3 All Wildlife Monitors are required to have all training and certificates for firearms and wildlife deterrents in accordance with AHJ requirements . Copies of the firearms certificates to be included with the Site Specific Health and Safety Plan.
- .4 Assume full responsibility for reporting incidents associated with wildlife encounters.
- .5 Supply one All Terrain Vehicle (ATV) per wildlife monitor to facilitate his duties. Ensure wildlife monitors are fully trained in the safe use of the ATV equipment.
- .6 Provide the wildlife monitors with mobile communication radios with charging units for on-site communication between the wildlife monitors, Contractor base radio, and Departmental Representative and Departmental Representative's Authorized Personnel. If radios do not provide sufficient range for continuous communication, provide satellite phones.

1.23 Fire Safety

- .1 Provide all fire prevention, fire protection and fire fighting services at the Project site.
- .2 Implement a fire safety program that includes fire prevention, fire protection and fire fighting requirements. Submit details of the fire safety program in writing to Departmental Representative for review prior to start of construction. Such review does not relieve Contractor from any obligations or responsibilities required by the Contract.
- .3 Ensure that any Sub-Contractors and other Contractor personnel on-site are briefed on fire safety requirements and are familiar with the fire prevention, fire protection and fire fighting program.
- .4 The fire safety program to meet or exceed the most recent editions of the following codes and standards:
 - .1 NWT Safety Act.
 - .2 National Fire Code of Canada.
 - .3 Canada Labour Code.

- .5 Personnel designated for fire fighting services must be provided with training for any special hazards that may be present. These personnel must also be provided with protective equipment as required by the Canada Labour Code.

1.24 Reporting Fires

- .1 A person discovering a fire and all fire related incidents will report immediately, by fastest available means, to Departmental Representative and site superintendent.
- .2 A person discovering a fire will if possible, remain in the vicinity to direct fire fighting personnel.

1.25 Fire Extinguishers

- .1 Provide and maintain fire extinguishers in sufficient quantity to protect, in an emergency, the Work in progress and the physical plant on site.

1.26 Smoking Precautions

- .1 Do not permit smoking in hazardous areas. Exercise care in the use of smoking materials in non-restricted areas.
- .2 Smoking in camp areas as per Section 01 54 00 – Camp Facilities.
- .3 Provide and place signs prohibiting smoking in areas where smoking is not permitted.
- .4 Signs prohibiting smoking will be in English and the local dialect and will have black lettering not less than 50 mm high, with a 12 mm wide stroke on a yellow background. In lieu of lettering, symbols of not less than 150 mm by 150 mm may be used.
- .5 Smoking is prohibited within 7.5 metres of fuel storage and dispensing facilities.
- .6 Provide and place signs indicating that smoking within 7.5 metres of fuel storage and dispensing facilities is not permitted, and that the vehicle ignition must be turned off while the vehicle is being refuelled. Provide at least one weather-resistant sign at each fuel dispensing location. The signs will have a minimum dimension of 200 mm and letters not less than 25 mm high. In lieu of lettering, signs may have international "No Smoking - Ignition Off" symbols not less than 100 mm in diameter. Install signs in a location visible to all drivers approaching the dispensing location, and at the dispensing unit.

1.27 Rubbish and Waste Materials

- .1 Rubbish and waste materials are to be kept to a minimum.
- .2 Storage:
 - .1 Extreme care is required where it is necessary to store oily waste in Work areas to ensure maximum possible cleanliness and safety.
 - .2 Greasy or oily rags or materials subject to spontaneous combustion will be disposed of as hazardous material in accordance with Section 02 61 33 - Hazardous Waste Material.

1.28 Hazardous Substances

- .1 If the Work entails the use of any toxic or hazardous materials or chemicals, or otherwise creates a hazard to life, safety or health, Work will be in accordance with the National Fire Code of Canada, Occupational Health and Safety Legislation, and WHMIS.
- .2 Departmental Representative is to be advised, and a "Hot Work" permit issued by Contractor's Health and Safety Officer in all cases involving welding, burning or the use of blow torches and salamanders, in buildings or facilities. Special precautions are necessary to safeguard life and property from damage by fire or explosives.
- .3 Wherever Work is being carried out in dangerous or hazardous areas involving the use of heat, fire watchers, equipped with sufficient fire extinguishers, will be provided. The determination of dangerous or hazardous areas along with the level of precaution necessary for Fire Watch will be at the discretion of Contractor. Notify Departmental Representative prior to that determination.
- .4 Provide proper ventilation and eliminate all sources of ignition where flammable liquids, such as lacquers or urethanes are used.
- .5 Do not store flammable substances within 30 m of the Temporary Storage Area.

1.29 Questions and Clarifications

- .1 Direct any questions or clarification to Departmental Representative.

1.30 Confined Spaces

- .1 Develop Confined Space Entry Procedures in accordance with the N.W.T. Mine Health and Safety Act.
- .2 Maintain adequate personal protective equipment, air quality monitoring devices and other equipment necessary to satisfy the requirements of the N.W.T. Mine Health and Safety Act, and as appropriate for the work to be completed.
- .3 Provide training for personnel designated to enter Confined Spaces. Topics to include, but are not limited to:
 - Confined Space Entry Procedures
 - Personal Protective Equipment
 - Air Quality Monitoring devices
 - Regulatory requirements
 - Job specific requirements

1.31 Measurement of Payment

- .1 All costs for the preparation and completion of the Site Specific Health and Safety Plan, are to be included in the lump sum price paid for under Item 01 35 32-1, as indicated in Basis of Payment Schedule. The lump sum price for the Site Specific Health and Safety Plan will be paid after a satisfactory Site Specific Health and Safety Plan has been submitted to Departmental Representative.
- .2 Include all direct costs for the provision of Wildlife Monitors, including ATV in the lump sum price bid for Wildlife Monitors, Item 01 35 32-2, in the Basis of Payment Schedule.

