

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Bid Receiving Public Works & Government Services  
Canada/Réception des soumissions Travaux publics et  
Services gouvernementaux Canada  
1713 Bedford Row  
Halifax, N.S./Halifax,(N.E.)  
B3J 1T3  
Halifax  
Bid Fax: (902) 496-5016

**Revision to a Request for Supply  
Arrangement - Révision à une demande  
pour un arrangement en matière  
d'approvisionnement**

The referenced document is hereby revised; unless  
otherwise indicated, all other terms and conditions of  
the Solicitation remain the same.

Ce document est par la présente révisé; sauf  
indication contraire, les modalités de l'invitation  
demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Real Property Contracting  
1713 Bedford Row  
P.O. Box 2247/C.P.2247  
Halifax, N.S./Halifax, (N.E.)  
B3J 3C9  
Halifax

<b>Title - Sujet</b> SA - ELECTRICAL SERVICES	
<b>Solicitation No. - N° de l'invitation</b> W010C-11C040/A	<b>Date</b> 2012-04-11
<b>Client Reference No. - N° de référence du client</b> W010C-11-C040	<b>Amendment No. - N° modif.</b> 001
<b>File No. - N° de dossier</b> PWA-1-64175 (121)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWA-121-4874	
<b>Date of Original Request for Supply Arrangement</b> 2012-04-10 <b>Date de demande pour un arrangement en matière d'app. originale</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2012-05-22</b>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Russell, Alex	<b>Buyer Id - Id de l'acheteur</b> pwa121
<b>Telephone No. - N° de téléphone</b> (902) 496-5168 ( )	<b>FAX No. - N° de FAX</b> (902) 496-5016
<b>Delivery Required - Livraison exigée</b>	
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	
<b>Security - Sécurité</b> This revision does not change the security requirements of the solicitation. Cette révision ne change pas les besoins en matière de sécurité de l'invitation.	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Acknowledgement copy required</b>	<b>Yes - Oui</b>	<b>No - Non</b>
<b>Accusé de réception requis</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>The Offeror hereby acknowledges this revision to its Offer.</b> <b>Le proposant constate, par la présente, cette révision à son offre.</b>		
<b>Signature</b>	<b>Date</b>	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
<b>For the Minister - Pour le Ministre</b>		

Solicitation No. - N° de l'invitation

W010C-11C040/A

Client Ref. No. - N° de réf. du client

W010C-11-C040

Amd. No. - N° de la modif.

001

File No. - N° du dossier

PWA-1-64175

Buyer ID - Id de l'acheteur

pwa121

CCC No./N° CCC - FMS No/ N° VME

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**Amendment 001 is correct a system error which omitted Annex A.**

See attached.

***All other terms and conditions remain the same.***

DEPARTMENT OF NATIONAL DEFENCE



SPECIFICATION  
SUPPLY ARRANGEMENT  
**ELECTRICAL**  
**CFB HALIFAX, NS**

Job No. W010C-11-C040

2011-05-05

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PART 1 - GENERAL

1.1 DESCRIPTION  
OF WORK

- .1 The work under this Supply Arrangement includes but must not be limited to the provisions of all labour, materials, tools, supervision and equipment necessary for minor maintenance, minor construction and repair of electrical systems, to include new installations and upgrades done as projects and provide the services listed within this specification.

1.2 ENGINEER

- .1 All reference to the Engineer in this specification, is to be understood, that the Contract's Inspector is representing the Formation Construction Engineering Officer(FCEO).
- .2 The address of the Engineer is:  
  
Formation Construction Engineering  
Maritime Forces Atlantic  
PO 99000 Stn Forces Willow Park Bldg 7  
Halifax, NS, B3K 5X5  
Attn: Contracts Inspector  
Tel: (902)720-1025  
Fax: (902)720-1591
- .3 The Engineer will provide the Contractor with a list of his/her authorized representatives at the pre-job meeting.

1.3 RESPONSIBILITY  
AND COMMUNICATIONS

- .1 This agreement is for work between the electrical Contractor and the Engineer. It is vital that all personnel involved realize that all formal communications concerning this agreement must be confined to the Contractor and the Engineer or his/her authorized representatives for the appropriate locations.
- .2 It is emphasized that the only person authorized to give instructions is the Engineer. Any instruction given, which involves a deviation or change to the requirements of plans and/or specifications, will be given in writing. The Contractor's undertaking of any work contrary to the Supply Arrangement documents without written authority will be entirely at his/her own risk, irrespective of any implied, or presumed, agreement or understanding.

1.4 LOCATIONS OF  
JOB SITES

- .1 Work sites for this Supply Arrangement is for Canadian Forces Base Halifax, Nova Scotia including but not limited to the following areas:
- .1 Stadacona - Halifax, NS;

1.4 LOCATIONS OF  
JOB SITES  
(Cont'd)

- .1 (Cont'd)
- .2 Windsor Park - Halifax, NS;
  - .3 Willow Park - Halifax, NS;
  - .4 Royal Artillery(RA) Park - Halifax, NS;
  - .5 Halifax Armoury - Halifax, NS;
  - .6 Damage Control Division - Herring Cove, NS;
  - .7 Ferguson's Cove - Ferguson's Cove Rd, NS;
  - .8 HMC Dockyard - Halifax, NS;
  - .9 Dockyard Annex(NAD) - Dartmouth, NS;
  - .10 Shannon Park - Dartmouth NS;
  - .11 Bedford Magazine(CFAD Bedford) - Bedford, NS;
  - .12 Degaussing Range, Wright's Cove - Dartmouth, NS;
  - .13 Bedford Rifle Range - Bedford, NS;
  - .14 Defence Research Development Canada(DRDC) -  
Dartmouth, NS;
  - .15 12 Wing Shearwater - Eastern Passage, NS;
  - .16 Hartlen Point Golf Course - Eastern Passage, NS;
  - .17 Osbourne Head - Cow Bay, NS;
  - .18 CFRS Newport Corner - Newport Corner, NS;
  - .19 Debert and outlying areas - Debert, NS;
  - .20 CFRS Mill Cove - Mill Cove, NS;
  - .21 Windsor Armoury - Windsor, NS.

1.5 SITE ACCESS

- .1 Access to the site is under the direction of the Department of National Defence. All visitors entering areas issuing a daily pass will be aware of the requirement for search as a condition of issue.
- .2 While within the confines of CFB Halifax all employees and representatives of the Contractor must comply with all of the Standing Orders as promulgated by Base Authorities. Engineer will provide copies of relevant Standing Orders.

1.6 PRE-JOB  
MEETING

- .1 No work on this Supply Arrangement is to proceed until the successful Contractor has attended the pre-job meeting.
- .2 Comply with applicable Base Standard Operating Procedures outlined in briefing.

