

**Part 1            General**

**1.1                WORK COVERED BY CONTRACT DOCUMENTS**

- .1        Work of this Contract comprises renovation of a kitchen and dining area, located at 2520 Central Avenue North, Saskatoon, Saskatchewan.

**1.2                CONTRACT METHOD**

- .1        Construct Work under stipulated price contract.

**1.3                CONTRACTOR USE OF PREMISES**

- .1        Refer to Section 01 35 13 – Special Project Procedures – Security Requirements.

**1.4                ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING**

- .1        Execute work with least possible interference or disturbance to building operations and occupants, and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.

**1.5                EXISTING SERVICES**

- .1        Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.
- .2        Where Work involves breaking into or connecting to existing services, give Departmental Representative 48 hours' notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions.
- .3        Establish location and extent of service lines in area of work before starting Work. Notify Departmental Representative of findings.
- .4        Submit schedule to and obtain approval from Departmental Representative for shut-down or closure of active service or facility including power and communications services. Adhere to approved schedule and provide notice to affected parties.
- .5        Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
- .6        Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .7        Record locations of maintained, re-routed and abandoned service lines.
- .8        Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

**1.6 DOCUMENTS REQUIRED**

- .1 Successful bidding Contractor is to obtain required sets of Contract Documents for construction purposes, which includes two (2) sets for "as-built" and record purposes.
  - .1 Contractor is responsible for costs of printing, handling, and shipping of Contract Documents.
- .2 Maintain at job site, one copy each document as follows:
  - .1 Contract Drawings.
  - .2 Specifications.
  - .3 Addenda.
  - .4 Reviewed Shop Drawings.
  - .5 List of Outstanding Shop Drawings.
  - .6 Change Orders.
  - .7 Other Modifications to Contract.
  - .8 Field Test Reports.
  - .9 Copy of Approved Work Schedule.
  - .10 Health and Safety Plan and other Safety-related documents.
  - .11 Other documents as specified.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1            ACCESS AND EGRESS**

- .1    Design, construct, and maintain temporary "access to" and "egress from" work areas, including stairs, runways, ramps, ladders, and scaffolding, independent of finished surfaces and in accordance with relevant municipal, provincial, and other regulations.

**1.2            USE OF SITE AND FACILITIES**

- .1    Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated. Refer to Section 01 35 13 – Special Project Procedures.
- .2    Closures: Protect work temporarily until permanent enclosures are completed.

**1.3            ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING**

- .1    Execute work with least possible interference or disturbance to building operations, occupants, and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.

**1.4            EXISTING SERVICES**

- .1    Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.
- .2    Where Work involves breaking into or connecting to existing services, give Departmental Representative 48 hours' notice for necessary interruption of mechanical or electrical service. Keep duration of interruptions to a minimum. Carry out interruptions after normal working hours of occupants, preferably on weekends.
- .3    Provide for personnel and pedestrian traffic.
- .4    Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

**1.5            SPECIAL REQUIREMENTS**

- .1    Submit schedule in accordance with Section 01 32 16 - Construction Progress Schedule - Bar (GANTT) Chart.
- .2    Ensure Contractor's personnel employed on site become familiar with and obey regulations including safety, fire, traffic, and security regulations.
- .3    Keep within limits of work and avenues of ingress and egress.

**1.6            SECURITY**

- .1    Refer to Section 01 35 13 – Special Project Procedures.

**1.7 BUILDING SMOKING ENVIRONMENT**

- .1 Comply with smoking restrictions.
- .2 Smoking is not permitted inside the perimeter of the facility grounds.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1                ADMINISTRATIVE**

- .1     Schedule and administer project meetings throughout the progress of the work at the call of Departmental Representative.
- .2     Prepare agenda for meetings.
- .3     Distribute written notice of each meeting four days in advance of meeting date to Departmental Representative.
- .4     Provide physical space and make arrangements for meetings.
- .5     Preside at meetings.
- .6     Record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.
- .7     Reproduce and distribute copies of minutes within three days after meetings; transmit to Departmental Representative, meeting participants, and affected parties not in attendance.
- .8     Representatives of Contractor, Subcontractor, and suppliers attending meetings will be qualified and authorized to act on behalf of party each represents.

**1.2                PRECONSTRUCTION MEETING**

- .1     Within 15 days after award of Contract, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2     Departmental Representative, Contractor, major Subcontractors, field inspectors, and supervisors will be in attendance.
- .3     Establish time and location of meeting and notify parties concerned minimum five days before meeting.
- .4     Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5     Agenda to include:
  - .1     Appointment of official representative of participants in the Work.
  - .2     Schedule of Work: in accordance with Section 01 32 16 - Construction Progress Schedules - Bar (GANTT) Chart.
  - .3     Schedule of submission of shop drawings, samples, colour chips. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
  - .4     Site security in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.
  - .5     Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
  - .6     Departmental Representative-provided products.

- .7 Record drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .8 Maintenance manuals in accordance with Section 01 78 00 - Closeout Submittals.
- .9 Take-over procedures, acceptance, warranties in accordance with Section 01 78 00 - Closeout Submittals.
- .10 Monthly progress claims, administrative procedures, photographs, hold backs.
- .11 Appointment of inspection and testing agencies or firms.

### **1.3 PROGRESS MEETINGS**

- .1 During course of Work and two weeks prior to project completion, schedule progress meetings bi-weekly.
- .2 Contractor, major Subcontractors involved in Work, and Departmental Representative are to be in attendance.
- .3 Notify parties minimum three days prior to meetings.
- .4 Record minutes of meetings; circulate to attending parties and affected parties not in attendance within three days after meeting.
- .5 Agenda to include the following:
  - .1 Review, approval of minutes of previous meeting.
  - .2 Review of Work progress since previous meeting.
  - .3 Field observations, problems, conflicts.
  - .4 Problems that impede construction schedule.
  - .5 Review of off-site fabrication delivery schedules.
  - .6 Corrective measures and procedures to regain projected schedule.
  - .7 Revision to construction schedule.
  - .8 Progress schedule, during succeeding work period.
  - .9 Review submittal schedules and expedite as required.
  - .10 Maintenance of quality standards.
  - .11 Review proposed changes for effect on construction schedule and on completion date.
  - .12 Other business.

### **Part 2 Products**

Not used.

### **Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1            DEFINITIONS**

- .1    Activity: Element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2    Bar Chart (GANTT Chart): Graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3    Baseline: Original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4    Construction Work Week: Monday to Friday, inclusive, will provide five-day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5    Duration: Number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6    Master Plan: Summary-level schedule that identifies major activities and key milestones.
- .7    Milestone: Significant event in project, usually completion of major deliverable.
- .8    Project Schedule: Planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision-making throughout project life cycle.
- .9    Project Planning, Monitoring and Control System: Overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

**1.2            REQUIREMENTS**

- .1    Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2    Plan to complete Work in accordance with prescribed milestones and time frame.
- .3    Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting.
- .4    Ensure it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

**1.3 SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit to Departmental Representative within 10 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
- .3 Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.

**1.4 MASTER PLAN**

- .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
- .2 Departmental Representative will review and return revised schedules within 5 working days.
- .3 Revise impractical schedule and resubmit within 5 working days.
- .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.

**1.5 PROJECT SCHEDULE**

- .1 Develop detailed Project Schedule derived from Master Plan.
- .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
  - .1 Award.
  - .2 Shop Drawings, Samples.
  - .3 Permits.
  - .4 Mobilization.
  - .5 Interior Architecture (Walls, Floors and Ceiling).
  - .6 Plumbing.
  - .7 Lighting.
  - .8 Electrical.
  - .9 Piping.
  - .10 Controls.
  - .11 Heating, Ventilating, and Air Conditioning.
  - .12 Millwork.
  - .13 Fire Systems.
  - .14 Testing and Commissioning.
  - .15 Supplied equipment long delivery items.
  - .16 Engineer supplied equipment required dates.



**1.6 PROJECT SCHEDULE REPORTING**

- .1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress.
- .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.

**1.7 PROJECT MEETINGS**

- .1 Discuss Project Schedule at regular site meetings. Identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .2 Weather related delays with their remedial measures will be discussed and negotiated.

**Part 2 Products**  
Not used.

**Part 3 Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1            ADMINISTRATIVE**

- .1    Provide submittals listed for review to Departmental Representative. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2    Do not proceed with Work affected by submittal until review is complete.
- .3    Present shop drawings, product data, samples, and mock-ups in SI Metric units.
- .4    Where items or information are not produced in SI Metric units, converted values are acceptable.
- .5    Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated, and identified as to specific project will be returned without being examined, and considered rejected.
- .6    Notify Departmental Representative at time of submission, in writing, identifying deviations from requirements of Contract Documents, stating reasons for deviations.
- .7    Verify field measurements and affected adjacent Work are co-ordinated.
- .8    Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .9    Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10   Keep one reviewed copy of each submission on site.

**1.2            SHOP DRAWINGS AND PRODUCT DATA**

- .1    The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data that are to be provided by Contractor to illustrate details of a portion of Work.
- .2    Submit drawings stamped and signed by professional engineer registered or licensed in Province of Saskatchewan.
- .3    Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross-references to design drawings and specifications.

- .4 Allow 10 working days for Departmental Representative's review of each submission.
- .5 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .6 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.
- .7 Accompany submissions with transmittal letter, containing:
  - .1 Date.
  - .2 Project title and number.
  - .3 Contractor's name and address.
  - .4 Identification and quantity of each shop drawing, product data and sample.
  - .5 Other pertinent data.
- .8 Submissions include:
  - .1 Date and revision dates.
  - .2 Project title and number.
  - .3 Name and address of:
    - .1 Subcontractor.
    - .2 Supplier.
    - .3 Manufacturer.
  - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
  - .5 Details of appropriate portions of Work as applicable:
    - .1 Fabrication.
    - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
    - .3 Setting or erection details.
    - .4 Capacities.
    - .5 Performance characteristics.
    - .6 Standards.
    - .7 Operating weight.
    - .8 Wiring diagrams.
    - .9 Single line and schematic diagrams.
    - .10 Relationship to adjacent work.
- .9 After Departmental Representative's review, distribute copies.