- .3 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the cost breakdown specified in Section 01 32 18 -Construction Progress Schedules – Bar (GANTT) Chart.

PART 2 PRODUCTS

2.1 Not Used

- .1 Not used.

PART 3 EXECUTION

3.1 Not Used

- .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 Definitions

- .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade environment aesthetically, culturally and/or historically.
- .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2 Regulatory Overview

- .1 Comply with all applicable environmental laws, regulations and requirements of Federal, Territorial and other regional authorities, and acquire and comply with such permits, approvals and authorizations as may be required.
- .2 Comply with and be subject to those permits and approvals obtained from Departmental Representative to conduct the Work.
- .3 Pay specific attention to the Land Use Permit and Water License.
- .4 Pay specific attention to the Migratory Birds Convention Act, as amended in 1994.

1.3 Submittals

- .1 Submit all required Contractor submittals to satisfy environmental requirements directly to the responsible agency and Authorities Having Jurisdiction (AHJ).
- .2 Submit one complete copy of all submittals and agency approvals to Departmental Representative.
- .3 All submittals in accordance with Section 01 33 00 - Submittal Procedures.

1.4 Relics and Antiquities

- .1 Relics and antiquities and items of historical or scientific interest such as cairns, tent rings, commemorative plaques, inscribed tablets, and similar objects found on-site or in buildings to be demolished will remain the property of the appropriate AHJ.
- .2 Prior to commencing Work at the site, review the following with Departmental Representative:
 - .1 The extent of the archaeological sensitive areas including gravesites.
 - .2 The methods to be used by Contractor to mark and protect the areas from construction/remediation activities.

- .3 Give immediate notice to Departmental Representative if evidence of archaeological finds are encountered during construction/remediation activities, and await Departmental Representative's written instructions before proceeding with Work in this area.
- .4 Protect archaeological finds and similar objects found during course of Work.

1.5 Site Maintenance

- .1 Keep the site free from the accumulation of waste materials and debris as specified in this section.
- .2 Upon completion of the Work, clean away and dispose of all surplus material, supplies, rubbish and temporary works leaving the site neat and tidy to the requirements of Departmental Representative and the Land Use Permit.

1.6 Fires

- .1 Fires and burning of rubbish on site permitted only when approved by Departmental Representative.
- .2 Obtain all required permits from AHJ.
- .3 Where fires or burning permitted, prevent staining or smoke damage to structures, materials or vegetation which is to be preserved. Restore, clean and return to new condition stained or damaged Work.
- .4 Provide supervision, attendance and fire protection measures as directed.

1.7 Disposal of Wastes

- .1 Do not bury rubbish and waste materials on site unless approved by Departmental Representative.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways.

1.8 Drainage

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water. Treat potentially contaminated contact water as described in Section 01 35 15 - Special Procedures for Contaminated Sites.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage courses.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with AHJ requirements.
- .4 Provide erosion and sediment control plan that identifies type and location of erosion and sediment controls to be provided. Plan to include monitoring and reporting requirements to assure that control measures are in compliance with Erosion and Sediment Control Plan, Federal, Territorial, and Municipal laws and regulations.

- .5 Submit an Erosion, Sediment and Drainage Control Plan to Departmental Representative for review and approval prior to commencing Work and specifically addressing the protection of water bodies, water courses, fisheries and the following:
 - .1 Details of grading Work to prevent surface drainage into or out of Work areas.
 - .2 Details of erosion control works and materials to be used, including the deployment of silt fencing, floating silt curtains and containment booms during construction and excavation activities.
 - .3 Work Schedule including the sequence and duration of all related Work activities.
 - .4 The treatment of site runoff to prevent siltation of watercourses.
 - .5 Dewatering procedures for excavated materials including silt removal procedures prior to discharge.
 - .6 Stabilizing procedures during excavation.
 - .7 Maintenance of filters and sedimentation traps.
 - .8 Procedures to comply with monitoring and reporting requirements of AHJ.
- .6 Water meeting discharge criteria resulting from dewatering activities will be released onto the ground at a location that is a minimum of 30 metres from natural drainage courses and 100 metres from fish bearing waters.
- .7 Have on hand sufficient pumping equipment, machinery, and tankage in good working condition for ordinary emergencies, including power outage, and competent workers for operation of pumping equipment.

1.9 Site Clearing and Plant Protection

- .1 Protect trees and plants where indicated.
- .2 Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
- .3 Minimize stripping of topsoil and vegetation.
- .4 Restrict tree removal to areas indicated or designated by Departmental Representative.

1.10 Work Adjacent to Waterways

- .1 Do not operate construction equipment in waterways.
- .2 Do not use waterway beds for borrow material.
- .3 Do not dump excavated fill, waste material or debris in waterways.
- .4 Design and construct temporary crossings to minimize erosion to waterways.
- .5 Do not skid logs or construction materials across waterways.
- .6 Avoid indicated spawning beds when constructing temporary crossings of waterways.

- .7 Do not blast under water or within 100 m of indicated spawning beds.

1.11 Pollution Control

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and plant to AHJ emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

1.12 Historical Archaeological Control

- .1 Provide historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on Project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in area are discovered during construction.
- .2 Plan: include methods to assure protection of known or discovered resources and identify lines of communication between Contractor personnel and Departmental Representative.