1.7 DEFINITIONS

- .1 The following definitions apply to the work to be directed by the Engineer.
  - .1 ADD: Make an addition to.
  - .2 ADJUST: Bring components to a more effective relative position.
  - .3 BALANCE LOAD: To balance the three(3) phase and single phase circuits which enter(or leave) the main switchboards, transformers and distribution panel boards, by calculating new and existing loads accordingly.
  - .4 BREAKDOWN MAINTENANCE: To perform repairs to damaged equipment due to failures.
  - .5 CLEAN: Scrape, brush, flush and vacuum as required to remove dust, dirt and foreign matter.
  - .6 CHECK/INSPECT: View closely for dirt, foreign substance, lack of lubricant, wear, damage, tightness, tension, alignment, leaks, cracks, spalling, deformation, overloading and settings. Make a critical appraisal of equipment, component and parts ability to fulfil their function to a high degree of efficiency.
  - .7 ENERGY SOURCE: Any electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other source of energy of potential harm to workers.
  - .8 HOT WORK: Hot Work includes any welding, cutting of material by use of torch or other open flame devices and grinding which produces sparks.
  - .9 INSTRUCT: Inform Engineer of any new operating procedures. Demonstrate and explain purpose, benefit and method of implementing new procedures.
  - .10 ISOLATE: To physically prevent the transmission or release of an energy source to machinery or equipment.
  - .11 LUBRICATE: Apply oil or grease to joints between moving parts and joints between fixed and moving parts.
  - .12 MEASURE: Determine capacity or amount in standard units using an appropriate instrument. Measure condenser

1.7 DEFINITIONS  
(Cont'd)

- .1 (Cont'd)
- .12 MEASURE:(Cont'd)  
and evaporator pressure drop with differential pressure meter or "U" tube manometer. Measure motor overload with instrument approved by overload manufacturer.
  - .13 PAINT: Clean, prepare and paint surfaces to paint manufacturer's recommendations with paint and primer recommended by paint manufacturer for applicable surface and use.
  - .14 PREDICTIVE MAINTENANCE: To perform required repairs that have been declared in advance, on the basis of observation, experience and/or scientific reasons.
  - .15 PREVENTATIVE MAINTENANCE: To inspect, test and re-condition a system, in order to prevent failures, at regularly scheduled intervals in accordance with specific instructions.
  - .16 PROVE: Operate and determine if operation produces intended response.
  - .17 REMOVE: Take off or away from.
  - .18 REPACK: Fill with packing again.
  - .19 REPAIR: Restore to a sound state.
  - .20 REPLACE: Restore by removing old components and replacing with new components.
  - .21 REPORT: To Engineer on-site and include in work report, results of inspection and proving, note problems encountered, services required, services performed and readings taken.
  - .22 SHUT DOWN: Take out of service.
  - .23 START UP: Return to service.
  - .24 TIGHTEN: Securely fix in place.
  - .25 TREAT: Act upon with agent.

1.8 CONTRACTOR  
QUALIFICATIONS

- .1 The Contractor must satisfy the Engineer that he/she has adequate and qualified staff to perform the service expected. This includes the processing of all service calls within an acceptable time period both during normal and silent working hours.
- .2 Must possess a minimum of three(3) years related experience in general electrical contracting. List three(3) major

1.8 CONTRACTOR  
QUALIFICATIONS  
(Cont'd)

- .2 (Cont'd)  
projects/contracts in the last five(5) years that show experience with project similar to what is contained in this statement of work.
- .3 References: Include three(3) letters of Reference from the above requested three(3) major projects(1 from each project). Each reference should be verifiable and include the following:
- .1 The name of client organization.
  - .2 Name, Title, Telephone number and facsimile number of contact.
  - .4 Various projects under this Contract will involve work in places with height restrictions. For this reason the Contractor and his employees must be trained and Certified in Fall Protection. Proof of this training and certification must be shown to Engineer when requested.
  - .5 Whenever the Contractor uses Sub-contractors, they too must be properly trained and certified and must be able to show proof of this training and certification to the Engineer or his/her representatives when on site.

1.9 CONTRACTOR'S  
RESPONSIBILITIES

- .1 Notify Engineer of the telephone at which Contractor or his/her representative may be contacted at all times.
- .2 The Contractor, prior to commencement of work, must report to the Engineer for the appropriate location. Authorized representatives of the Engineer for each location will be discussed at the pre-job meeting.
- .3 The Contractor must contact the Engineer on the first working day following and "after normal working hours" emergency or urgent call and obtain a requisition number.
- .4 On award of the Supply Arrangement, the Contractor must provide names of personnel performing work on this Supply Arrangement complete with proof of their qualifications.

1.10 CONTRACTOR'S  
PERSONNEL

- .1 The Contractor must have the capability of providing two(2) qualified construction Electricians within 24 hour call-up. Where applicable, each of electrical journeyperson may have an apprentice who is registered with the Department of Labour in the Province of Nova Scotia at the second year level. This apprentice must be under the direct supervision of the electrical journeyperson.
- .2 The Contractor will provide the Engineer with a list of all people working on Department of National Defence premises, complete

1.10 CONTRACTOR'S PERSONNEL  
(Cont'd)

(Cont'd)  
with a copy of their licences, where applicable, and will update the list immediately when personnel changes.

1.11 EMERGENCY AND SERVICE CALL-UP

The Contractor must maintain and provide DND with current phone, fax and pager numbers to be able to provide response to requests for service from the Engineer or his/her representatives on a twenty-four(24) hour, seven(7) day per week basis. If the request for service is from the after hours Engineer representative, the Contractor must, immediately upon completion of the service, report back to the Engineer describing the action taken to correct the problem. The following work priorities and response times will apply:

.1 EMERGENCY: A priority of "Emergency" is defined as a deficiency or breakdown that requires immediate attention to reduce the potential for danger to occupants, the general public, the environment, or the facility. Maintenance and minor construction identified with this priority must be responded to immediately and must be reported without delay to designated manager.

.1 Standard Response Times:

.1 Urban/rural: ASAP/Maximum 1 hour.

.2 ROUTINE: A priority of "Routine" is defined as essential maintenance and minor construction requirements which should be rectified at the earliest possible opportunity. It is considered as deficiencies or breakdowns that do not impair current operations or pose any danger to the occupants, the general public, the environment or the facility.

.1 Standard Response Times:

.1 Urban/rural: 24 hours.

.2 The Contractor, when requested by the Engineer for an emergency service, will proceed to the site, repair or protect the system or equipment from further damage. When the system has been made safe, the Contractor must provide, within one(1) working day, a detailed estimate to complete repairs and put the equipment in proper working order.

.3 Service and/or repair call-up to be provided on an "as and when requested" basis only.

1.12 SECURITY  
CLEARANCE

- .1 The Contractor and his/her personnel must be suitable for security clearance as defined by the Department of National Defence Security Officer.
- .2 The Engineer will make the necessary arrangements for security clearances if deemed necessary.
- .3 The Contractor must submit his/her name and the names of all employees, including new employees engaged during the Supply Arrangement who will be working under this Supply Arrangement to the Engineer immediately following notification of Supply Arrangement award.
- .4 The Contractor and his/her employees will be required to provide personal information, such as address and date of birth; and complete Government forms in order to receive the required clearance level.
- .5 Only those employees who receive the required clearance level will be allowed on-site.
- .6 The Contractor must have a picture ID for each employee and must be worn in a visible location while on site at all times.