- .10 Submit electronic copy of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .11 Submit electronic copies of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .12 Submit electronic copies of test reports for requirements requested in specification Sections and as requested by Departmental Representative.
  - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
  - .2 Testing must have been within 3 years of date of contract award for project.
- .13 Submit electronic copies of certificates for requirements requested in specification Sections and as requested by Departmental Representative.
  - .1 Statements printed on manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements.
  - .2 Certificates must be dated after award of project contract complete with project name.
- .14 Submit electronic copies of manufacturers' instructions for requirements requested in specification Sections and as requested by Departmental Representative.
  - .1 Pre-printed material describing installation of product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.
- .15 Submit electronic copies of Manufacturer's Field Reports for requirements requested in specification Sections and as requested by Departmental Representative:
  - .1 Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
- .16 Submit electronic copies of Operation and Maintenance Data for requirements requested in specification Sections and as requested by Departmental Representative.
- .17 Delete information not applicable to project.
- .18 Supplement standard information to provide details applicable to project.
- .19 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected,

noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.

- .20 The review of shop drawings by Public Works and Government Services Canada (PWGSC) is for sole purpose of ascertaining conformance with general concept.
  - .1 This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting requirements of construction and Contract Documents.
  - .2 Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of sub-trades.

### **1.3 SAMPLES**

- .1 Submit for review samples in duplicate as requested in respective specification Sections. Label samples with origin and intended use.
- .2 Deliver samples prepaid to Departmental Representative's business address.
- .3 Notify Departmental Representative in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern, or texture is criterion, submit full range of samples.
- .5 Adjustments made on samples by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .6 Make changes in samples that Departmental Representative may require, consistent with Contract Documents.
- .7 Reviewed and accepted samples will become standard of quality of work and material against which installed Work will be verified.

### **1.4 MOCK-UPS**

- .1 Erect mock-ups in accordance with 01 45 00 - Quality Control.

### **1.5 PHOTOGRAPHIC DOCUMENTATION**

- .1 Submit electronic copy of colour digital photography in jpg format, fine resolution, as directed by Departmental Representative.
- .2 Project identification: name and number of project and date of exposure indicated.
- .3 Viewpoints and location: As determined by Departmental Representative.
- .4 Frequency of photographic documentation: As directed by Departmental Representative.

- .1 Upon completion of framing and services before concealment of Work,  
and as directed by Departmental Representative.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1            PURPOSE**

- .1        To ensure that both the construction project and the institutional operations may proceed without undue disruption or hindrance and that the security of the Institution is maintained at all times.
- .2        Refer to the Information Guide for Contractors and the Contractors Security Briefing form included in this project manual.

**1.2            DEFINITIONS**

- .1        "Contraband" means:
  - .1        An intoxicant, including alcoholic beverages, drugs and narcotics.
  - .2        Tobacco or associated tobacco products.
  - .3        An igniting device, lighter or matches.
  - .4        A weapon or a component thereof, ammunition for a weapon, and anything that is designed to kill, injure or disable a person or that is altered so as to be capable of killing, injuring or disabling a person, when possessed without prior authorization.
  - .5        An explosive or a bomb or a component thereof.
  - .6        Currency over any applicable prescribed limit, \$50 when possessed by an inmate without prior authorization.
  - .7        Any item not described in paragraphs 1.2.1.1 to 1.2.1.6 that could jeopardize the security of a Penitentiary or the safety of persons, when that item is possessed without prior authorization.
- .2        "Unauthorized Smoking and related Items" means all smoking items including, but not limited to, cigarettes, cigars, tobacco, chewing tobacco, cigarette making machines, matches and lighters.
- .3        "Commercial Vehicle" means any motor vehicle used for the shipment of material, equipment and tools required for the construction project.
- .4        "CSC" means Correctional Service Canada.
- .5        "Director" means Director, Warden or Superintendent of the Institution as applicable.
- .6        "Construction Employees" means persons working for the General Contractor, the sub-contractors, equipment operators, material suppliers, testing and inspection companies and regulatory agencies.
- .7        "Departmental Representative" means the project manager from Public Works and Government Services Canada.

- .8 "Perimeter" means the fenced or walled area of the Institution that restrains the movement of the inmates.
- .9 "Construction Limits" means the area as shown on the contract drawings that the Contractor will be allowed to work. This area may or may not be isolated from the security area of the Institution.

### **1.3 PRELIMINARY PROCEEDINGS**

- .1 Prior to the commencement of work, the Contractor shall meet with the Director or his/her representative to:
  - .1 Discuss the nature and extent of all activities involved in the Project.
  - .2 Establish mutually acceptable security procedures in accordance with this instruction and the institution's particular requirements.
- .2 Contractor shall:
  - .1 Ensure that all Construction Employees are aware of the security requirements.
  - .2 Ensure that a copy of the security requirements is always prominently on display at the job site.
  - .3 Co-operate with institutional personnel in ensuring that security requirements are observed by all Construction Employees.

### **1.4 CONSTRUCTION EMPLOYEES**

- .1 Submit to the Director a list of the names with date of birth of all Construction Employees to be employed on the construction site and a security clearance form for each employee.
- .2 Allow two (2) weeks for processing of security clearances. Employees will not be admitted to the Institution without a valid security clearance in place and recent picture identification such as a provincial driver's license. Security clearances obtained from other CSC Institutions are not valid at this Institution.
- .3 The Director may require that facial photographs may be taken of Construction Employees and these photographs may be displayed at appropriate locations in the Institution or in an electronic database for identification purposes. The Director may require that Photo ID cards be provided for all Construction Employees. ID cards will then be left at the designated entrance to be picked upon arrival at the institution and shall be displayed prominently on the Construction Employees' clothing at all time while Construction Employees are in the institution.
- .4 Entry to Institutional Property will be refused to any person there may be reason to believe may be a security risk.
- .5 Any person employed on the construction site will be subject to immediate removal from Institutional Property if they:



- .1 Appear to be under the influence of alcohol, drugs or narcotics.
- .2 Behave in an unusual or disorderly manner.
- .3 Are in possession of contraband.
- .6 Smoking is prohibited on CSC property.

## **1.5 VEHICLES**

- .1 All unattended vehicles on CSC property shall have windows closed; doors and trunks shall be locked and keys removed. The keys shall be securely in the possession of the owner or an employee of the company that owns the vehicle.
- .2 The Director may limit at any time the number and type of vehicles allowed within the Institution.
- .3 Drivers of delivery vehicles for material required by the project will not require security clearances but must remain with their vehicle the entire time that the vehicle is in the Institution. The Director may require that these vehicles be escorted by Institutional Staff or Commissionaires while in the Institution.
- .4 If the Director permits trailers to be left inside the secure perimeter of the Institution, these trailer doors will be locked at all times. All windows will be securely locked when left unoccupied. All trailer windows shall be covered with expanded metal mesh. All storage trailers inside and outside the perimeter shall be locked when not in use.

## **1.6 PARKING**

- .1 Parking area(s) to be used by Construction Employees will be designated by the Director. Parking in other locations will be prohibited and vehicles may be subject to removal.

## **1.7 SHIPMENTS**

- .1 All shipments of project material, equipment and tools shall be addressed in the Contractor's name to avoid confusion with the Institution's own shipments. The Contractor must have his/her own employees on site to receive any deliveries or shipments. CSC staff will NOT accept receipt of deliveries or shipments of any material, equipment or tools.

## **1.8 TELEPHONES**

- .1 There will be no installation of telephones, Facsimile machines and computers with Internet connections permitted within the perimeter of the Institution unless prior approval of the Director is received.
- .2 The Director will ensure that approved telephones, facsimile machine and computers with internet connections are located where they are not accessible to inmates. All computers will have an approved password protection that will stop an internet connection to unauthorized personnel.

- .3 Wireless cellular and digital telephones, including but not limited to devices for telephone messaging, pagers, telephone used as 2-way radios, are not permitted within the Institution unless approved by the Director. If wireless cellular telephones are permitted, the user will not permit their use by any inmate.
- .4 The Director may approve but limit the use of two way radios.

## **1.9 WORK HOURS**

- .1 Work hours within the Institution are: Monday to Friday 08:00 hrs. to 17:00 hrs.
- .2 Work will not be permitted during weekends and statutory holidays without the permission of the Director. A minimum of seven days' advance notice will be required to obtain the required permission. In case of emergencies or other special circumstances, this advance notice may be waived by the Director.

## **1.10 OVERTIME WORK**

- .1 No overtime work will be allowed without permission of the Director. Provide minimum forty-eight (48) hours' advance notice when overtime work on the construction project is necessary and approved. If overtime work is required because of an emergency such as the completion of a concrete pour or work to make the construction safe and secure, the Contractor shall advise the Director as soon as this condition is known and follow the directions given by the Director. Costs to the Crown for such events may be attributed to the Contractor.
- .2 When overtime work, weekend, or statutory holiday work is required and approved by the Director, extra staff members may be posted by the Director or his/her designate, to maintain the security surveillance. The Departmental Representative may post extra staff for inspection of construction activities. The actual cost of this extra staff may be subject to reclamation by the Crown.

## **1.11 TOOLS AND EQUIPMENT**

- .1 Maintain a complete list of all tools and equipment to be used during the construction project. Make this inventory available for inspection when required.
- .2 Throughout the construction project maintain up-to-date the list of tools and equipment specified above.
- .3 Keep all tools and equipment under constant supervision, particularly power-driven and cartridge-driven tools, cartridges, files, saw blades, rod saws, wire, rope, ladders and any sort of jacking device.
- .4 Store all tools and equipment in approved secure locations.
- .5 Lock all tool boxes when not in use. Keys to remain in the possession of the employees of the Contractor. Scaffolding shall be secured and locked when not erected and when erected, will be secured in a manner agreed upon with the Institutional designate.