1.13 Notification

- .1 Departmental Representative will notify Contractor in writing of observed non-compliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 Contractor: after receipt of such notice, inform Departmental Representative of proposed corrective action and take such action for approval by Departmental Representative.
- .3 Departmental Representative will issue stop order of Work until satisfactory corrective action has been taken.
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

1.14 Measurement of Payment

- .1 Include all direct costs for the supply, transport, installation, removal and disposal of Environmental Protection Supplies including, but not limited to silt fence, sorbent booms, floating turbidity curtain and all necessary stakes and connecting hardware in the lump sum price for Environmental Protection Supplies, Item 01 35 43-1, as indicated in the Basis of Payment Schedule.

- .2 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the cost breakdown specified in Section 01 32 18 - Construction Progress Schedules – Bar (GANTT) Chart.

PART 2 PRODUCTS

2.1 Environment Protection Supplies

- .1 Comply with federal and territorial fisheries and environmental protection legislation, including preventing the loss or destruction of fish habitat, and minimizing the impact of sedimentation, siltation or otherwise causing a degradation in water quality.
- .2 Unused Erosion, Sediment and Drainage Control supplies will remain the property of Departmental Representative until the completion of the Contract. Dispose of or remove unused Environment Protection Supplies as indicated by Departmental Representative. Off-site Transportation of unused Environment Protection Supplies to location designated by Departmental Representative will be negotiated at the rates provided for Potential Additional Work.
- .1 Silt Fence
 - .1 Provide a minimum of 100 m of polypropylene silt fence (typical height of 0.9 m) and the necessary stakes for installation. This will be used as necessary to prevent sediment transport into water bodies. Product acceptance will be based on compliance with the following minimum/maximum average values.
 - .1 Minimum Grab Tensile Strength (ASTM D4632): 520 N (Warp).
 - .2 Maximum Elongation (ASTM D4632): 20%.
 - .3 Minimum Puncture Strength (ASTM D4833): 250 N.
 - .4 Maximum Apparent Opening Size (ASTM D4751) 500 µm.
 - .2 At the completion of construction, dispose of used silt fence as non-Hazardous Waste.
- .2 Sorbent Boom
 - .1 Provide a minimum of 200 lineal metres of 200 mm diameter hydrophobic, sorbent booms. This will be used as necessary to mitigate the migration of hydrocarbons.
 - .2 At the completion of construction, dispose of used absorbent boom in accordance with Section 02 61 33 - Hazardous Waste Material.
- .3 Floating Turbidity Curtain
 - .1 Provide re-usable prefabricated floating turbidity curtain of appropriate depth and length for Contractor's work methodology to control suspended sediment and turbidity during in-water works.
 - .2 Floating turbidity curtain generally meeting the United States Army Corps of Engineers Type II designation and meeting the following values:

- .1 Floatation buoyancy: minimum 250 N/m
- .2 Fabric Curtain Grab Tensile (ASTM D-5043): minimum 1700 x 1650 N
- .3 Connectors: brass grommets nominally 300 mm o/c for lacing
- .4 Ballast Chain: minimum 8 mm galvanized chain, 1.4 kg/m
- .5 Load Cable: minimum 8 mm galvanized, vinyl coated 7 x 19 wire rope, minimum loading 40 kN.
- .6 Constructed in panels

- .3 Provide all mooring lines and anchors as necessary to secure the floating turbidity curtain in position.

PART 3 EXECUTION

3.1 Temporary Erosion Sedimentation Control

- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff to adjacent properties, according to requirements of AHJ.
- .2 Inspect, repair, and maintain erosion and sedimentation control measures during Work.
- .3 Implement silt curtains and other erosion control methods as directed by Departmental Representative.

3.2 Floating Turbidity Curtain

- .1 Deploy and secure floating turbidity curtain prior to any in-water works, and in accordance with AHJ requirements.
- .2 Deploy and secure floating turbidity curtain in accordance with manufacturer's recommendations.
- .3 Remove floating turbidity curtain following completion of in-water works and restore affected areas in accordance with AHJ requirements.

END OF SECTION

PART 1 GENERAL

1.1 Preliminary Requirements

- .1 There is an existing administration building at Terra Mine available for Contractor's use. The existing administration building is scheduled for demolition as part of this Work.
- .2 There are existing camp facilities at Terra Mine in various states of disrepair, which may be suitable for short-term accommodation. Additional camp facilities to accommodate Contractor's and Departmental Representative's personnel will be required during this work.
- .3 Prior to installation of camp facilities and service area submit location and layout plan to Departmental Representative for review. At minimum, Departmental Representative and Departmental Representative's Authorized Personnel office space to be hard sided.
- .4 The location of the camp facilities must be approved by Departmental Representative. Provide 30 days after Contract award.
- .5 Temporary camp facilities to be located and operated in accordance with local regulations and Authorities Having Jurisdiction (AHJ).
- .6 Provide and operate complete camp facilities services, including provision, preparation and serving of food, for construction personnel, Departmental Representative and his authorized personnel, and other specified site visitors.
- .7 Provision of camp facilities services consisting of:
 - .1 Design, supply, installation, and operation and maintenance of camp facilities including:
 - .1 All associated facilities.
 - .2 Utilities and services required for camp facilities such as heating, lighting, fuel, potable, and domestic water systems.
 - .3 Sewage collection.
 - .4 Treatment and disposal systems.
 - .5 Waste, refuse and garbage collection and disposal system.
 - .6 Camp facilities fire prevention.
 - .7 Alarm and fire fighting system.
 - .8 Camp facilities safety and security service.
 - .9 Meals and catering service.
 - .10 Shower/wash facilities.
 - .11 Sleeping and washroom facilities.
 - .12 Bedding and bedding laundry services.
 - .13 Janitorial services.
 - .14 Personnel laundry facilities.
 - .15 Recreational facilities.
 - .16 Snow removal services.
 - .2 Obtain and pay for, as part of provision of camp facilities services all licenses, permits, and authorizations required to comply fully with all laws, ordinances and regulations of Federal and local authorities in connection with the performance of Work of this section.