1.13 WORK SCHEDULE

- .1 At each normal service call, the Contractor must have personnel on-site providing the service continuously on every working day until the work is completed.
- .2 Contractor must inform the Engineer of any delays because of availability of material to complete the work.
- .3 Normal working hours will be 0800 to 1600 hours, Monday to Friday inclusive excluding holidays.

1.14  
SUB-CONTRACTORS

- .1 Only sub-contractors that have been pre-approved, in writing, by the Engineer are permitted to work on any part of this Supply Arrangement.
- .2 The Contractor must ensure that all Contractor's personnel, sub-contractors and sub-contractor's personnel understand and comply with the regulations at all times, while within the confines of DND property.
- .3 Approved sub-contractor's work will be invoiced using the Unit Price Table found in ANNEX A.

1.15 NOTIFICATION  
OF REQUIREMENT

- .1 A PWGSC 942 "Call-up against a Standing Offer" will be issued by the Engineer or his/her representative, to notify the Contractor of requirements against this Supply Arrangement.
- .2 Prior to commencing work, an estimated cost must be submitted to the Engineer in writing including the total costs for all work that will be performed as requested in accordance with Supply Arrangement price table.
- .3 When requested by Engineer, provide an adequate breakdown to quote to show how costs were incurred.

1.16 CODES AND  
STANDARDS

- .1 The following codes and standards in effect at the time of award are subject to change/revision. The latest editions of each must be enforced during the term of the Supply Arrangement.
  - .1 National Building Code of Canada(NBCC);
  - .2 Canada Labour Code Part II;
  - .3 Canada Occupational Health and Safety Act;
  - .4 National Fire Code of Canada;
  - .5 Canadian Electrical Code Part I CSA 22.1;
  - .6 Canadian Environmental Protection Act;
  - .7 Any other code of provincial and local application;
  - .8 Materials and workmanship must conform to or exceed applicable standards:
    - .1 Canadian Government Specifications Board(CGSB);
    - .2 Canadian Standards Association(CSA);
    - .3 American Society for Testing Materials(ASTM); and
    - .4 referenced organizations.
- .2 The Contractor can obtain addresses for codes and standards from Engineer upon request.
- .3 In the event of a conflict between any of the above codes or standards, the most stringent will apply.
- .4 These standards must be considered an integral part of the specifications and must be read in conjunction with the drawings and specifications. The Contractor must be fully familiar with their

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- 1.16 CODES AND STANDARDS (Cont'd) .4 (Cont'd)  
contents and requirements as related to the work and materials specified.
- 1.17 WORKMANSHIP .1 Workmanship must be the best quality executed by workers experienced and skilled in the respective duties for which they are employed.
- .2 Do not employ any unfit person or anyone unskilled in their required duties. The Engineer reserves the right to require the dismissal from the site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.
- .3 Decisions as to the quality or fitness of workmanship in cases of dispute rest solely with the Engineer whose decision is final.
- .4 The Contractor must employ a competent and experienced supervisor with the authority to speak on his behalf on day-to-day routine matters.
- .5 All equipment panels and control covers must be replaced and properly fitted utilizing all fastening screws and/or bolts according to equipment design. All workmanship is subject to inspection and approval.
- .6 Replace all work unsatisfactory to the Engineer without extra cost.
- .7 Submit schedule to and obtain approval from the Engineer for any shut-down or closure of active service or facility. Adhere to approved schedule and provide notice to affected parties.
- 1.18 INSPECTION .1 All work and materials covered by this specification will be subject to inspection at any and all times by the Engineer.
- 1.19 WORK DONE BY OTHER MEANS .1 This Supply Arrangement does not create an exclusive right of the Contractor to perform all work which might be required. The Engineer reserves the right to have any work done by other means.
- 1.20 PROTECTION OF EXISTING FACILITIES .1 The Contractor must take all necessary precautions to ensure against damage to existing facilities. Any damage to such facilities as a result of the Contractor's operations must be repaired or replaced by the Contractor at his own expense, as soon as is reasonably possible.
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1.20 PROTECTION OF  
EXISTING FACILITIES  
(Cont'd)

- .2 Special coverings and protection must be provided to protect plants, walls, projections and adjacent work where materials are being removed, installed or hoisted.
- .3 The Contractor must protect all occupant owned furnishings and equipment, and the building from damage during execution of this Supply Arrangement.
- .4 Where the Engineer considers it necessary, provide and erect warning signs and barriers.

1.21 EXISTING  
SERVICES

- .1 Protect and maintain existing active services.
- .2 Connect to existing services with minimum disturbance to occupants and building operation.
- .3 Use existing services at no cost.
- .4 Use designated sanitary facilities.
- .5 Any shutdown or closure of active service or facility to execute service or repair must first be approved by Engineer or his/her representative.
- .6 Ensure that capacity of services is adequate prior to imposing additional loads. Connecting and disconnecting is Contractor's expense and responsibility.
- .7 Inform the Engineer immediately of any code violations or required repairs which could pose a hazard to employees or building occupants.
- .8 When connecting to or disconnecting from an existing electrical system, ensure of a balanced load upon completion of work.

1.22 CUTTING,  
FITTING AND  
PATCHING

- .1 Execute cutting, fitting and patching required to make work fit properly.
- .2 Where new work connects with existing and where existing work is altered, or cut, patch and make good to match existing work. On abandoned service lines, cap or otherwise seal the lines at the cut-off points or as directed by the Engineer.
- .3 Obtain Engineer's approval before cutting, boring or sleeving load-bearing members.
- .4 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.
- .5 Fit work airtight to pipe, sleeves, ducts and conduits.

1.23 ALTERATIONS,  
ADDITIONS OR  
REPAIRS TO  
EXISTING BUILDING

- .1 Execute work with least possible interference or disturbance to occupants, public and normal use of premises. Arrange with Engineer to facilitate execution of work.
- .2 Where security has been reduced by work of Contract, provide temporary means to maintain security.
- .3 Where elevators, dumbwaiters, conveyors or escalators exist in building, only those assigned for Contractor's use may be used for moving men and material within building. Protect walls of passenger elevators, to approval of Engineer before use. Accept liability for damage, safety of equipment and overloading of existing equipment.
- .4 Provide temporary dust screens, barriers, warning signs in locations where renovation and alteration work is adjacent to areas used by public or government staff.

1.24 SITE SECURITY

- .1 Site security is the responsibility of the Contractor who must erect temporary site enclosures, barricades and fencing to prevent unauthorized entry, pilferage and vandalism.
- .2 Any work that may disrupt the operations of the occupying clients will be carried out after normal building operational hours. For all work carried out after normal building operational hours, the Engineer will determine acceptable building security.