- .6 All missing or lost tools or equipment shall be reported immediately to the Director.
- .7 The Director will ensure that the security staff members carry out checks of the Contractor's tools and equipment against the list provided by the Contractor. These checks may be carried out at the following intervals:
  - .1 At the beginning and conclusion of every construction project.
  - .2 Weekly, when the construction project extends longer than a one week period.
  - .3 The Contractor may be subject to random checks by security staff to ensure proper storage and security of tools throughout the project.
- .8 Certain tools/equipment such as cartridges and hacksaw blades are highly controlled items. The Contractor will be given at the beginning of the day, a quantity that will permit one day's work. Used blades/cartridges will be returned to the Director's representative at the end of each day.
- .9 If propane or natural gas is used for heating the construction, the Institution will require that an employee of the Contractor supervise the construction site during non-working hours.
- .10 If torches or grinders are required tools to perform Work, Contractor must complete a Hot Work Permit as supplied by CSC. Completed original form(s) are copied and posted on the work site in a conspicuous location. Original documents are to remain with the Institutional Fire Chief.

## **1.12 KEYS**

- .1 Security Hardware Keys:
  - .1 The Contractor shall arrange with the security hardware supplier/installer to have the keys for the security hardware to be delivered directly to Institution, specifically the Security Maintenance Officer (SMO).
  - .2 The Security Maintenance Officer (SMO) will provide a receipt to the Contractor for security hardware keys.
  - .3 The Contractor will provide a copy of the above-mentioned receipt to the Departmental Representative.
- .2 Other Keys:
  - .1 The Contractor will use standard construction cylinders for locks for his/her use during the construction period.
  - .2 The Contractor will issue instructions to his/her employees and sub-trades, as necessary, to ensure safe custody of the construction set of keys.
  - .3 Upon completion of each phase of the construction, the CSC representative will, in conjunction with the lock manufacturer:
    - .1 Prepare an operational keying schedule.

- .2 Accept the operational keys and cylinders directly from the lock manufacturer.
  - .3 Arrange for removal and return of the construction cores and install the operational core in all locks.
- .3 Upon putting operational security keys into use, the CSC construction escort shall obtain these keys as they are required from the Security Maintenance Officer (SMO) and open doors as required by the Contractor. The Contractor shall issue instructions to his/her employees advising them that all security keys shall always remain with the CSC construction escort.

#### **1.13 SECURITY HARDWARE**

- .1 Turn over all removed security hardware to the Director of the Institution for disposal or for safekeeping until required for re-installation.

#### **1.14 PRESCRIPTION DRUGS**

- .1 Employees of the Contractor who are required to take prescription drugs during the workday shall obtain approval of the Director to bring a one day supply only into the Institution.

#### **1.15 SMOKING RESTRICTIONS**

- .1 Contractors and construction employees are not permitted to smoke inside correctional facilities or outdoors within the perimeter of a correctional facility and must not possess unauthorized smoking items within the perimeter of a correctional facility.
- .2 Contractors and construction employees who are in violation of this policy will be requested to immediately cease smoking or dispose of any unauthorized smoking items and, if they persist, will be directed to leave the institution.
- .3 Smoking is only permitted outside the perimeter of a correctional facility in an area to be designated by the Director.

#### **1.16 CONTRABAND**

- .1 Weapons, ammunition, explosives, alcoholic beverages, drugs and narcotics are prohibited on Institutional Property.
- .2 Discovery of Contraband on the construction site and the identification of the person(s) responsible for the Contraband shall be reported immediately to the Director.
- .3 Contractors shall be vigilant with both their staff and the staff of their sub-contractors and suppliers that the discovery of Contraband may result in cancellation of the security clearance of the affected employee. Serious infractions may result in the removal of the company from the Institution for the duration of the construction.

- .4 Presence of arms and ammunition in vehicles of Contractors, sub-contractors and suppliers or employees of these will result in the immediate cancellation of security clearances for the driver of the vehicle.

#### **1.17 SEARCHES**

- .1 All vehicles and persons entering Institutional property may be subject to search.
- .2 When the Director suspects, on reasonable grounds, that an employee of the Contractor is in possession of Contraband or unauthorized items, he/she may order that person to be searched.
- .3 All employees entering the Institution may be subject to screening of personal effects for traces of Contraband drug residue.

#### **1.18 ACCESS TO AND REMOVAL FROM INSTITUTION PROPERTY**

- .1 Construction personnel and commercial vehicles will not be admitted to the Institution after normal working hours, unless approved by the Director.

#### **1.19 MOVEMENT OF VEHICLES**

- .1 Escorted commercial vehicles will be allowed to enter or leave the Institution through the vehicle access gate during the following hours:
  - .1 07:45 hrs. to 11:00 hrs.
  - .2 13:00 hrs. to 15:30 hrs.
- .2 Construction vehicles shall not leave the Institution until an inmate count is completed.
- .3 The Contractor shall advise the Director twenty four (24) hours in advance to the arrival on the site of heavy equipment such as concrete trucks, cranes, etc.
- .4 Vehicles being loaded with soil or other debris, or any vehicle considered impossible to search, must be under continuous supervision by CSC Staff or Commissionaires working under the authority of the Director.
- .5 Commercial Vehicles will only be allowed access to Institutional Property when their contents are certified by the Contractor or his/her representative as being strictly necessary to the execution of the construction project.
- .6 Vehicles shall be refused access to Institutional Property if, in the opinion of the Director, they contain any article which may jeopardize the security of the Institution.
- .7 Private vehicles of Construction Employees will not be allowed within the security wall or fence of medium or maximum security Institutions without the permission of the Director.

- .8 With prior approval of the Director, a vehicle may be used in the morning and evening to transport a group of employees to the work site. This vehicle will not remain within the Institution the remainder of the day.
- .9 With the approval of the Director, certain equipment may be permitted to remain on the construction site overnight or over the weekend. This equipment must be securely locked, with the battery removed. The Director may require that the equipment be secured with a chain and padlock to another solid object.

#### **1.20 MOVEMENT OF CONSTRUCTION EMPLOYEES ON INSTITUTIONAL PROPERTY**

- .1 Subject to the requirements of good security, the Director will permit the Contractor and his/her employees as much freedom of action and movement as is possible.
- .2 However, notwithstanding paragraph above, the Director may:
  - .1 Prohibit or restrict access to any part of the Institution.
  - .2 Require that in certain areas of the Institution, either during the entire construction project or at certain intervals, Construction Employees only be allowed access when accompanied by a member of the CSC security staff.
  - .3 During the lunch and coffee/health breaks, all employees will remain within the construction site. Employees are not permitted to eat in the officer's lounge and dining room.

#### **1.21 SURVEILLANCE AND INSPECTION**

- .1 Construction activities and all related movement of personnel and vehicles will be subject to surveillance and inspection by CSC security staff members to ensure that established security requirements are met.
- .2 CSC staff members will ensure that an understanding of the need to carry out surveillance and inspections, as specified above, is established among Construction Employees and maintained throughout the construction project.

#### **1.22 STOPPAGE OF WORK**

- .1 The Director may request at any time that the Contractor, his/her employees, sub-contractors and their employees not enter or leave the work site immediately due to a security situation occurring within the Institution. The Contractor's site supervisor shall note the name of the staff member making the request and the time of the request and obey the order as quickly as possible.
- .2 The Contractor shall advise the Departmental Representative within 24 hours of this delay to the progress of the work.

**1.23 CONTACT WITH INMATES**

- .1 Unless specifically authorized, it is forbidden to come into contact with inmates, to talk with them, to receive objects from them or to give them objects. Any employee doing any of the above will be removed from the site and his/her security clearance revoked.
- .2 It is forbidden to take pictures of inmates, of CSC staff members, or of any part of the Institution other than those required as part of this Contract.

**1.24 COMPLETION OF CONSTRUCTION PROJECT**

- .1 Upon completion of the construction project or, when applicable, the takeover of a facility, the Contractor shall remove all remaining construction material, tools and equipment that are not specified to remain in the Institution as part of the construction contract.

**END OF SECTION**



# **INFORMATION GUIDE FOR CONTRACTORS**

## **MODULE 3**

**For All Contractors Who Perform Work  
in an Institutional Environment**



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## 2.0 TARGET CLIENTELE OF THIS MODULE

This module was designed for all contractors and/or their employees and/or subcontractors who perform work in an **institutional environment**.

## 3.0 MODULE METHODOLOGY

The information in this module was gathered together from a variety of sources to give you – the contractor – some vital information that will help you arrive at your contractual work location better prepared to work in a CSC institution, facility or government office. These sources include information taken from various orientation training packages designed for CSC staff and volunteers. Sources also include interviews with former CSC contractors who, based on their own personal experiences, had specific ideas about what information would be helpful for new contractors to have in advance before starting contractual work for CSC. This module's content was then verified by various subject matter experts to ensure that the module included information that was relevant to the work of a contractor new to CSC.

## 4.0 MODULE OBJECTIVES

By the end of this module, you will be familiar with:

- ◆ A definition of institutional environments, including institutional routines and structures;
- ◆ The offender profile;
- ◆ Types of offender contact;
- ◆ Security issues and strategies in an institution;
- ◆ The offender code and prison sub-culture;
- ◆ Developing professional relationships with offenders and avoiding being manipulated;
- ◆ Health risks associated with offenders; and
- ◆ Emergency, crisis and conflict management within an institutional environment.

## 5.0 INSTITUTIONAL ENVIRONMENT

An institutional environment refers to any federal institution, penitentiary that houses offenders who are currently serving a sentence of 2 years or more. Federal institutions include all levels of security, from a Special Handling Unit (SHU), to multi-level, maximum, medium and minimum security facilities.