- .3 Provide camp facilities services for own workforce, Departmental Representative, Departmental Representative's authorized personnel and for three (3) over night visitors. Separate space is to be provided for cook(s), cook's helpers and for female staff.
- .4 Demobilize camp facilities from site at completion of contract.
- .8 Provide camp facilities services for own workforce, Departmental Representative, and Departmental Representative's Authorized Personnel as follows:
 - .1 Resident Departmental Representative: duration of the Project.
 - .2 Environmental Inspectors: 2 people for the duration of the Project.
 - .3 Geotechnical Inspectors: 1 person for the duration of the Project and 1 person for 50% of the duration of the project.
 - .4 PWGSC and INAC Office Personnel: maximum of three (3) people on an as required basis
- .9 Camp Facilities will not be older than 20 years.
 - .1 Departmental Representative will arrange to have the proposed camp facilities inspected by a third-party building inspector prior to mobilization.
 - .2 Provide written notice two (2) weeks prior to mobilization for Departmental Representative to arrange inspection. Contractor to note that a satisfactory building inspection is required before camp facilities will be paid.
 - .3 Contractor will address any recommendations arising from building inspector's report before camp facilities are paid.
- .10 Provide and maintain one digital communication system for the site consisting of full duplex and secure voice, real time fax and high speed internet. Communication system should accommodate virtual private network (VPN) connections. The communication system is to be based on monthly charges with unlimited internet access. Provide wireless 802.11 B/G network access points such that the entire camp area has wireless high speed internet. Maintain one handheld satellite telephone with sufficient pre-paid minutes or subscription for on-site for emergency purposes or when the main communication system is non-functional. Use of the handheld satellite telephone for primary site communications for extended periods is not acceptable.
- .11 Shared use areas, kitchen dining areas and sleeping quarters will be maintained as smoke-free areas. Provide a smoking area at Contractor's discretion, in accordance with Federal, Territorial and local regulations and guidelines.
- .12 Camp facilities, if applicable, at outlying sites will require full communication and sanitary systems as described in this Specification.

1.2 Regulatory Requirements

- .1 Camp facilities including utilities, services, location and operation is subject to Departmental Representative's approval and is to be designed, established and operated in accordance with applicable Federal, Territorial and local codes, regulations and requirements governing camp facilities.

- .2 Camp facilities location to be established at a location which does not interfere with operations undertaken on site. Camp facilities and service area locations are subject to Departmental Representative's approval.
- .3 Obtain applicable licenses, permits and authorizations prior to establishing camp. Submit proof of same to Departmental Representative. Pay for all costs for inspection of camp facilities and electrical facilities by AHJ.
- .4 Provide water that meets Health Canada Guidelines for Canadian Drinking Water Quality. Submit information on water, including the source and water quality test results to Departmental Representative prior to opening the camp facilities.
- .5 Collect samples each week from the potable water source and after treatment and have analyzed at a CAEAL accredited laboratory for all Health Canada Guidelines for Canadian Drinking Water Quality requirements. Submit results to Departmental Representative.
- .6 Comply with all requirements of the Water License, Land Use Permit and all other licenses, permits and authorizations.
- .7 Operate the camp in accordance with the camp rules as specified in this Section.

1.3 Environment

- .1 Comply with environmental regulations as per Section 01 35 43 - Environmental Procedures.
- .2 Adhere to applicable guidelines and in accordance with AHJ.
- .3 Submit to Departmental Representative before opening of camp facilities, proof of adherence to all environmental regulations. Display all applicable regulatory permits at the camp facilities site.
- .4 Submit design details of sewage disposal and treatment system conforming to requirements of AHJ thirty (30) days after contract award.
- .5 Install and maintain fire protection equipment as specified in Section 01 35 32 - Site Specific Health and Safety Plan.

1.4 Camp Facilities Installation and Removal

- .1 Mobilize equipment, camp facilities, personnel, and materials.
- .2 Establish approved temporary buildings, shops, offices and facilities required.
- .3 Place all camp facilities so as not to interfere with any construction or other site activities.
- .4 Carry out all Work necessary to protect environment, such as constructing pads (if required), prior to actual installation of camp facilities.
- .5 Locate camp generators minimum 30 m to any sleeping facility, camp kitchen or an area with constant human presence.

- .6 Winterize and secure camp, equipment, and vehicles at the end the construction season.
- .7 Remove camp facilities, clean up, and leave site in condition satisfactory to Departmental Representative.

1.5 Site Location

- .1 Locate camp facilities at a site that provides for the safety and welfare of its residents for the duration of the Work. Contractor is responsible for the camp facilities location.
- .2 Locate camp facilities within walking distance of the Work site, if possible.
- .3 Locate camp facilities up wind of any locations in which materials may be burned.
- .4 Locate camp facilities on gravel pad. Pad must be constructed using aggregate sources from borrow areas.
- .5 Locate camp facilities in an area that has been previously disturbed, but outside of any remedial work areas, if possible. If camp is located on waste rock, provide sufficient 20 mm minus gravel or sand to maintain a trafficable surface.
- .6 Co-locate the medic's centre with an office, or other facility where other workers are present.
- .7 Co-locate the communications centre with an office, or other facility where other workers are present.
- .8 Locate any temporary shelter to be used as a workshop near the Work.
- .9 Construct an access road to the selected location, as needed or as directed by Departmental Representative.