1.25 POWER AND  
WATER SUPPLY

- .1 DND may provide, free of charge, temporary electric power and water for construction purposes.
- .2 Engineer will determine delivery points and quantitative limits. Engineer's written permission is required before any connection is made. Connect to existing power supply in accordance with Canadian Electrical Code.
- .3 Provide, at no cost to DND, all equipment and temporary lines to bring these services to project site.
- .4 Supply of temporary services by DND is subject to DND requirements and may be discontinued by DND site representative at any time without notice, without acceptance of any liability for damage or delay caused by such withdrawal of temporary services.
- .5 After the temporary service lines are no longer required, the Contractor must remove all lines and equipment, restore the connection points to their original condition and return the land to its original contour.

1.26 HEATING AND  
VENTILATING

- .1 Provide temporary heat and ventilation as required to:
  - .1 Facilitate progress of work.
  - .2 Protect work and products against dampness and cold.
  - .3 Prevent moisture condensation on surfaces.
  - .4 Provide ambient temperatures and humidity levels for storage, installation and curing of materials.
  - .5 Provide adequate ventilation to meet health regulations for safe working environment.
- .2 Maintaining strict supervision of operation of temporary heating and ventilating equipment to:
  - .1 Conform with applicable codes and standards.
  - .2 Enforce safe practices.
  - .3 Prevent abuse of services.
  - .4 Prevent damage to finishes.
  - .5 Vent direct-fired combustion units to outside.

1.27 SITE VISIT

- .1 Failure to visit the site, to examine the Specifications and Drawings or otherwise to become familiar with Site Conditions, will not relieve the Contractor of any responsibility to provide the complete work in accordance with the Supply Arrangement documents.

1.28 DOCUMENTS  
REQUIRED

- .1 Maintain at job site, one copy each document as follows:
  - .1 Contract drawings;
  - .2 Specification; and
  - .3 Call-up Work Order.

1.29 DRAWINGS AND  
MAINTENANCE  
MANUALS

- .1 Where available, Maintenance Manuals and drawings for new work are to be accessible for viewing by the Engineer, when required. Maintenance Manuals and drawings for existing work are available for viewing from the Engineer, when required.



1.31 LICENCES,  
PERMITS AND FEES

- .1 Provide the authorities having jurisdiction with all information requested.
- .2 Pay all fees and obtain certificates and permits required.
- .3 Furnish these certificates and permits.
- .4 New panel installation will require Nova Scotia Power Inspections.
- .5 Pay applicable Federal, Provincial and Municipal taxes.

1.32 CLEANING

- .1 Maintain work area free of accumulated waste and rubbish.
- .2 Remove and dispose of debris, used and obsolete material on a daily basis.
- .3 Remove grease, dust, dirt, stains, fingerprints and other foreign materials from sight-exposed interior and exterior finished surfaces affected by Supply Arrangement work.
- .4 Disposal of debris will be the Contractor's responsibility and must be off DND property and in accordance with municipal requirements.
- .5 On completion of the work under each call-up all surplus material, including materials declared surplus by DND, plant, tools, equipment and debris must be removed from the job site to the satisfaction of the Engineer.

1.33 GUARANTEE/  
WARRANTY

- .1 All labour, materials, and equipment supplied under this Supply Arrangement must be warranted for a period of one(1) year after completion of the Contract.
- .2 Where the Contractor supplies equipment purchased from a supplier or manufacturer, he must obtain from such supplier or manufacturer a warranty for the term specified and such warranty must be made out to DND.
- .3 For all items where the manufacturer's normal guarantee/warranty periods exceed that specified the Contractor must obtain from the manufacturer or supplier, a warranty for the manufacturer's normal warranty period.

PART 2 - PRODUCTS

2.1 PRODUCT  
APPROVAL

- .1 The Contractor must ensure that all controlled products used in the performance of the work are classified and labelled according to the Workplace Hazardous Materials Information System(WHMIS).
- .2 The Contractor must submit for approval the Material Safety Data Sheets(MSDS) for all controlled products that will be used in the performance of this work.
- .3 No controlled products are to be brought on-site without prior approved Material Safety Data Sheets(MSDS).
- .4 Material Safety Data Sheets(MSDS) to remain on-site at all times.

2.2 MATERIALS  
AND EQUIPMENT

- .1 Equipment and materials to be new, CSA certified, and manufactured to standard quoted.
- .2 Where there is no alternative to supplying equipment which is not CSA certified, obtain special approval from an independent testing agency recognized by the provincial Department of Labour.
- .3 Use products of one manufacturer or same type as existing, including classification, unless otherwise specified.
- .4 Request direction from Engineer prior to replacing any component.
- .5 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.
- .6 Deliver, store and maintain materials with manufacturer's seals and labels intact.
- .7 Store materials in accordance with manufacturer's and supplier's instructions.
- .8 Do not store materials on-site without Engineer's approval.
- .9 Department of National Defence accepts no responsibility for materials or equipment stored on-site.
- .10 When an equipment inventory numbering system exists, identify to the Engineer all pertinent data relative to the new piece of equipment upon installation.

2.2 MATERIALS  
AND EQUIPMENT  
(Cont'd)

.11 As requested, the Contractor to supply drawings and manufacturer's instructions and specifications on all new equipment.

2.3 REPLACEMENT  
PARTS

.1 The Contractor is required to repair or replace worn or defective parts or complete components of the system(s) using only genuine manufacturer's replacement parts.

.2 Replacement parts by another manufacturer may be used with written permission of the Engineer.

.3 Request direction from the Engineer prior to replacing any component.

.4 Where an equipment inventory numbering system exists, identify on the log sheet the number of the equipment where the replacement part was used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

- 1.1 CONSTRUCTION SAFETY MEASURES .1 Observe and enforce construction safety measures complying with the requirements of the following statutes and authorities:
- .1 Canada Labour Code Part II and the Canadian Occupational Health and Safety Regulations.
  - .2 Nova Scotia Occupational Health and Safety Act and supporting Occupational General Safety Regulations as amended from time to time.
  - .3 Most recent amendments to the National Building Code of Canada, Part 8 and National Fire Code.
  - .4 Nova Scotia Worker's Compensation Board.
  - .5 Applicable municipal statutes.
  - .6 Department of National Defence and Base Safety Regulations.
- .2 Engineer will provide a copy of relevant DND Safety Regulations.
- .3 In event of conflict between any requirement of above statutes, comply with the most stringent measures or with Engineer's written directive.
- .4 Refer to Section 01 35 35, DND Fire Safety Requirements.
- .5 **Prior to Contract Award**
- .1 Bidders/Tenders are to provide a copy of the company's safety policy, signed by the owner or authorized representative of the company.
  - .2 Bidders/Tenders are to provide documents and evidence to the satisfaction of the Crown, indicating that the bidder/tender has successfully completed an independent SAFETY AUDIT and will maintain that safety audit for the life of the Supply Arrangement(Contractor and sub-contractor(s)).
- .6 **Before Work Begins**
- .1 Bidder/Tender to provide documentation if requested by the Crown, indicating all safety training attained for each person who will be involved with the Supply Arrangement.
- .7 Disciplinary procedures must be spelled out in the tender/Supply Arrangement documents so there are no misunderstandings.
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1.1 CONSTRUCTION SAFETY MEASURES  
(Cont'd)