Each facility has its own unique set of routines and policies – however, all must operate within the policies and procedures that govern the Correctional Service of Canada.<sup>1</sup>

<sup>1</sup> For a detailed break-down of CSC's institutional structures, please refer back to Module 1, section 6.6 "CSC's Physical Environment."

## 5.1 Institutional Structure

An institution can be compared to a mini-community as it contains living quarters for offenders (cells or rooms), a kitchen, a hospital, work locations, a store (canteen), one or more churches, one or more family units (for Private Family Visits), a large yard, a gym, and a library. Some institutions have “micro”-communities within an institution where offenders have their own living quarters and share a kitchen, living room and bathroom with 8 to 10 other offenders. In those settings, offenders are required to cooperatively work with the other offenders on the unit for meal preparation and cleanliness of the living area.

Some institutions are located within other institutions and will share services. For example, the Regional Treatment Center in the Ontario Region is within the structure of Kingston Penitentiary (KP). The Regional Treatment Center is a stand alone institution but shares services with KP for meal preparation, clothing issues, some hospital or medical issues, and at set times, allows access to its large yard when not in use by KP offenders.

Each institution has a perimeter structure. Maximum and medium security institutions have either walls or double fences surrounding the perimeter, along with razor wire, motion detector systems and cameras to deter escapes. These facilities are usually secured by manned towers and monitored by vehicle patrols, as well as a Main Communications and Control Post (MCCP) from which motion detector systems, cameras and radios are operated.

Minimum security facilities are structured to resemble a more conventional community setting, allowing offenders more freedom to come and go from the grounds with permission..

## 5.2 Institutional Routine

Each institution has a routine that governs an offender’s day. There are two basic day routines - one for the weekday and one for the weekend. The evening routines for both weekday and weekend, including holidays, remain the same.

The following is a general example of what you can expect regarding an institution’s routine. Keep in mind, however, that times and routine structures will vary from institution to institution and across institutional security levels. Offenders are expected to adhere to the established routine of their institution as well as any routine changes that may occur.

### 5.2.1 Daytime Routine (Monday to Friday)

The following is a general example of the normal daytime routine between Mondays and Fridays:

Time	Activity
06:00	Early kitchen workers proceed to the kitchen
07:00	Cells are unlocked and breakfast is announced
07:10	Diabetics are allowed access to the Health Care Department
07:40	Offenders who need medicine are allowed to go to health care to

	pick up their medication.
<b>08:00</b>	"Work-up" is announced – offenders go to their school or work programs; offenders who are not working, excused from duty or are unemployed will be locked in their cells
<b>08:00</b>	All cell doors are locked, except those permitted to remain open
<b>10:30</b>	Cells are unlocked
<b>11:20</b>	Offenders return from their work location
<b>12:00</b>	Offenders are counted
<b>12:15</b>	Once the count has been verified, lunch is announced
<b>13:00</b>	Work-up is announced - offenders not working, excused from duty or are unemployed will be locked in their cell
<b>15:30</b>	Cells are unlocked
<b>16:00</b>	Offenders are counted
<b>16:15</b>	Once the count has been verified, dinner is announced

### 5.2.2 Evening Routine (Monday to Friday)

During the evening routine, offenders have the option of remaining in their cells or proceeding to the yard or gymnasium, library, evening programs or other permitted activities by way of *change-overs / movement*.

A change-over / movement is the process where the cells are unlocked at various intervals permitting offenders to move from the recreational areas back to their cells and vice-versa. Once lock-up has been called, the offender must remain at that location until the next change-over / movement.

At 22:00 hours, the yard is cleared and at 22:30 hours, the gymnasium and any recreational, program or offender office location(s) is cleared. At 23:00 hours, the final count of the day is called and all offenders are secured in their cells for the night.

### 5.2.3 Weekend and Holiday Routine

The following is a general example of a typical weekend or holiday institutional routine:

<b>Time</b>	<b>Activity</b>
<b>07:00</b>	Cells are unlocked and breakfast is announced
<b>08:00</b>	Recreational activities begin - offenders are permitted to move from their cells to the recreational activities, either to the yard or to the gym; offender movement is governed by change-overs / movements
<b>12:00</b>	Offenders are counted
<b>12:15</b>	Lunch is announced once the noon count has been certified correct
<b>13:00</b>	Recreational activities and movement to recreational areas begin, governed by change-overs / movements
<b>16:00</b>	Offenders are counted

16:15	Dinner is announced once the count has been certified correct
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Note that the movement of offenders is strictly controlled in a Special Handling Unit (SHU) – however, movement of offenders becomes less controlled the lower the security level of the institution or community center.

### 5.3 Institutional Counts

There are 3 types of counts: **formal**, **informal** and **CCC** counts.

A **formal count** is a process where an offender is assessed as alive and well. During a formal count, an offender is usually counted in his/her cell – this applies to maximum, medium and multi-level security institutions. At minimum institutions and with institutions with bedrooms instead of cells, the offenders do not have to be in their cells, but must be visible and remain in place during the count.

There are 4 formal counts per day as well as one “stand-to” count. A *stand-to* count is a count where the offender must be in his/her cell, in a standing position, facing the officer for facial identification and to ensure that the offender is alive and breathing.

Most institutions will have formal counts at 00:00, 05:00, 12:00, 16:00 and 23:00. Stand-to counts are either at 12:00 or 16:00. These hours may vary depending on the internal routine of the institution.

An **informal count** is a process where offenders are counted individually without interference in their activities. Informal counts are usually done during walks *i.e.* an officer or staff member enters a range or work location and checks to see that the area is in good order as well as counts the number of offenders in that area. During an informal count, offenders could be doing a range of activities such as sleeping, working, exercising, *etc.*

A **CCC** count is a process used in a Community Correction Center where a sign-in sheet is used to count the offenders. Unlike formal counts, a CCC count does not require that all residents be counted at the same time. As long as the offenders’ whereabouts are known *i.e.* at work, in the community or in the center, the count can be completed.

### 5.4 OFFENDER Dress

During work hours, offenders are required to wear regulation dress. The following is a list of standard issue institutional clothing that the offender may wear at any given time during the work day (the items available may vary at each institution):

- institutional blue jeans;
- belt (institutional head to decide if offenders are to be issued belts);
- institutional golf shirts (red, blue);
- white t-shirt or white undershirt (sometimes worn under golf shirt);

- institutional parka or jacket (depending on the weather);
- institutional green coveralls (to be left in work area);
- institutional white clothing (kitchen/hospital workers);
- leisure shoes, or running shoes; and
- work boots (must be authorized and must remain in the work location)

During leisure hours, offenders are permitted to wear their own personal clothing. Note that women offenders are permitted to wear approved personal clothing within the institution in lieu of institutionally issued clothing during both work and leisure hours.

## 5.5 Offender Profiles

The offender population is comprised of offenders serving their first federal sentence, long time offenders and “recidivist” offenders *i.e.* offenders who have been in the federal correctional environment more than once as a result of more than one sentence.

In federal institutions, offenders could be serving sentences from two years plus one day to life sentences. Offender offences range from minor offences, break and enter, assault, possession of drugs, to more serious offences such as manslaughter or murder.

The following information is provided to give you an idea of this unique community setting. However, this population is ever changing. CSC is now faced with both an aging offender population and an influx of younger offenders who are continually challenging authority, whether it be the correctional system or the traditional offender hierarchy. Some of these offenders also arrive in the institution with substance abuse problems, physical problems and/or mental health issues.<sup>2</sup>

## 5.6 Case Management

Case Management is defined as a process of reintegration of the offender into society as a law-abiding member of the community. Every offender has a Case Management Team or CMT that consists of the offender, a Correctional Officer / Primary Worker and a Parole Officer. Each member of the team has a specific role to play in assisting the offender to become a law-abiding citizen and to reduce the risk that the offender may pose to the public.

The task of the CMT is to gather information about the offender, identify the factors that contributed to the offender’s crime cycle, analyze that information in order to assist the offender to minimize the risk that he/she poses and to assist the offender in safely reintegrating back into society.

This is an ongoing process that starts on the first day the offender is placed in federal custody and continues, with the exception of offenders serving indeterminate or life sentences, until the offender has reached the expiration of their sentence or long-term

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<sup>2</sup> For more information on offender profiles, please refer to Module 1, section 6.7

supervision order. In the case of life or indeterminate sentences, the case management process continues until either the offender's risk has been minimized or the offender dies.

### 5.6.1 Case Management Components

There are three components to the case management process:

- (1) **Reintegration planning;**
- (2) **Intervention;** and
- (3) **Decision-making.**

#### 5.6.1.1 Reintegration planning

The reintegration process begins on the first day of the offender's sentence. This process involves the development of a strategy or Correctional Plan for the supervision of the offender throughout his/her entire sentence. The key activities involved in this component include gathering and analyzing information about the offender and assessing the offender's level of risk. This determines the appropriate security classification of the offender and his/her assignment to specific programs that will target factors that contribute to criminal behaviour.

#### 5.6.1.2 Intervention

Intervention is defined as any activity that may impact the contributing factors and so reduce the offender's risk or increase his/her level of reintegration potential. Interventions used in the offender's case must address the contributing factors defined in the offender's Correctional Plan. Some intervention strategies include change of thinking or cognitive processes *i.e.* increased social skills, change in values, and change in acting out behaviours.

There are several intervention vehicles including structured programs/core programs, psychological counselling, support groups, employment, and education or vocational training.

When assessing an offender, CSC examines certain factors that have been statistically proven to measure both an offender's risk to re-offend, either violently or non-violently, and his/her risk of escaping. CSC uses the three following risk assessment tools in this kind of analysis: (1) **Static risk factors**, (2) **Dynamic risk factors** and (3) **Contributing risk factors**.