1.6 Sewage Disposal Requirements:

- .1 Design sewage treatment facilities capable of treating greywater and blackwater generated from camp operations to meet the following requirements:

<u>Parameter</u>	<u>Maximum Allowable Concentration</u>
pH	6 to 9
Mineral Oil and Grease	5 mg/L and none visible
Total Suspended Solids	180 mg/L
BOD	120 mg/L
Fecal Coliforms	10,000 CFU/dL

- .2 Submit details of sewage system to Departmental Representative no later than 30 days after contract award.
- .3 Provide separate storage for sewage generated by camp operations and wastewater generated from remediation activities.

- .4 Discharges are to be in compliance with applicable permit requirements and limitations. Make adjustments to process or provide alternative equipment (at no additional cost) such that sewage meets the applicable discharge criteria.
- .5 Waterless toilets are an acceptable alternative to blackwater sewage treatment systems. Effluent from waterless toilets will be incinerated.

1.7 Break Facilities

- .1 At sites where returning to camp is impractical for breaks and meals, provide at minimum a break facility complete with sanitary facilities.
 - .1 Break facility will be of sufficient size to accommodate the construction crew and will be suitable for use as an overnight emergency shelter.
- .2 At minimum, equip the break facility with first-aid supplies complete with eye wash station, emergency rations and bottled potable water sufficient to sustain stranded personnel for a minimum of 72 hours, sleeping bags suitable for the season, a heating system, provisions for making hot water, hand washing facilities, a camp stove and fuel and a satellite telephone complete with sufficient pre-paid minutes or subscription. These emergency supplies are not to be used for daily operation of the outlying sites.
- .3 Maintain inventory of expiration dates and replenish as necessary.
- .4 Store food in bear-proof containers.

1.8 Existing Camp Facilities

- .1 Contractor is advised that the existing camp facilities at Terra and is available for Contractor's short-term use. Contractor will be responsible for operation and maintenance of the existing camp should he propose to occupy it. Contractor will note that the existing camp is scheduled for demolition as part of this Contract.
- .2 Contractor is advised that any of the existing site facilities, excluding fuel storage facilities, to be demolished as part of this Contract are available to Contractor to support the operation of the Construction Camp. Contractor is to be responsible for all costs associated with the upgrading or conversion of the existing site facilities to satisfy the requirements of this Section, including but not limited to hazardous materials abatement. Use of existing site facilities is subject to review of Departmental Representative prior to mobilization. Information describing the existing facilities is included in Appendix B, Waste Inventory.
- .3 Contractor is advised that some of the existing camp facilities to be demolished as part of this Contract contain painted materials that are contaminated with polychlorinated biphenyls (PCBs) and leachable lead. Deal with PCB and lead-contaminated materials as set out in Section 02 41 16 – Structure Demolition and Section 02 61 33 – Hazardous Waste Materials.

1.9 Maintenance

- .1 Maintain camp facilities in tidy and sanitary condition.

- .2 Heat camp facilities to provide environmentally controlled conditions between 20 and 22 degrees C.
- .3 Equip camp facilities with furnace sized to heat rooms and adjacent corridor spaces.
- .4 Furnace to have forced air circulation system with minimum of one hot air outlet per room in sleeper trailers. Alternatively, trailers may be heated with electric space heaters.
- .5 Clean camp facilities daily. Clean and sanitize toilets, urinals, showers, washbasins, washing machine, and laundry tubs daily.
- .6 Provide adequate bug, pest and wildlife control to all buildings, and camp facilities
- .7 Maintain camp facilities power plant, fuel storage facilities, water lines, sewage system, garbage disposal containers, heating and cooling units, appliances and furniture in neat, clean and good operating condition and make repairs as necessary.

1.10 Departmental Representative's Sleeping Quarters

- .1 Sleeping quarters for Departmental Representative and his authorized personnel are to be within the camp complex, but segregated from those for Contractor's staff.
- .2 In sleeping quarters for Departmental Representative's work force, provide a minimum of 4.6 m² of floor space for each occupant, with one dimension not to be less than 2 m.
- .3 It is anticipated that Departmental Representative's work force will include both male and female personnel. Design and operate the construction camp with due consideration of the separate and private requirements for this work force.
- .4 Provide single sleeping quarters for use by Resident Departmental Representative with a minimum floor area of 6 m².
- .5 Sleeping quarters for other Departmental Representative's support personnel, as indicated in this Section, are to provide for maximum double occupancy with a minimum floor area of 9.2 m².
- .6 Provide a minimum of 11 m³ of air space for each occupant.
- .7 Provide storage lockers and/or shelving to store personal items. Provide at least one power outlet per occupant. Provide one reading light above each bed.
- .8 Provide key locks and keys for Departmental Representative and Departmental Representative's staff sleeping quarters upon their use of these facilities.

1.11 Departmental Representative's Site Office

- .1 Departmental Representative will indicate acceptable office space within existing administration building, should Contractor commission it for use.