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(Cont'd)

- .1 **First Violation:** Verbal warning issued to the Contractor for the first violation of a safety regulation(Violation will be documented on Supply Arrangement file, copy to Contractor, DCC or PWGSC).
- .2 **Second Violation:** Written warning to Contractor for second violation of a safety regulation(Violation will be documented on Supply Arrangement file, copy to Contractor, DCC or PWGSC).
- .3 **Third Violation:** A third violation of a safety regulation may result in the termination of the Contract with a recommendation to the Contracting Authority that the Contractor be denied access to Formation Construction Engineering contracts(Documented to Supply Arrangement file, copies to Contractor, DCC or PWGSC).
- .4 **Serious Violation:** For a serious violation of a safety regulation as deemed by a regulator, project manager or safety officer a recommendation will be made to the Contracting Authority to immediately terminate the Contract/Supply Arrangement(Violation documented on Supply Arrangement file, copies to Contractor, DCC or PWGSC).
- .5 **Charges Laid or Guilty Determination by Courts:** Infractions of safety regulations that result in charges being laid by a regulator against the contractor or the contractor being found guilty by the courts may result in that Contractor being denied access to Formation Construction Engineering contracts.

1.2 ASBESTOS PRODUCT & ASBESTOS ACTIVITY

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- .1 Within the confines of the Base, the provision of new products containing fibrous asbestos materials is prohibited.
- .2 Demolition or disturbance of spray or trowel-applied asbestos can be hazardous to health. Should material resembling spray or trowel-applied asbestos be encountered in course of work, stop work and notify Engineer immediately. Do not proceed until written instructions have been received from Engineer.

1.3 FASTENING DEVICES EXPLOSIVE ACTUATED

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- .1 Explosive actuated devices must not be used.
-

- 1.4 HOT WORK
- .1 All hot work activity is to take place with written permission from the Engineer(Hot Work Permit).
  - .2 The ventilation system in the area of any Hot Work activity is to be isolated to prevent migration of fumes/smoke and to reduce any possible spread of fire to other areas of the facility.
  - .3 Contractor is to employ an employee trained in the use of fire extinguishers as fire watch during any Hot Work for a minimum of 30 minutes after activity has ceased.
- 1.5 CONFINED SPACES
- .1 All work in confined spaces will be carried out in compliance with the Canada Occupational Safety and Health Regulations, Part XI.
  - .2 The Contractor to provide and maintain all equipment as required by any person to enter and/or perform work in a safe manner, in compliance with the Canada Occupational Safety and Health Regulations, Part XI.
  - .3 The Contractor to provide and maintain training, as required by the Canada Occupational Safety and Health Regulations, Part XI.
    - .1 The Contractor and/or his employees must provide proof of training and qualifications when requested by the Engineer.
  - .4 The Contractor to provide the Engineer with a copy of an "Entry Permit" for each and every entry into the confined space to ensure compliance with the Canada Occupational Safety and Health Regulations, Part XI.
  - .5 The Contractor to have a hazard assessment of the confined space performed.
    - .1 The Contractor to provide the Engineer with a copy of the hazard assessment.
- 1.6 FALL PROTECTION
- .1 All work carried out above the mandatory height restrictions, from unguarded structure and/or scaffolding, will be done in compliance with the Canada Occupational Safety and Health Regulations, Part XII, Section 12.10.
  - .2 The components of a fall protection system must meet the standards as outlined in the Canada Occupational Safety and Health Regulations, Part XII, Section 12.10(2).
  - .3 The Contractor is to ensure fall protection equipment is maintained, inspected and tested by a qualified technician as required by the Canada Occupational Safety and Health Regulations, Part XII, Section 12.3.
-

1.7 ARC FLASH

- .1 The Contractor is to ensure all electrical equipment such as switchboards, panel boards, motor control centres and meter socket enclosures be marked to warn persons of potential electric shock and arc flash hazards. This labeling is required for all new & modified installations.
- .2 The warning label must also include information regarding "arc flash hazard category(0 to 4)" and the "Flash Protection Boundary" as defined in NFPA 70E. All projects specifications must include short circuit study and flash hazard analysis.
- .3 In accordance with the new CSA Standards Z462-08 para 4.3.3.3 Electrical Contractors are now required to perform a shock and flash hazard analysis to select the appropriate PPE to wear. Electrical Contractors are now required Arc-rated personal protective equipment while troubleshooting and diagnostic testing that cannot be performed unless the electrical conductor or circuit part is energized. All contractor work practices must protect each employee from arc flash and from contact with live parts directly with any part of the body or indirectly through some other conductive object.

1.8 SAFETY

- .1 The Contractor must provide a copy of their company's Occupational Health and Safety Policy Program. It must meet the Provincial Occupational Health and Safety Acts. The Engineer will instruct the Contractor where the Federal Standards apply.
- .2 The Contractor must perform site hazard assessments to establish site specific safe work practice procedures for the safety and well being of his/her employees. Copies will be made available to Department of National Defence upon request.
- .3 All copies of the formal Hazard Assessments conducted by the Contractor throughout the duration of the work must be retained and made available to the Engineer immediately upon request.
- .4 It is the Contractor's responsibility to be familiar with all applicable Safety Acts, Regulations, Codes and Standing Offer requirements. These must be identified and addressed in the Safety Plan, by identifying Standard Operating Procedures(SOP) and safe work practices(SWP) which incorporate clear and specific control measures, applicable rules, procedures and practices, all of which will become mandatory.
- .5 Post the Safety Plan at a common location on the site visible to all workers and persons accessing the site. Ensure that all employees, including sub-contractors' personnel, are advised of such Safety Plan and of the posted location.
- .6 The Contractor must ensure all workers and authorized persons entering the work site are notified of and abide by the posted Safety Plan, safety rules, procedures, safe work practices and

1.8 SAFETY  
(Cont'd)

- .6 (Cont'd)  
applicable Safety Acts, Regulations, and codes. Any person not complying with these will not be permitted on the site.
- .7 Must ensure that all applicable personal protective equipment(PPE) is used.
  - .1 All personnel are required to wear hard hats, in accordance with CAN/CSA Z94-1-92 (R1998).
  - .2 All personnel are required to wear safety footwear, in accordance with CAN/CSA Z195-M92.
  - .3 All personnel are required to wear eye & face protection, in accordance with CAN/CSA Z94.3-93 (R1999).
  - .4 When and where noise level is above 85 decibels; all personnel are required to wear hearing protection, in accordance with CSA Z94.2-94.
  - .5 Where toxic or noxious gas fumes, or oxygen deficiency or excessive dust may occur, so as to create a hazard to life, safety or health; all personnel are required to wear respiratory protection, in accordance with CSA Z94.4-93.
- .8 The Engineer will coordinate arrangements for the Contractor to be briefed on site safety within fourteen(14) days of award of Supply Arrangement.