- **Static risk factors** are those factors relating to the offenders past. Past behaviour is important to examine as it has been proven that past behaviour is the best predictor of future behaviour. Static risk factors include the offender's previous history of violence, instability in employment and relationships, physical or psychological indicators such as drug or alcohol abuse or personality disorders, and the offender's current offence.

- **Dynamic risk factors** refer to the offender's values and beliefs. Offender behaviours that are considered socially acceptable will lower the offender's dynamic risk, whereas negative offender behaviour that is socially unacceptable and/or criminal will raise the offender's risk. Examples of dynamic risk factors are the offender's marital status, attitude, employment, and peer association (social vs. anti-social peers).
- **Contributing risk factors** are those factors that drive or influence the offender's criminal behaviour. For example, an offender may have a drinking and drug problem, but the offender may only be more prone to committing crimes when on drugs. In this case, drugs would be a contributing risk factor for the offender, whereas alcohol would not. CSC staff is specifically concerned with identifying these needs.

During the intervention phase, there are several key dynamics that contribute to the lowering of an offender's risk to the public and to his/her reintegration back into the community. These dynamics include positive influences from a spouse and/or family member, community contact and/or support, support from spiritual or ethnic leaders, support groups both within the institution and within the community, volunteers, and various CSC staff. Such staff could include a psychologist, psychiatrist, nurse, physician, librarian, program delivery officer, shop instructor or work supervisor, and/or various members of the CSC team who have a positive rapport with the offender.

### 5.6.1.3 Correctional Programs

Correctional programs play a significant role in the rehabilitation of an offender. There are a number of offender reintegration programs offered at CSC designed to address the various criminogenic needs found in the offender population. It is important to note that CSC is recognized around the world for the quality of its programs and their contribution to the safe reintegration of offenders.

Correctional programs are divided into 5 categories:

- correctional programs;
- mental health programs;
- educational programs;
- employability programs; and
- social programs.

The following is a brief definition of each category:



### **Correctional Programs**

The primary goal of Correctional Programs is to help offenders safely and successfully reintegrate into the community. These programs involve interventions that focus on the many factors that directly contribute to criminal behaviour and include clearly defined objectives, participant selection criteria, a process for evaluating participant progress, and a process for evaluating the effectiveness of the program. Correctional programs are delivered by either program officers or psychologists, who are both trained and qualified.

### **Mental Health Programs**

Mental health programs can be defined as therapeutic interventions that address criminal behaviours and provide for essential needs of good mental health.

### **Educational Programs**

Educational programs help prepare offenders for participation in Correctional Programs and employability programs by increasing their level of education, comprehension and critical thinking to optimize the impact of the interventions. They are offered by certified and trained teachers who have met the requirements of the applicable provincial ministries of education.

### **Employability Programs**

Employability programs are interventions aimed at enhancing the job readiness of offenders. Job-readiness training, the professional training programs and assignments to institutional employment are considered tools that help to bridge the considerable gaps that have been identified in the area of offender employment. Employability programs play a key role in CSC's efforts to actively encourage offenders to become law-abiding citizens.

### **Social Programs**

Social programs are interventions that focus on the safe reintegration of offenders. These programs help offenders define pro-social lifestyles so they will be better able to choose to engage in activities that will allow them to become productive members of society and law-abiding citizens. Social programs also encourage and reinforce the transfer of skills learned in Correctional Programs.

#### **5.6.1.4 Decision making**

Decision making regarding the various forms of offender release refers to the process of preparing and presenting the offender's case to the decision maker. The decision maker is either the National Parole Board (NPB) (for parole or statutory release decisions) or the Warden/Director of the institution (for short term absences). Decisions are based on an assessment of the success of intervention strategies in lowering the offender's level of risk to the point where release to the community or transfer to a lower security is the appropriate and

least restrictive measure of control consistent with the protection of the public, CSC staff and the offender him/herself.

## 6.0 DEFINITIONS OF OFFENDER CONTACT

During your contract term, depending on the type of institution that you are working in, you will come into contact with offenders either through **peripheral**, **casual** or even **regular** and direct contact.

**Peripheral contact** means that while the offender is within sight but that there is no physical interaction or verbal contact between you and the offender. For example, you may be contracted to do clerical work in the administration building, and an offender is within sight of you; however, the distance between you and he/she makes conversation unlikely.

**Casual contact** means that you may come into occasional contact with an offender, where verbal interaction with and/or physical proximity to an offender may occur. For example, you may be working in the administrative building and the cleanliness of the area is being maintained by an offender. He/She may come into your work location and remove the garbage, sweep the floors, etc.

**Regular contact** means that you have direct and/or regular contact with an offender. For example, you might be a teacher providing instruction and guidance to an offender pursuing his scholastic education or you may be contracted to facilitate a program to offenders.

It is important that you understand the security challenges that are an inevitable part of your environment when you work in an institution regardless of your level of contact with offenders.

## 7.0 SECURITY ISSUES

There are certain steadfast rules that must be observed in order to keep your interaction with an offender within professional boundaries and to assist you in guarding your safety, the safety of CSC staff and the public.

### 7.1 Dynamic Security

Contractors working in an institution work in a secure environment where a key focus is dynamic security. Dynamic security can be defined as:

- **Any activity that contributes to the safe and secure correctional environment by encouraging constructive relationships and by increasing awareness of factors that contribute to or detract from a safe and secure environment.**

Specifically, it also means being alert to safety issues by actively observing, listening to and interacting with offenders. Paying attention, often gives staff the opportunity to act in a timely manner to maintain everyone's safety and well-being.

As a contractor, your contribution to dynamic security adds to the overall safety of the institution. When you pay attention to your environment, you may see or hear things that you do not expect and leave you unsure of what to do. Always consult CSC staff in this situation.

## 7.2 Security Strategies

Because you will interact peripherally, casually or directly with offenders in an institution, there are some important security strategies that you must employ in order to prevent you from placing yourself in a compromising or dangerous position. The following chart outlines some specific strategies you can use to contribute to dynamic security:<sup>3</sup>

GENERAL AREAS	SPECIFIC TIPS
<b>Attitude</b>	<ul style="list-style-type: none"> <li>◆ No matter what your position, part of your contractual work obligations involves contributing to a safe and secure environment. A safe secure environment allows you to perform your other functions.</li> <li>◆ Security is NOT someone else's job. It is YOUR job.</li> <li>◆ Practice professional behaviour.</li> </ul>
<b>Observe and report</b>	<ul style="list-style-type: none"> <li>◆ Report and/or document anything you may feel is "unusual."</li> <li>◆ Constantly be aware of your environment.</li> <li>◆ Get to know your offender's usual behaviour; report unusual behaviours (they might not be significant to you but may be very important to other staff).</li> </ul>
<b>Be aware of your environment</b>	<ul style="list-style-type: none"> <li>◆ As you move throughout your work environment, use your senses to gather information.</li> </ul>
<b>Dress</b>	<ul style="list-style-type: none"> <li>◆ Offenders will gain information about you by the way you dress (professional; don't care attitude; advertising your sexuality, etc.).</li> <li>◆ Wear footwear that is comfortable and lets you move quickly.</li> </ul>

<sup>3</sup> Note that this list contains only a few points of consideration and is by no means exhaustive. Your judgement when dealing with offenders in an institution is vital to ensure the safety and security of yourself, the environment you work in, the staff around you and the public. Address any questions or concerns to your CSC representative, project authority, or senior CSC staff.

<b>Teamwork</b>	<ul style="list-style-type: none"> <li>◆ Communicate with each other - pass important information on to others verbally and in writing.</li> <li>◆ If you locate an emergency, get help.</li> <li>◆ If a fight breaks out between offenders, get help.</li> <li>◆ If you work in an isolated area, use a buddy system to enhance your personal safety.</li> <li>◆ If required by your contractual work duties, always wear your personal panic alarm (PPA).</li> </ul>
<b>Car safety</b>	<ul style="list-style-type: none"> <li>◆ Park your vehicle in the parking lot and lock all doors.</li> <li>◆ Check the inside of your car before entering to ensure that no one is hiding inside the car.</li> <li>◆ Once safely inside, lock the car doors to ensure that no one can open up a door and enter before you have a chance to leave.</li> <li>◆ Do not leave any valuables or personal information in plain sight within the vehicle.</li> </ul>
<b>Personal conduct</b>	<ul style="list-style-type: none"> <li>◆ Your conduct should reflect a professional attitude.</li> <li>◆ Do your job properly. Offenders know who does their job properly and those who do not. They target those who do not for manipulation.</li> <li>◆ Do not run unless necessary; this behaviour tells staff that something is wrong.</li> <li>◆ Tell staff if you have prescription drugs (which are necessary for your own well-being) with you while working with an offender.</li> </ul>
<b>Key control</b>	<ul style="list-style-type: none"> <li>◆ Practice good key control - make it a habit</li> <li>◆ Keep your keys on your person or lock them in a wall safe.</li> <li>◆ Never leave your keys in a door.</li> <li>◆ Never give your keys to an offender.</li> <li>◆ Don't "give" your keys to another staff member by throwing them down a hallway like a bowling ball.</li> <li>◆ If you have multiple keys, know which key opens which door (you may need to open a door or close a door quickly during an emergency).</li> <li>◆ If you lose your keys, report it immediately. If your keys are lost, security is compromised.</li> </ul>
<b>Tool control</b>	<ul style="list-style-type: none"> <li>◆ Use shadow boards for easy identification of missing tools.</li> <li>◆ Never give or loan tools to offenders that they are not authorized to possess.</li> <li>◆ Immediately report missing tools.</li> </ul>