- .2 Provide office accommodation and furniture on-site for Departmental Representative. The use of this facility will not be shared with Contractor. Shared office and living space for the Departmental Representative is not acceptable.
- .3 Provide electrical lighting system, giving a minimum of 200 lux, using surface mounted, shielded commercial fixtures with 10% upward lighting component.
- .4 Departmental Representative's office is to have a minimum floor space of 20 square metres and furnished with the following:
 - .1 One double-pedestal desk with a top surface not less than 150 cm by 75 cm.
 - .2 One desk chair.
 - .3 Two chairs, stacking type.
 - .4 One four-drawer file cabinets with locking mechanisms.
 - .5 One bookcase, not less than 90 cm wide by 30 cm deep by 120 cm high, complete with adjustable shelves.
 - .6 One double-tray in/out paper distribution baskets.
 - .7 One waste paper baskets.
 - .8 Four duplex receptacles, 120 V, 60 Hz equipped with surge protection.
 - .9 Two UPS (Uninterruptible Power Supply) bars.
 - .10 One plan table.
 - .11 One ethernet port and one phone/facsimile port.
- .5 Provide and maintain at Departmental Representative's office one Multiple Function Centre (MFC) with capabilities for printing, faxing, copying, scanning and PC faxing. This unit is to be for Departmental Representative's exclusive use and is to be Windows compatible with Parallel, USB and Ethernet interfaces. Provide the MFC with all required consumable supplies to ensure continuous operation. The MFC is required to also meet the following specifications:
 - .1 Print Function: Black and White with a minimum of 32 MB of memory.
 - .2 Fax Function: Black and White with a minimum modem speed of 33.6k bits per second (bps) and PC Faxing capabilities.
 - .3 Copy Function: Black and White with capabilities for Automatic Document Feed (ADF) and Reduction / Enlargement.
 - .4 Scan Function: Black and White and Colour scan capabilities with a minimum optical scan resolution of 600 x 2400 dots per inch (dpi) and capabilities to scan to e-mail, image, OCR and file.
- .6 Provide, for the use by Departmental Representative and Departmental Representative's Authorized Personnel, five (5) mobile communication radios, complete with charging units. The radios are to allow for on-site communication between Departmental Representative, Departmental Representative's Authorized Personnel and Contractor. The radios are to have a minimum range of 5 km.
- .7 It is critically important that the communication equipment provided by Contractor for Departmental Representative's use is reliable and of the highest quality. Immediate repair or replace faulty equipment. The equipment is to be operational from the day the work commences.

1.12 Field Laboratories

- .1 Supply and pay for two separate field laboratories, complete with furniture, for the use by Departmental Representative's Authorized Personnel. The two labs will include a geotechnical lab and an analytical lab. The two laboratories may be combined in one module unit.
- .2 Locate the field laboratories in the camp complex and make ready for use three days prior to the first day work commences for which testing is required, and remain available for the duration for which testing is required.
- .3 The analytical lab will have a minimum floor area of 40 square metres complete with heating system, lighting system, a minimum of three 110 and one 220 volt, 60 cycle electric outlets, water and sewer system, sink, work benches, garbage cans, stove, hood and fan, shelving and clothes rack, two desks, two 0.75 m x 1.50 m tables, three chairs, one four-drawer filing cabinets and adequate windows. Provide a minimum of 30 square metres of shelf area.
- .4 Equip the analytical lab with a standard refrigerator with a total minimum capacity of 0.48 cubic metres (17 cubic feet) and a chest freezer with a total minimum capacity of 0.28 cubic metres (10 cubic feet). The refrigerators and freezer will remain the property of Contractor.
- .5 The geotechnical lab will have a minimum floor area of 20 square metres complete with a heating system, lighting system, a minimum of four 110 and one 220 volt, 60 cycle electric outlets, water and sewer system, sink, work benches, garbage cans, shelving, one desk, one 0.75 m x 1.50 m table, two chairs, one four-drawer filing cabinet and adequate windows. Provide a minimum of 10 square metres of shelf area.
- .6 Provide and maintain one phone line and internet connection in each laboratory.
- .7 Equip the geotechnical lab with the following new granular material testing equipment:
 - .1 One forced convection bench top laboratory oven with digital controls, stainless steel interior and suitable for effective drying of soil samples.
 - .2 One rack of sieves: 200 mm metric sieves, or equivalent. Sieve sizes: 0.080, 0.160, 0.425, 1.25, 2.0, 5.0, 10.0, 12.5, 25.0, 50.0, 75.0 and 100.0 mm.
 - .3 One wash sieve, lid and pan.
 - .4 Pans and Tares:
 - 2 each 13" x 9" x 2"
 - 2 each 26" x 18" x 3.5"
 - 2 each 9.3" x 5.3" x 2.7"100 paper plates - 200 mm min. diameter.
100 aluminum pie plates - 200 mm min. diameter (for use in oven).
 - .5 One brass sieve brush and one soft sieve brush.
 - .6 One precision grade electronic scale with an accuracy and readability to 0.1 g and a minimum capacity of 8 kg.
 - .7 One polyethylene tarp for sample splitting: 1.8 m x 1.8 m minimum size.
 - .8 One 115 V / 60 Hz portable sieve shaker with timer and minimum 1/3 hp motor drive. This unit must be capable of securing a minimum of ten full size 8" sieves

- .9 One pair of oven mitts.
- .8 Clean both laboratories at least two times per week, and maintain all electric lights, heating, water and sewer systems in good working condition during the period the laboratory is required. Maintain facility in acceptable condition.
- .9 Provide power to each of the laboratories on a 24 hour/day basis while the cleanup activities, requiring laboratory services, are in operation. Equip all power supplies with adequate surge protection. Damage to equipment resulting from power surges will be repaired or replaced at no cost to Departmental Representative or his authorized personnel.
- .10 Submit to Departmental Representative for approval, a sketch of the proposed laboratories before fabrication or construction.
- .11 Provide Departmental Representative with key-locks for the field laboratories prior to commencement of activities requiring laboratory services being in operation.