1.9 SITE SIGNS AND  
NOTICES

- .1 Safety and Instruction Signs and Notices:
  - .1 Signs and notices for safety and instruction must be in both official languages. Graphic symbols must conform to CAN/CSA Z321-96(R2006).

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

- 1.1 EMERGENCY REPORTING .1 Telephone Number: Dial 9-1-1.
- 1.2 FIRE SAFETY ENFORCEMENT .1 Within the confines of the Base, the prescription and enforcement of mandatory Fire Safety measures will be exercised under the authority of the Formation Fire Chief.
- .2 Comply with and enforce compliance by all contractor personnel with all requirements of this specification section, and with the most recent edition of the National Building Code of Canada(NBCC) and the National Fire Code of Canada(NFC), including all subsequent revisions issued by the National Research Council of Canada.
- .3 The Engineer reserves the right to require the dismissal from site of persons deemed careless or otherwise in violation of the Fire Safety Requirements.
- 1.3 FIRE SAFETY BRIEFING .1 Prior to commencement of work under this Supply Arrangement, the Engineer will arrange a meeting of all parties concerned to review and clarify requirements for Fire Safety measures. This may involve a briefing by the Formation Fire Chief.
- .2 The Engineer will provide direction for reporting of fire including the emergency telephone number for fire reporting and location of fire alarms within or adjacent to work area.
- 1.4 FIRE WATCH .1 Provide this service including training and assignment of fire-watch persons on a scale and schedule as prescribed by the Base Fire Chief and as indicated in the Engineer approved Fire Safety Plan.
- 1.5 FIRE EXTINGUISHERS .1 Provide and maintain in operational condition fire extinguishers as prescribed by the Formation Fire Chief.
- 1.6 SMOKING PRECAUTIONS .1 In accordance with these Fire Safety requirements particular to the work area and site, the Engineer and Formation Fire Chief will designate hazardous areas as well as non-restricted areas where smoking may be permitted.
-



1.10 RUBBISH &  
WASTE MATERIAL

- .1 Storage:
  - .1 Where it is necessary to store oily waste in work areas exercise extreme care to ensure maximum possible safety and cleanliness.
  - .2 Greasy or oily rags or materials subject to spontaneous combustion must be deposited and kept in a receptacle approved by the Formation Fire Chief and removed as directed by the Engineer.
- .2 The burning of rubbish is prohibited.
- .3 Removal:
  - .1 All rubbish must be removed from the work site at the end of the work day or shift or as directed by the Engineer.

1.11 FLAMABLE  
LIQUIDS

- .1 The handling, storage and use of flammable liquids are to be governed and guided by the requirements established by the Formation Fire Chief and in accordance with the approved Fire Safety Plan.
- .2 Indoor storage of flammable liquids must not exceed thirty(30) litres provided that they are stored in areas and containers approved by the Formation Fire Chief.
- .3 The Engineer reserves the right to require removal from the site any storage containers not acceptable to the Formation Fire Chief.
- .4 The Engineer will not permit indoor storage of quantities of flammable liquids exceeding thirty(30) litres for on-site work purposes, without the written permission of the Formation Fire Chief.
- .5 Transfer of flammable liquids within buildings is prohibited.
- .6 Transfer of flammable liquids must not be carried out in the vicinity of open flames or any type of heat producing devices.
- .7 Flammable liquids having a flash point below twenty-two(22) degrees C such as naphtha or gasoline must not be used as solvents or cleaning agents.
- .8 Flammable waste liquids, for disposal, must be stored in approved containers located in a safe ventilated area. Quantities are not to exceed thirty(30) litres. Dumping or burning of flammable liquids on site is prohibited.

1.12 HAZARDOUS  
SUBSTANCES

- .1 Exercise special precautions necessary to safeguard life and property from damage by fire or explosives.
- .2 If the work entails the use of any toxic or hazardous materials, chemicals or explosives, or otherwise creates a hazard to life, safety or health, work must be in accordance with the most recent edition of the requirements of the National Fire Code of Canada, and measures prescribed by the Formation Fire Chief.

1.13 HAZARDOUS HOT  
WORK

- .1 Prior to commencing any "Hot Work" involving open flame of burning, obtain "Hot Work" Permit issued by the Formation Fire Chief.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

CONTRACTORS MUST ENSURE THAT ALL THEIR PERSONNEL ARE FAMILIAR WITH THESE REGULATIONS AND REQUIREMENTS

1.1 GENERAL

- .1 The following is a summary of the security, safety and fire regulations of Canadian Forces Ammunition Depot, Bedford, as promulgated by the Base Commander, CFB Halifax and administered by the Superintendent CFAD Bedford NS.
- .2 Contractor's personnel will be subject to all of the regulations while working within confines of CFAD Bedford.

1.2 PRE JOB SECURITY AND SAFETY MEETING

- .1 Prior to commencement of work, the Contractor must meet with the Site Security, Safety and Fire Safety Regulations Officers. In accordance with direction of Engineer and these site officers, ensure that all employees of the Contractor are given thorough instructions on security, safety and fire precautions peculiar to an Ammunition Depot and that the regulations are fully compiled with, at all times, by all Contractor personnel.

1.3 SECURITY PASSES

- .1 Contractors must report to the NCO I/C Commissionaires at Building 153; submit names of all their personnel and description of all their vehicles to arrange the issue of the required temporary passes prior to proceeding to work within the the confines of the depot.

1.4 CONDITIONS FOR ACCESS

- .1 All visitors will be issued a daily pass and will be required to sign an acknowledgement that they are aware of and consent to the following conditions for access.
- .2 The person to whom this pass is issued agrees to return the pass to the Security Guard at the gate when the Supply Arrangement or employment at CFAD Bedford expires.
- .3 All vehicles entering and leaving CFAD Bedford may be searched to ensure that no prohibited articles are taken into nor contraband articles are taken out of the Ammunition Depot.

1.5 FIRE SERVICE CFAD BEDFORD

- .1 Fire service at CFAD Bedford is provided by DND Fire Service from 0730 until 1600 hours, Monday to Friday. All Supply Arrangement work will be ended by 1530 hours daily. Fire response at all other times is provided by HRM. Before any work
-

1.5 FIRE SERVICE .1  
CFAD BEDFORD  
(Cont'd)

(Cont'd)  
is carried out during silent hours, the Dockyard Platoon Chief must be contacted at 427-0550, local 3500.

1.6 SEARCHES .1

The Canadian Corps of Commissionaires may conduct a personal search of individuals at any time within the Ammunition Depot. Vehicles entering or leaving the Depot may be searched to ensure that contraband articles are not taken into the Explosives Area and that property is not taken out without authorization.

1.7 ALARMS .1

DEPOT ALARMS: A Siren is sounded only in the event of an emergency such as a fire, explosion, thunderstorm or evacuation. A Siren is also sounded to signify "All Clear".