<p><b>Communication with staff</b></p>	<ul style="list-style-type: none"> <li>◆ Wear your PPA (Personal Panic Alarm) at all times if required by your contractual work obligations.</li> <li>◆ Test your PPA daily at the start of your shift.</li> <li>◆ Know if your PPA is a static or tracking model.</li> <li>◆ Know how to use your PPA and/or radio.</li> <li>◆ Part of good teamwork is good communications.</li> <li>◆ By knowing what other departments do, you are able to pass on information that may be useful to them in performing their roles.</li> <li>◆ Be aware of offenders who may be within earshot when discussing personal information or information about another offender.</li> <li>◆ Post emergency numbers (i.e. security office, supervisor's office, etc.) in an easily observed location near your phone.</li> </ul>
<p><b>Communication and relationships with offenders</b></p>	<ul style="list-style-type: none"> <li>◆ Be professional.</li> <li>◆ Relationships with offenders must be professional. It is okay to be friendly during your interactions with offenders. <b>IT IS NOT OK</b> to be friends with an offender. There is a difference.</li> <li>◆ Never enter into a personal relationship with an offender, either platonic or otherwise.</li> <li>◆ Do not share personal information with an offender. You do not want to put yourself in a position where the offender knows where you live, where your children go to school, etc. Possession of this information may provide an offender the opportunity to put you in a compromising position.</li> <li>◆ Be firm but fair.</li> <li>◆ Be consistent (don't play favourites).</li> <li>◆ There is no need to be confrontational (when you are, the offender will likely try to save face by being confrontational in return).</li> <li>◆ Acquire skills to defuse situations.</li> <li>◆ Don't discuss an offender's situation or problems with other offenders.</li> <li>◆ Be aware that some offenders can read quite well upside down (i.e., while they are talking to you, they are reading the paperwork on your desk).</li> <li>◆ Be aware of and alert for manipulative behaviours.</li> <li>◆ Avoid bringing anything in or taking anything out for an offender ("nothing in, nothing out") no matter how insignificant it appears to be, unless authorized in writing by appropriate CSC staff.</li> </ul>

	<ul style="list-style-type: none"> <li>◆ If an offender tries to influence or threaten you to bring drugs or anything else into your contracted work environment, either the offender is testing you or you have already placed yourself in a compromising position. Report this immediately to staff.</li> </ul>
<b>Computer security</b>	<ul style="list-style-type: none"> <li>◆ Never give your password(s) to other staff or offenders.</li> <li>◆ Don't write your passwords down or post them on your bulletin board.</li> <li>◆ Be aware of offender presence or ability to observe you while you log on to your computer.</li> <li>◆ Never leave your office unattended when you have logged on to the system.</li> <li>◆ If you leave your office, log off.</li> <li>◆ Never let an offender use your computer. No exceptions.</li> <li>◆ Lock up your computer disks and/or USB keys.</li> <li>◆ If you think someone has tampered with your computer equipment, report it to security and IT department immediately.</li> <li>◆ Be aware of your office and computer set up. Ensure offenders cannot see (and read) your screen as you work.</li> </ul>
<b>Electronics</b>	<ul style="list-style-type: none"> <li>◆ Leave all pieces of electronic equipment (cell phone, Palm Pilots, blackberry, etc.) and photographs in the locker with your other personal effects. If possible, leave them at home.</li> </ul>
<b>Static control devices</b>	<ul style="list-style-type: none"> <li>◆ Doors serve to control or restrict movement. Never leave your office unattended if offenders are permitted to be in the area.</li> <li>◆ A locked door is a secure door.</li> <li>◆ If you think your door or lock has been tampered with, report it.</li> <li>◆ Understand the purpose of barriers and the rationale for only opening one barrier at a time (be patient).</li> </ul>
<b>Personal possessions and information</b>	<ul style="list-style-type: none"> <li>◆ Do not bring large quantities of cash or valuables into an institution or to your community contractual work environment.</li> <li>◆ Do not leave your purse or wallet where offenders may have access. Lock them up or don't bring them.</li> <li>◆ Decide what personal information you are and are not willing to divulge to an offender. At some point, you</li> </ul>

	<p>need to draw a line.</p> <ul style="list-style-type: none"> <li>◆ Be aware that offenders can gain a great deal of information about you by the pictures/photographs you have in your office, your children's art on the wall, <i>etc.</i> Decide if this is acceptable to you and realize the possible consequences of their knowing.</li> </ul>
<b>Other tips</b>	<ul style="list-style-type: none"> <li>◆ Immediately report inappropriate offender conduct (touching you, threatening you, sexual advances, love letters, <i>etc.</i>).</li> <li>◆ Information is sensitive. Information is categorized as Protected A, B or C. Observe the precautions for handling, storing and transporting these various classes of information (see module 1 for refresher on this information).</li> <li>◆ Be aware of and adhere to CSC policies, routines and procedures.</li> <li>◆ Do not do “favours” for offenders. Do your job, but not favours.</li> </ul>
<b>Seek advice or help</b>	<ul style="list-style-type: none"> <li>◆ When you don't know or are unsure of a routine or procedure, <u>ASK</u> a CSC staff member for help.</li> <li>◆ Never be afraid to ask a staff member questions or to report any unusual conversations or situations with them. In these situations, an offender may be trying to convey to you some important information, or may be attempting to place you in a compromising position.</li> </ul>

By following these security strategies listed above, you will go a long way towards ensuring your own personal protection while working with offenders.

### 7.3 Unauthorized Items/Contraband

Offenders have limited access to goods in an institution and will go to great lengths to try and obtain them. These goods are very desirable commodities in an institution and can be used as currency in the institution's “black market.”

One way that offenders try to get items that they want but are not supposed to have is by asking you to provide them. It is important that you understand the classification of these items as well as the negative consequences for you if you give in to an offender's demands.

There are two categories of items that offenders may ask you to bring in for them. They are referred to as **contraband** and **unauthorized item**:

- **Contraband** includes an intoxicant (such as alcohol), weapons and/or ammunition, an explosive device and/or any of its components, currency, and drugs of any sort. Any item not listed here that could jeopardize the security of the correctional environment or the safety of any person, can also be considered contraband.
- **Unauthorized items** refer to any other item that an offender is either not authorized to have or may be authorized to have but is acquiring or attempting to acquire the item from sources other than approved channels. Unauthorized items include mundane things such as cigarettes and other tobacco products, stamps and writing paper, books and magazines, clothing, jewellery, or junk food. The list of items an offender may ask for is endless. These are just a few examples.

Anyone who is providing or attempting to provide an offender with contraband could receive a criminal record, a prison term, be fined, or receive all three. Anytime an item that you provided or are attempting to provide to an offender is classified as contraband or an unauthorized item, it will be taken very seriously and may result in serious consequences.

Note that it is not up to you to decide what is appropriate or not appropriate to provide to the offender. Remember that offenders in institutions have limited resources for a reason and are supposed to obtain items through appropriate means. Asking you to provide something for an offender is not appropriate under any circumstances. **Report any such requests made to you by offenders.**

## **8.0 OFFENDER CODE AND PRISON SUB-CULTURE**

Offenders in any institution are part of a prison sub-culture and follow an offender code of conduct. The features and dynamics of this sub-culture can be very foreign to most people who have never worked within a correctional setting.

In order to protect yourself as a contracted worker, you need to be aware of the offender code and the prison culture in order to be aware of potential situations that could affect your safety and security and of those around you.

### **8.1 Prison Sub-Culture**

The prison sub-culture is an unwritten code of conduct that is used by offenders within an institutional setting, much like social norms that informally govern people in the community. The difference with the prison sub-culture is that many of the values and beliefs upon which it is based are actually imported from the “street.” Offenders come to prison with their criminally oriented attitudes, values, associations, social structure, jargon, rules, sanctions, *etc.* and are usually still influenced – at least partly - by this sub-culture when released into the community.

The visible expression of prison culture varies from day to day, depending on what is happening that day and the internal and external pressures that might exist at any given time. This unwritten code is more apparent in a maximum-security setting, and becomes less



noticeable as you progress down to a minimum-security institution or to a non-institutional environment. An offender may not be consciously aware of the code but will adhere to it intuitively.

The prison code includes the following principles in which an offender:

- minds his/her own business and does not interfere with what other offenders are doing;
- never reports another offender's business to authorities for any reason;
- is tough and takes anything that happens to him during his sentence;
- never gets upset when interacting with other offenders;
- treats CSC staff with suspicion, contempt or mere tolerance;
- always pays his/her debts (*i.e.* when an offender owes another offender money, drugs, or services).
- does not steal from other offenders;
- does not go into another offender's cell without permission;
- does not break his word to other offenders;
- never asks someone what they are serving time for;
- does not get staff to solve his/her problems; and
- does not associate with outcasts.

Breaking any of these rules could have dire consequences. For example, the offender could:

- find himself/herself at the bottom of the hierarchy;
- be placed in segregation for his/her own protection; or
- find his or her life in danger which could result in injuries, assaults and even death.

The code also cautions offenders to be wary of those with whom they associate. For example, offenders learn in the prison sub-culture to:

- ♦ not divulge personal information to anyone;
- ♦ stay away from someone that cannot be trusted; and
- ♦ if someone is found that can be trusted, to stick with them.

Due to the new influx of young offenders, however, the old code of conduct is not as strictly enforced – consequently, many of the rules of the offender code today tend to be paid mainly “lip service.” In today's prison environment, therefore, the code of today does not have to be followed as much as it must *appear* to be followed. For example, an offender may be hostile or quarrelsome with CSC staff in front of other offenders, but may be pleasant with staff while on an outside escort. An offender is always concerned with his or her “joint image” and “saving face” when around peers.

Offenders will, however, violate the code *if* it is in their best interests. For example, an offender who is caught with narcotics may volunteer information on the drug trade and institutional drug dealers in order to avoid punishment or obtain some type of preferential

treatment. In this case, an offender violated the code ("don't rat on another offender") because it was in his/her best interest.

In contrast, other offenders follow the code without fail. It is easy to identify this group of offenders because they resist attempts by staff to establish any type of positive rapport and as a result may be antagonistic and disruptive.