1.13 Linen, Bedding and Laundry

- .1 Supply three (3) blankets, two (2) sheets, one (1) pillow and one (1) pillow case for each person living in camp facilities.
- .2 Change linens weekly or whenever occupancy changes..
- .3 Launder sheets and pillow covers regularly to provide weekly supply of clean linen.
- .4 Provide clean blankets to all camp occupants. Clean blankets as conditions warrant.
- .5 Cooking staff to wear suitable kitchen attire. Launder kitchen attire daily.

1.14 Ablution and Latrine Facilities

- .1 Provide ablution and latrine facilities as per AHJ and codes requirements and as per camp occupancy requirements as follows:
 - .1 Flush toilets as required.
 - .2 Urinals as required.
 - .3 Wash basin of stainless steel, porcelain, with one mirror over each basin as required.
 - .4 Individual shower units with non-slip flooring together with adjacent dressing cubicles as required.
- .2 Maintain separate ablution and latrine facilities for female/male populations.
- .3 Maintain separate ablution and latrine facilities for Departmental Representative and Departmental Representative's support staff. Maintain separate facilities for Departmental Representative's male and female staff.
- .4 Clean ablution and latrine facilities daily. Supply adequate amounts of paper towels, toilet tissue, and individual drinking cups in washrooms.

1.15 Food Quality and Schedule

- .1 Groceries to be of top quality. Eggs and dairy products to be grade "A". Canned fruit and vegetables to be choice or fancy.
- .2 Beef to be Canada Grade "A", pork to be Grade "I", turkey , chicken or other fowl to be "utility" or better.
- .3 Provide choices of traditional food. Provide healthy choices in food preparation.
- .4 As a minimum, provide three meals a day. Provide casual meals or fourth meals if irregular shifts are worked or irregular travel by personnel is required.
- .5 Main courses to be served at meals are classified as follows:
 - .1 First Line: Beef steak, roast beef, roast pork, veal cutlets, baked ham, ham steak, chicken, turkey, pork chops, roast lamb, roast veal.
 - .2 Second Line: Fish, short ribs, spare ribs, stews, meat pies, liver, curried dishes, spaghetti and meatballs, sausages, Salisbury steak, Swiss steak, ground beef, corned beef, stir fries.
 - .3 Third Line: Hot dogs, omelettes, chili con carne, baked beans, chicken and turkey turnovers, dishes using leftover meats, soup and sandwiches.
- .6 Lunch is to include one second line item and a third line item. Do not repeat the same selection more than twice weekly. Provide a vegetarian option upon request.
- .7 Supper to include one first line and a choice between a second and third line. Do not repeat the same selection more than twice weekly. Beef steak to be served at least once per week. A vegetarian option to be available on request.
- .8 Breakfast to include fruit juice or fruits, coffee, tea, milk, hot and cold cereals, porridge, toast and preserves, peanut butter, hot cakes, eggs, bacon, ham and sausages.
- .9 Provide box lunches for all camp occupants who will not be in camp facilities for noon meal.
- .10 Contractor will be given 12 hours notice to serve fourth and/or casual meals to Work forces of other Contractors and Departmental Representative.
- .11 Provide "Mug Up" nightly at 2100 hours consisting of tea, coffee, hot chocolate, fruit juice and any left over pastries at cook's discretion. Make coffee available at coffee breaks.
- .12 Provide beverages and snacks at all times. A variety of snacks should be available, including snacks that are appropriate for diabetics or persons with blood sugar concerns. Snacks may consist of fresh fruit or vegetables, granola bars, cheese and crackers, bannock, or other suitable items.
- .13 Make available daily apples and oranges; serve other types of fresh fruit at least once per week. Fresh salads are to be provided daily.

- .14 Provide milk each day; powdered milk is not acceptable for drinking, but may be used for cooking.

1.16 Service Facilities

- .1 Install, hook-up, test and make necessary repairs to sewage, water supply, heating, and electrical services.
- .2 Situate power plant in camp facilities area to minimize noise, and prevent exhaust fumes from blowing through camp facilities during prevailing winds.
- .3 Ground all buildings and electrical equipment with an approved grounding system.

1.17 Recreation

- .1 Provide an area for recreation for all camp occupants.
- .2 Area to be of a size suitable for accommodating at least 50% of camp occupants, and to be suitably furnished with lounge, and stacking chairs.
- .3 Provide a TV and DVD player for use by camp occupants. Alternatively, provide a satellite television system.
- .4 Provide a minimum of 20 DVD Movies and rotate these movies every two weeks or provide a TV with satellite link.
- .5 Provide an assortment of books (soft cover) and magazines for reading.

1.18 Camp Facilities Rules

- .1 Camp facilities of this size and nature in a remote location require that certain basic rules be established for mutual benefit of all camp occupants.
- .2 Prepare a set of camp facilities rules, for approval by Departmental Representative, prior to commencing operations.
- .3 In order to protect all residents, the following activities are strictly prohibited and could result in dismissal and removal from site:
 - .1 Tampering with smoke or fire detectors/alarms, any other safety equipment or electrical outlets/fixtures.
 - .2 Possession and consumption or use of alcohol or illegal drugs.
 - .3 Possession or use of firearms, ammunition or other lethal weapons.
 - .4 Fighting, physical violence, stealing, vandalism or destruction of property.
 - .5 Harassment in any form.
 - .6 The employee or visitors departure from the site for any of these reasons will be on the first available Scheduled transportation. Should this person wish to leave immediately the costs will be the responsibility of the employee.