.2

FIRE EMERGENCY: A series of "HI-LO" sounds on the Depot Alarm System signifies an emergency in the explosive area. Contractors must cease operations and proceed in their own vehicles to the nearest exit gate out of the explosive area. If no vehicle available proceed to the nearest "Fire Assembly Point" at Buildings 169 or 143.

.3

THUNDER AND LIGHTNING: A series of "Beeps" on the Depot Alarm System signifies a thunder/lightning storm warning. Contractors must cease operations and proceed in their own vehicles to the nearest exit gate out of the explosive area. If no vehicle available proceed to the nearest "Fire Assembly Point" at Buildings 169 or 143.

.4

EVACUATION: A series of "Slow Whoops" on the Depot Alarm System signifies that evacuation in the explosive area has been ordered by the Superintendent. The evacuation could be extended to include the non-explosive area as well as so ordered by the Superintendent.

.5

ALL CLEAR: A continuous blast on the Depot Alarm System signifies that the emergency situation is "All Clear".

1.8 REPORTING .1  
OF FIRES

All fires, regardless of whether they have been extinguished or not, must be reported immediately to the Base Fire Department.

.2

All Contractors and employees must familiarize themselves with the locations of the nearest fire alarm box or telephone.

.3

Fires may be reported by ringing the nearest street alarm box or by telephoning 911. Persons reporting the fire must remain at the alarm box or telephone until the Fire Department arrives and be prepared to direct Fire Fighters to the scene of the fire.

1.9 PROHIBITED  
ARTICLES

- .1 The following articles are prohibited and/or controlled from being taken inside the explosive area. Permission by the Superintendent may be granted for certain articles:
  - .1 Matches or other flame producing equipment(including vehicle lighters);
  - .2 Pipes, smoking appliances, tobacco products, or smoking materials in any form;
  - .3 Explosives or chemicals;
  - .4 Lights, lamps or electrical devices/tools which are not explosion proof;
  - .5 Cameras;
  - .6 Food and drink; and
  - .7 Radio transmitting devices(i.e. mobile radios, cellular phones, remote car starters, and garage door openers, etc).
- .2 No persons will introduce, possess or consume alcoholic beverages, narcotics or any intoxicant within the confines of the Ammunition Depot.
- .3 The site security officers will seize and hold at the gate, any such materials found by search.

1.10 SAFETY AND  
FIRE REGULATIONS

- .1 SMOKING: Is strictly prohibited in explosive areas.
- .2 BUILDINGS: Smoking is prohibited in all buildings.
- .3 SAFETY PRECAUTIONS ELECTRICAL/ELECTRONIC EQUIPMENT: All personnel operating or maintaining electrical/electronic equipment involving the use of voltage higher than 50V must brief the Site Safety and Fire Safety Officers concerning all safety rules in the operating and instructional manuals covering the equipment.
- .4 FLAMMABLES, EXPLOSIVES OR CHEMICALS: As required, may be allowed into the explosive area provided that the Depot Safety Officer and the Depot Fire Department are made aware of this and that approval by the Superintendent is given. These items after approval may be transported by the Contractors provided the transportation route is known by the Depot Fire Department and adequate fire extinguishers are available.
- .5 OPEN FLAME OR WELDING: Prior approval must be obtained before commencing any work involving cutting, welding or use of open flame appliances in or around buildings containing

1.10 SAFETY AND  
FIRE REGULATIONS  
(Cont'd)

- .5 OPEN FLAME OR WELDING:(Cont'd)  
explosives. The Fire Safety Officer will check out the work area and ensure that adequate fire extinguishers and first aid appliances are available and that fire watchers have been posted.
- .6 FUEL DISPENSING CONTAINERS: Contractors must ensure that all of their fuel dispensing containers meet or exceed the following standards:
  - .1 Type II safety container, leakproof, Terne plate construction, UL listed and FM approved.
  - .2 Container must have spring-operated spout cap which opens to allow vapours to escape and self closes on release of internal pressures.
  - .3 Container must have flexible or rigid built-in metal dispensing nozzle to prevent static sparks.
  - .4 Standard of Acceptance: Protectoseal, Model Nos. 247, 249, 8410 and 8420.
  - .5 Other acceptable products: Safe-T-Way.
  - .6 Any other model must be approved by the BFC.
  - .7 Violation of any of the above regulations will result in immediate cancellation of the offender's Security Pass and expulsion from the site.

1.11 TRAFFIC  
REGULATIONS

- .1 VEHICLES: All operators must adhere strictly to the following rules while proceeding through the Ammunition Depot.
    - .1 Drivers must not leave the motors of their vehicles running or leave the vehicles unattended when parked between buildings or traverses.
    - .2 Drivers must not drive vehicles in the direction opposite to that indicated by the "One-Way" signs.
    - .3 No one will operate a vehicle within the Depot area at a speed greater than 25 kilometers per hour at any time.
    - .4 No one will operate a vehicle within the Depot area at a speed greater than 8 kilometers per hour at any time, while passing between blast walls and buildings.
    - .5 No one will leave a vehicle unattended within 10 metres of a fire hydrant or within 30 metres of a building containing explosives.
-

1.11 TRAFFIC  
REGULATIONS  
(Cont'd)

- .1 VEHICLES:(Cont'd)
  - .6 All vehicles must be equipped with a Fire Extinguisher of a suitable size and type so that it may be used to extinguish any fire originating in that vehicle.
  - .7 Violation of any of the above regulations will result in immediate cancellation of the offender's Vehicle Pass and expulsion from the site.
- .2 ROADWAYS: In the event of a fire or emergency all roads and buildings within CFAD Bedford must be accessible at all times. Contractors required to disrupt roadways during the course of their work, must ensure that at least one lane of each roadway is passable, at all times. Vehicles not required to transport personnel to the nearest exit gate must be parked on the side of the road and away from the nearest building.
- .3 FUELING: Fueling of vehicles within the explosive areas is prohibited. Small equipment(lawn mowers, chainsaws, etc.) may be re-fueled, but only at sites designated by the Safety Officer and Fire Safety Officer. Comply with all safety practices pertaining to re-fueling hot equipment. Provide adequate fire extinguishers of types prescribed by the Fire Safety Officer. Only approved safety dispensing containers, as specified at sub-paragraph 1.10.6, will be permitted within the confines of the Ammunition Depot.
- .4 Violation of any of the above regulations will result in immediate cancellation of the Vehicle Pass and expulsion of the offender from the site.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

- 1.1 SITE ACCESS .1 Contractors' personnel are required to report to the main desk each morning, sign the register and obtain an identification badge which must be displayed on their person at all times. Upon leaving the Complex at the end of the day, or at lunch time, the Contractors' personnel must report to the main desk, return the badge and be signed off the register.
- 1.2 PARKING .1 Contractors' vehicles will be allowed into the inner compound only under the following conditions; namely, for short periods of time, to load or unload equipment and supplies and then remove to the upper parking lot adjacent to Windmill Road or to the street. The site supervisor of the contracting firm will be allowed to park his/her vehicle, for short periods of time, in one of the visitor's parking slots or, if filled, he/she will be permitted to park in the inner compound while making periodic progress visits. It is emphasized that contractors' vehicles entering the inner compound can be subject to search by the Commissionaire on duty upon their departure. DRDC reserves the right to limit the above-mentioned parking privileges if they are being abused.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