## 8.2 Offender Hierarchy<sup>4</sup>

Within each institution, there is a unique offender hierarchy. This hierarchy exists in spite of CSC's efforts and strategies aimed at eliminating its negative criminal influences. Every offender fits somewhere within the social structure. This structure is a system of social organization and control that establishes behavioural expectations for the offender population. The hierarchy also sanctions punishments for those who violate the accepted norms and rules of behaviour. The hierarchy helps define a person's identity (voluntary or not) within the offender population.

For the most part, the sub-culture that develops inside a prison is actually imported from the "street." Offenders come to prison with their criminally oriented attitudes, values, associations, social structure, jargon, rules and sanctions. The prison sub-culture or social system is actually a logical extension of offenders' lives in the community. Once inside, criminally oriented offenders attempt to establish and perpetuate an infrastructure that supports their needs, values and attitudes.

The social structure and hierarchy that is developed, accepted and reinforced is the one that best meets the needs, interests and values of the membership, particularly those members who hold power and influence.

The offender hierarchy consists of the following, by order of importance:

- Leader(s);
- Advisors and Enforcers;
- Followers and offender middle-class;
- Unaligned offenders;
- Disgraced/unaccepted/outsideers; and
- Outcasts.

The following is a description of the roles of each of these types of people in the offender hierarchy:

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<sup>4</sup> The reader is cautioned to keep in mind that the following explanation of the offender hierarchy is simply a tool to help illustrate a very complex social phenomenon. It is by no means an absolute analysis of the issue.

### **8.2.1 Leaders**

At the top of the hierarchy are usually one (1) and sometimes two (2) or more offenders who are the strongest in terms of influence or power. These leaders are usually offenders who are key players in the overall control of the offender population and economy. On occasion, a combination of the most dominant leaders may result in an alliance of power. These powerful people are seldom a problem for staff because they have their followers who take all the risks associated with any criminal activities. The leaders present the appearance of compliance with institutional regulations and tend to avoid unnecessary confrontations with staff.

### **8.2.2 Advisors & Enforcers**

Beneath the leaders are the support groups for the leader(s). They are comprised of advisors and enforcers. The advisors help maintain and organize criminal activities between those in prison and those "on the street." They may simply be skilled manipulators who can organize and control followers. The enforcers, for the most part, are those offenders who use intimidation and violence to achieve the goals of the leader.

### **8.2.3 Followers/Middle Class**

The followers and the middle class tend to make up the bulk of the offender population. They usually comply with the basic rules of the institution and will go along with participating in correctional programming to varying degrees in order to take advantage of conditional release opportunities. To avoid formal disciplinary sanctions, members of this group will usually behave so as not to deliberately attract attention to themselves.

Offenders from this group are usually the consumers who are the driving force for the underground economy. Some of its members may also sometimes play minor roles in the activities of the leaders (*i.e.* running drugs, watching others, holding or hiding weapons for enforcers, watching out for CSC staff).

### **8.2.4 Unaligned Offenders**

Various types of offenders find themselves in this hierarchical position. This group includes new offenders who may not be aware of the social structure and rules. Consequently, they are often a target of exploitation, particularly by offenders who are higher in the social structure.

Young, tough and violent offenders looking for a group with whom to associate usually fall into this category. They are less vulnerable to exploitation or victimization because of their behaviour. Another component of this group is comprised of the loners who may pay to be left alone, as well as the older offenders who have "matured out" but

still have sufficient power, reputation or status to permit them to remain on the sidelines.

### 8.2.5 Outsiders

Offenders who fall into this category include those who have broken the "code" or unwritten rules of the prison sub-culture or those who have served as informants for staff. Additionally, offenders who are perceived as associating too closely with staff and those offenders who are mentally challenged or have special needs often fall into this position in the hierarchy.

In general, this group consists of unaccepted, disgraced and/or different offenders. They are ostracized by the general offender population and have no power or meaningful status. Consequently, they are the most victimized and exploited group of offenders.

### 8.2.6 Outcasts

At the very bottom of the hierarchy are the *outcasts*. This group is rarely or only temporarily encountered in open population and can usually be found in protective custody for their own protection. This group usually consists of offenders serving time for unacceptable crimes *i.e.* infanticide or infant murder, sexual assault of children/child molestation, repeat violators of the offender code, and former law enforcement officers. An offender who wishes to enhance their status or position within the hierarchy may be able to do so by injuring or killing one of these outcast members.

## 8.3 Hierarchy Dynamics

Many factors affect a person's relative position in the hierarchy. Rank is not permanent. All offenders can gain or lose status based on their behaviour while in the institution. Certain actions, behaviours or factors are perceived by the rest of the population, especially the leaders, as being *status enhancing* or *status reducing*.

### 8.3.1 Status Enhancing Actions, Behaviours or Factors

There are several factors that can enhance an offender's status in an institution. These are:

- **Gang or underworld affiliation on the street:** Imported power and status because of prior reputation, position within organized crime in the community, and/or valuable connections for obtaining drugs or weapons.
- **Incarcerated for a sensational crime:** Imported reputation and potential status. An offender who has committed a violent offence comes to the institution with the reputation of someone who is not afraid to use violence.

Murder of a police officer carries a special status. Offenders serving a life sentence are usually afforded a higher status within the institution because of the nature of their crime.

- **Ability to supply items demanded by the prison population:** Most offenders want to make prison as easy and enjoyable as possible. Often, the general population demands goods and services that are normally denied by institutional rules. Offenders who have the connections to supply goods and services that are difficult to acquire enjoy significant power, influence and position within the institutional hierarchy.
- **The ability to have narcotics brought into the institution:** Those participating in the drug trade can acquire a great deal of power. Offenders who can supply this product earn a high position on the social ladder. Drug dealing is extremely profitable allowing drug dealers to buy position and status.
- **Having served time in prison before:** Offenders who have served prior terms of incarceration and have proven themselves as "solid cons" will be able to move into higher positions within the hierarchy more rapidly than someone coming into the institution for the first time.
- **Having the willingness and physical size and/or skill to use extreme violence:** Status and power are afforded to those offenders who have demonstrated their ability and willingness to use violence. The power of a leader, enforcer, or gang comes from the fear that can be instilled in the rest of the population. Offenders who are not afraid to use force quickly establish a reputation and gain status in the eyes of most of the population. Furthermore, the ability and willingness to use violence is a marketable commodity that is a useful service to a number of powerful individuals within the institution.
- **Possessing ethnic, cultural or spiritual status in the community:** If an institution has a high percentage of the offender population of a particular ethnic, cultural or spiritual background, an offender who has significant power or status within that ethnic, cultural or spiritual group in the community may gain higher status within the institution (*i.e.* Jamaican, Islamic or Aboriginal leader).
- **Possession of status symbol items:** Goods and services within the institution take on a symbolic value far in excess of the true value of the item. The more difficult the item is to acquire, the higher the item is in terms of status value. Possession of status symbols can set the offender apart from the rest of the offender population. Furthermore, an offender who possesses such a status symbol also has significant purchasing power.
- **Committing an important action or service within the institution:** Performing or participating in some action that is often difficult, dangerous or illegal is a proven method of improving one's status within the prison

population. Having the willingness to take risks and do someone else's dirty work is a way of proving oneself.

### 8.3.2 Status Reducing Actions, Behaviours or Factors

As with factors that improve an offender's status within an institution, there are also factors that can reduce an offender's status. These are:

- **Being in prison for the first time:** New offenders are not always aware of the prison social structure and rules. They are not trusted by the experienced offenders and are usually kept at arms length while the offender population checks them out and while they prove themselves to be a "solid con." They may make mistakes that make them unworthy of respect.
- **Being physically non-threatening due to age, mental capacity, personality or size:** All of these traits are associated with a person who is perceived as weak and vulnerable. Within the prison environment, this type of person automatically becomes a potential victim or target. Stronger, more aggressive offenders will take advantage of this type of offender. When this happens, other offenders watch to see whether the victim will attempt to defend themselves or their property. If they do not, they lose further reputation and social standing. Without the protection of another influential offender, this type of person is a constant target.
- **Serving time for an offence which the offender population considers repugnant (i.e. sexual assault of a child/child molestation, the murder of an infant):** This type of offender is relegated to the lowest strata of the prison hierarchy. To gain status or acceptance, this type of offender must associate himself/herself with another offender who already has status, power and influence. If this type of offender can provide a service or commodity to a leader or gang, they can gain a measure of acceptance and protection. While the prison population may not agree with the leader's or gang members' "hands off" policy, few will actively oppose it.
- **Not possessing the connections or resources to pay for goods or change one's status:** One of the rules of the offender code is to "pay your debts." Offenders who persistently are unable to pay for goods or services that they have used lose respect and status. This type of offender soon becomes ostracized and may have no other choice but to seek the protection of staff.
- **Having served time at an institution considered as a "protective custody" prison:** Offender populations are fully aware of the "type" of offender who resides in specific institutions. They know that certain institutions are predominately comprised of sex offenders. Regardless of the type of crime the offender has actually committed, offenders transferring in from that "type" of institution are automatically labelled as being that "type" of

offender. The rest of the population slots them into one of the lower positions in the hierarchy. In order to move upwards, the offender must prove that he is not that “type” of offender.

- **Being too friendly with CSC staff:** When the offender population perceives an offender as being too friendly with staff, they become suspicious that the offender is “ratting out” on other offenders and their illegal activities. Unless the population is aware that the friendliness is part of a set-up ploy to manipulate the staff member, they will either ostracize the culprit or introduce harsher sanctions. New offenders may unwittingly fall into the trap of being too friendly with staff.

### 8.3.3 Other Factors that Influence Hierarchy Dynamics

If an offender is transferred from one institution to another or is released to the community, his/her movement creates a vacancy within the prison hierarchy from the institution he/she left. If the offender is transferred to another institution, his/her position within the new institution’s hierarchy will depend on the status and power that the offender brings with him/her. An offender’s status is not automatically transferable.

Movement within the hierarchy may also occur as a result of a power struggle between leaders or rival gangs. Depending upon the outcome of the conflict, major restructuring of the prison hierarchy may occur.