- .4 Make all camp residents familiar with all emergency procedures, exits, signals and alarms. Keep accesses to fire equipment clear at all times, and immediately report any damaged fire or safety apparatus to your supervisor.
- .5 Use of vehicles or equipment only when trained and authorized to do so.
- .6 Use, adjust and repair equipment or machinery only when authorized by the supervisor.
- .7 Vehicle/Equipment checks must be completed and the logbook updated at the beginning of every shift or when starting any vehicle or piece of equipment. Seat belts must be worn at all times in vehicles and equipment.
- .8 Keep living areas as clean as possible.
- .9 Have warm emergency clothing available at all times during the wet or cold weather.
- .10 Keep clothing or other flammable goods away from baseboard heaters.
- .11 Ensure that personal items and clothing are marked for easy identification. Provide space for workers to hang wet clothing to dry prior to next shift.
- .12 Employees must store/remove all personal effects and belongings when going off rotation or permanently off site.
- .13 No loose clothing, dangling neckwear, bracelets, rings or similar articles are to be worn where there is a risk of coming into contact with moving machinery or electrical energized equipment.
- .14 Keep workplace and equipment neat and orderly. Complete an inspection of your Work place tools and equipment prior to starting Work. Correct any hazards immediately.
- .15 Provide a copy of camp facilities rules to all camp occupants prior to or upon arrival in camp.
- .16 Enforce camp facilities Rules.

1.19 Controlled Access Trailer

- .1 Provide a suitably sized trailer to house the decontamination rooms for entire construction crew, Departmental Representative, inspectors and up to five visitors to the site.
 - .1 The trailer is to have two access doorways where construction workers and field personnel can enter from the construction side, change out their PPE and field clothes, and wash up prior to entering the camp facilities or clean site of the trailer.
- .2 Provide a washer and dryer, to be incorporated into the decontamination side of the trailer.

- .3 Provide the necessary utilities and connections to operate the decontamination trailer.
- .4 Provide a designated area for all construction equipment, located in such a manner as to minimize the potential for contaminated material (radioactive tailings and the like) to enter the camp facilities.

1.20 Laundry Facilities

- .1 Within the camp, provide both personnel laundry facilities and facilities dedicated to the camp (ex: bedding, kitchen linens) separate from those in the Controlled Access Trailer.
- .2 Laundry facilities for washing of PPE (ex: coveralls and other exterior Work clothing) to be located within or adjacent to the Controlled Access Trailer.

1.21 Equipment, Tool and Materials Storage

- .1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- .2 Locate materials not required to be stored in weatherproof sheds on site in a manner to cause least interference with Work activities.

1.22 Sanitary Facilities

- .1 Washroom facilities are to be provided at, or in close proximity to, the respective camp facilities and Work areas.
- .2 Washroom facilities provided to have running hot and cold water for workers not able to return to the camp facilities for meals.

1.23 Security

- .1 Restrict access to camp facilities. Only persons employed on Project to be allowed normal access. Unauthorized persons will be permitted on site only with approval of Departmental Representative and/or Contractor.

1.24 Access to Work

- .1 Be responsible for the transport of personnel and equipment to the various Work areas on the site.

1.25 Transportation

- .1 Provide return air transportation services for Departmental Representative and Departmental Representative's Authorized Personnel from Contractor's base of operations to site.
- .2 If Contractor's Base of Operations is not serviced by scheduled commercial air services, provide transportation from the nearest commercially serviced airport. Provide minimum 21 days notice of change to transportation base.

- .3 It is anticipated that air transport of Departmental Representative's Authorized Personnel will be scheduled to coincide with the transport of Contractor's workforce to and from the site. Provide air transportation for Departmental Representative's personnel at a minimum frequency of one return trip per week and two additional trips per month Scheduled according to Departmental Representative's request.
- .4 Departmental Representative will advise Contractor of Departmental Representative's and Departmental Representative's personnel air transportation requirements one week in advance of trip departure.

1.26

Measurement of Payment

- .1 Include all direct costs for the provision, operation and maintenance of all camp facilities and equipment, including water treatment and sewage treatment, inspection of camp facilities and electrical facilities by NWT officials, on-site mobile communication equipment, as well as the provision of catering, rooms, and laundry and janitorial services for the camp facilities in the lump sum cost bid under Item 01 54 00-1, as indicated in the Basis of Payment Schedule.
- .2 The provision of room and board and associated services for Departmental Representative and Authorized Personnel will be measured for payment by the person-day for each day that personnel reside overnight at the camp facilities. Departmental Representative's room and board will be paid under Item 01 54 00-2 in the Basis of Payment Schedule.
- .3 The provision of transportation from Contactor's base of operations to site for Departmental Representative's Authorized Personnel will be measured for payment by the number of person return trips and will be paid Item 01 54 00-3 in the Basis of Payment Schedule.
- .4 Provision of casual meals to visiting Departmental Representative's authorized personnel will be measured for payment by the number of meals served. Casual meals will be paid under Item 01 54 00-4 in the Basis of Payment Schedule.
- .5 All costs for the supply and installation of satellite and long distance communication links for Departmental Representative and authorized personnel in the lump sum price for Communication links, Item 01 54 00-5, as indicated in the Basis of Payment Schedule.
- .6 Include all direct costs for provision of consumable office supplies for Departmental Representative in the Provisional Cost Sum for Consumable Office Supplies, Item 01 54 00-6 in the Basis of Payment Schedule.
- .7 Except as otherwise indicated herein, Work under this section will not be measured. Include all costs in Item BOPC-1, Balance of Project Costs in the Basis of Payment Schedule. Indicate the cost of this Work as a separate line item in the cost breakdown specified in Section 01 32 18 -Construction Progress Schedules – Bar (GANNT) Chart.

PART 2 PRODUCTS

2.1 Not Used

.1 Not used.

PART 3 EXECUTION

3.1 Not Used

.1 Not used.

END OF SECTION