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 ENVIRONMENTAL .1 All work is to be performed in accordance with the Federal Environmental Protection Act and the Provincial Environmental Acts and Regulations.
- 1.3 DISPOSAL OF WASTE .1 Do not bury rubbish and waste materials on site unless approved by Engineer.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- 1.4 DRAINAGE .1 Provide temporary drainage and pumping required to keep excavations and site free from water.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- 1.5 SITE CLEARING AND PLANT PROTECTION .1 Protect trees and plants on site and adjacent properties where indicated.
-

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- 1.5 SITE CLEARING AND PLANT PROTECTION  
(Cont'd)
- .2 Wrap in burlap, trees and shrubs adjacent to construction work, storage areas and trucking lanes, and encase with protective wood framework from grade level to height of 2m.
  - .3 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.
  - .4 Minimize stripping of topsoil and vegetation.
  - .5 Restrict tree removal to areas indicated or designated by Engineer.
- 1.6 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 100m of indicated spawning beds.
- 1.7 POLLUTION CONTROL
- .1 Maintain temporary erosion and pollution control features installed under this Supply Arrangement/Contract.
  - .2 Control emissions from equipment and plant to local authorities 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.
-

1.8 FIRES .1 Fires and burning of rubbish on site is not permitted.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 JOURNEYPERSON .1  
ELECTRICIAN

The journeyperson electrician must:

- .1 Carry out and assist in various types of building electrical maintenance and minor construction as requested by Department of National Defence Canada. Maintenance types defined in Section 01 11 00 GENERAL REQUIREMENTS.
- .2 Relocate, install or repair electrical equipment; such as, but not limited to, lighting fixtures, receptacles, relays, pac poles, wiring runs, panels, breakers, portable equipment, or any other electrical requirements requested by the Engineer; such as, testing, calibrating, programming or electrical measurements.
- .3 Inform the Engineer of any "phase unbalance"(voltage or current) produced by new or additional equipment in a new or existing system. Carry out adjustments and record results.
- .4 Produce all certificates and permits upon request of the Engineer.
- .5 Instruct the Engineer on-site of any new operating procedures when installing or modifying new or existing equipment.
- .6 Must immediately inform the Engineer of any unsafe situations or conditions related to the work site.
- .7 Where applicable, each journeyperson electrician may have an apprentice who is registered with the Department of Labour in the Province of Nova Scotia at a second year level.

PART 2 - PRODUCTS

2.1 MATERIALS .1

Materials to be new, CSA certified and manufactured to standard quoted, where applicable.

2.2 CONDUIT .1

Flexible metal conduit to CSA C22.2 No. 18.3-04.

.2

Electrical metallic tubing(EMT) to CSA C22.2 No. 83-M1985(R2008).

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2.3 CONDUIT  
FITTINGS .1 Fittings for raceways to CSA C22.2 No. 18.4-04.

PART 3 - EXECUTION

3.1 INSTALLATION  
GUIDELINES .1 Do complete installation in accordance with CSA C22.1 except where specified otherwise.

.2 Minimum size conductors for branch circuit wiring must be #12 copper RW90 X-link.

.3 EMT and RW90 conductors to be installed for branch circuit wiring.

.4 All EMT to have steel set screw couplings and connectors(no cast).

.5 AC-90 X-Link, flexible armoured cable, copper conductors with anti-shorts may be used for lighting fixture drops, in demountable partitions and in other applications where, in accordance with the Engineer, it is not feasible to run conduit.

.6 Flexible conduit and #12 RW90 conductors to be installed as fixture drops from junction boxes.

.7 All new circuits to be colour-coded and numbered at breakers, junction boxes and wiring devices. Include panel number and circuit number on each conductor.

.8 No splices allowed inside panelboards(distribution, power and lighting).

.9 Panel directories are to be brought up to date with each new circuit change or installation.

.10 Receptacles to match existing in type and positioning or equivalent.

.11 Switches to be nylon faced, specification grade:

.1 Type:

.1 Hubbell 1201 - 15 ampere or equal;

.2 Hubbell 1221 - 20 ampere or equal.

.12 Any replacement or new installation of fluorescent fixtures must contain energy saving ballasts and lamps as follows or equivalent:

.1 Type:

3.1 INSTALLATION GUIDELINES  
(Cont'd)

- .12 (Cont'd)
- .1 Type:(Cont'd)
- .1 Surface mounted - CFI = Director - 2 series with Halophane lens or equal.
- .2 Recessed - CFI - Prismalyte lens or equal.
- .3 Electronic Ballast Type - Advance Rapid Start or EBT Instant Start, or equal.
- .4 Lamp Type - 32 Watt, 3500 K, T-8, G.E. or equal.

3.2 INSTALLATION

- .1 Flexible metal conduit runs must not exceed 1.5m.
- .2 Install separate ground wire in EMT.
- .3 Lugs, terminals, screws used for termination of wiring to be suitable for copper conductors.
- .4 Minimum acceptable size wire to be used is #12 AWG copper conductors.

Contractor agrees that the following are the unit prices referred to herein:

**1 YEAR STANDING OFFER AGREEMENT**

Class of Labour, Plant or Material	Unit of Measure	Estimated Quantity *	Price Per Unit	Total
1. <b>First Hour</b> Service Calls, including travel time and all related expenses and one person hour productive labour at the job site. a) During Regular Hours: 0800-1600 Hours Monday through Friday Licensed Electrician 2nd Year Apprentice b) Outside Regular Hours: Monday through Sunday including all day Saturday, Sunday and holidays Licensed Electrician 2nd Year Apprentice	Per Call Per Call Per Call Per Call	100 Calls 100 Calls 50 Calls 50 Calls	..... ..... ..... .....	..... ..... ..... .....
2. <b>Subsequent Hours</b> Labour only, in addition to (1) above. a) During Regular Hours: 0800-1600 Hours Monday through Friday Licensed Electrician 2nd Year Apprentice b) Outside Regular Hours: Monday through Sunday including all day Saturday, Sunday and holidays Licensed Electrician 2nd Year Apprentice	Per Hour Per Hour Per Hour Per Hour	10,000 Hrs. 6,000 Hrs. 1,000 Hrs. 1,000 Hrs.	..... ..... ..... .....	..... ..... ..... .....
3. Travel Outside Metro Area	Per km	2000 km	.....	.....
4. Allowance for material, replacement parts, required permits, certificates, assessments, special equipment, and security at net cost, plus a markup of _____ % applied to the net cost.	Allowance	.....n/a.....	.....n/a.....	\$75,000
<b>TOTAL AMOUNT OF TENDER (1 Year SOA):</b>				<b>\$_____</b>

NOTE: The Estimated Quantity entered in column three for each item is an estimate only for service as and when required and does not infer that all the quantities for that item will be utilized or that the quantities may not be exceeded.