When a vacancy is created, the departing offender may have already trained his/her replacement, which is usually ready to assume their new role and responsibilities before the departing offender leaves.

## 8.4 Prison Economy

The driving force behind the institutional economy is the items that offenders are not entitled to have or items that are limited. Due to their incarceration, offenders are cut off from easy access to some of the forms of entertainment and sources of pleasure that they enjoyed when they were in the community.

Incarceration does not affect the demand for certain goods or services. The prison economy exists to meet the many and varied demands of offender consumers.

CSC must provide offenders with the necessities of life such as food, shelter, clothing and medical care. Additionally, offenders are provided with an allowance or pay in order to purchase personal items. These items may include canteen, hobby craft items or additional personal items for cell use.

The institutional economy goes beyond those goods and services provided by CSC or what the offender acquired through his/her pay. In such an environment, a business person can make a profit and place himself/herself well within the hierarchy.

Since, with the exception of minimum security institutions money is not allowed in institutions prison currency is any item or service that has value to another offender. An offender can pay for something with an item from his/her personal property, through a specialized skill or through a service. Personal items may consist of any item that the offender has in his/her possession. A specialized skill is any skill the offender may possess, such as tattooing, brew-making, legal advice, weapon making, *etc.* A service may include running errands, holding or storing contraband or unauthorized items, sexual favours, *etc.*

The types of items that are highly sought are drugs, brew or distilled alcohol (also referred to as shine) and cigarettes or tobacco products. Canteen items, hobby craft items and personal items are usually exchanged for these items, therefore making them also highly sought. In the case of personal items and some hobby craft items, these items are always assigned an owner. If it is discovered that the offender who has the item in his/her possession is not the rightful owner of that item, the item is confiscated and the registered owner is located. If the owner cannot be located, the item becomes a crown asset and is disposed of.

## **8.5 Impact of the prison economy**

After having discussed what drives the prison economy, we will now examine how the prison economy impacts the security of the institution, the offender population and the staff as well as anyone else who works in a correctional facility or environment.

Many offenders are subject to exploitation generated by the prison economy. For those who are constant consumers and distributors of what the economy has to offer, the pressures associated with payment and interest rates on late payments can create serious problems for both the offenders and the institution.

When an offender gets himself/herself in debt, the offender must pay back the principal and the interest within a week or a set date. If not, the offender is charged at an interest rate of 100% per week, quickly causing the offender to go further and further in debt, until he/she finds himself/herself unable to pay their debt.

Offenders with credit payment problems will sometimes resort to measures that see him/her stealing from or muscling weaker offenders, becoming involved in the drug trade, (including pressuring spouses and family members to bring in drugs or money), becoming an informant to the institution, seeking protective custody and even seeking out more powerful offenders or loan sharks, with the result that the offender becomes even more actively involved in the prison sub-culture.

An offender going through these difficult choices is not thinking about either their correctional plan or participating in programs. This is when CSC's role in assisting the offender to



become a law abiding citizen and/or to assisting the offender to attend programs to reduce their risk to the public is jeopardized.

Apart from offenders, staff members and other people working within the institution, volunteers and even spouses and family members of an offender may also fall prey to intimidation and manipulation, either from an offender who has found himself/herself in this situation or from the member at the top of the offender hierarchy.

There are many ways for an offender to acquire drugs and other commodities. CSC uses various methods and techniques to prevent this from happening; however, these methods and techniques are not fail-safe. The tools and methods to detect and intercept drugs are Ion Scanners, drug dogs, searches and staff observations. Offender informants may also provide staff with information, but the reliability of that information and its source(s) must be constantly verified. When there are reasonable grounds to believe that an offender may have drugs on their person, in their person, or hidden within the institution, CSC can use dry cells,<sup>5</sup> searches and in some cases x-rays under the direction of a medical professional to locate the drugs.

There are several ways for offenders to acquire drugs. An item, such as a tennis ball or an arrow with drugs can be sent over the wall. Visitors could bring the drugs in via a visit, private family visit (PFV) or through a family or social event. Staff, contractors, volunteers or anyone else working within an institutional setting could also be coerced or manipulated into providing this service to offenders.

It is therefore imperative that as a contractor, you be aware that you as well as any staff member or volunteer within CSC, if not equipped with this knowledge, could fall prey to an offender's manipulative tactics.

## 9.0 MANIPULATION TACTICS

It is very important when working in an institution to understand the dynamics of offender manipulation and to be alert for manipulative behaviours. Contractors can be vulnerable to manipulation by offenders, particularly if they do not have previous experience in an institutional environment. Even seasoned contractors (those with previous experience) may be vulnerable to manipulation by offenders.

You must be aware of how offenders can manipulate you into doing something that you should not. A good motto to follow is this: ***If it doesn't feel right, it probably isn't.*** Let's now take a look at what manipulation is and how you can protect yourself.

Manipulation is defined as:

- To influence or to manage shrewdly or deviously, especially to one's own advantage; and

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<sup>5</sup> A dry cell is a special type of washroom facility that allows CSC staff to collect and examine human waste from the offender for drugs or items that the offender had previously ingested.

- To use or control by artful or indirect means to one's own advantage.

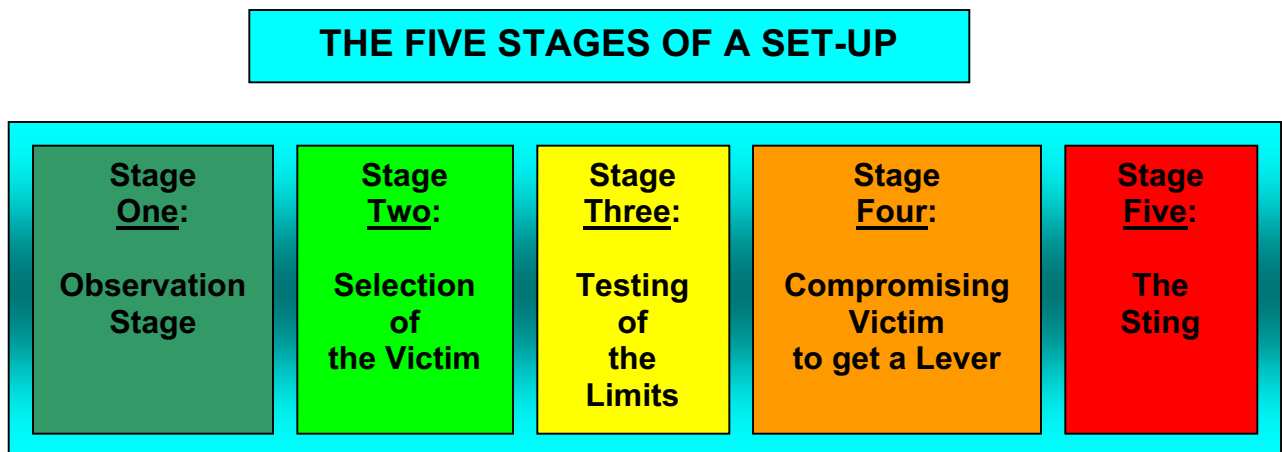
Keep in mind that some offenders are exceptionally skilled at manipulation. Moreover, there are several stages of manipulation and it is not always based on a single incident. Manipulation involves a series of steps or stages that can serve as warnings if you are aware of the dynamics of a **set-up**.

A **set-up** works because the offender has gathered information about you and uses manipulative techniques that exploit a vulnerability that has been perceived. Vulnerabilities may be physical, emotional, spiritual or financial in origin. It is therefore very important to understand the dynamics of manipulation and recognize what actions you can take to lessen the chances of this happening to you.

## 9.1 Five Stages of a Set-up

There are five stages that may occur when an offender is trying to manipulate her or her victim. These are (1) *Observation*, (2) *Selection of a Victim*, (3) *Testing the Limits*, (4) *Compromising the Victim and Creation of a Lever*, and (5) *the Sting*.

The following chart illustrates these five stages:



### Stage One: Observation

During the observation stage, the offender is observing you - particularly how you interact with staff and other offenders – where he/she tries to pinpoint any vulnerabilities you may have that can be used to his/her advantage.

### Stage Two: Selection of a Victim

In the “Selection of a Victim” stage, the offender gathers and analyzes information about the victim, followed by a discussion of the next course of action with all of the players involved in the set-up.

### Stage Three: Testing the Limits

The third stage is called “Testing of the Limits” and involves one or more offenders who wish to exploit the victim’s vulnerabilities. This stage usually involves progressive steps in which the offender is continually testing their victim’s vulnerabilities. This is done to see if the offender can place the victim in a compromising position in order to create a “lever” or leverage against the victim.

There are several manipulative mechanisms that offenders will use to try to place you in a compromising position. Here are a few of those mechanisms. *(Note that there are variations to these techniques and that this list is by no means exhaustive):*

- The Support System: The support system works best in a situation where the victim has a strong desire to be liked by and to like others. The offender will use this system to create a situation where the victim views the offender more as a peer rather than an offender.
- The Sympathy Play: In this technique, the offender is attempting to elicit feelings of pity, compassion or sympathy from the victim. The offender may also use some emotional crisis or experience that the victim recently experienced.
- The Plea for Help: The offender will use this technique if the victim has a strong desire to help others, and will at times combine it with the sympathy play.
- The We/They Syndrome: This technique works best when the offender has perceived the victim’s difficulty in being accepted by the people around him/her. The offender will attempt to separate the victim from their peers and isolate them from their protection.
- The Offer of Protection: This technique is used in order to create a sense of protection from other offenders. The offender will deliberately set up a scenario where the victim would feel that the protection of the offender would be best.
- Allusions of Sex: This is a probing manipulative technique to see if the victim might entertain further advances such as sexual touching or a sexual act. This technique is usually followed by the touch test.
- The Rumour Mill: This technique is used solely for the purpose of isolating and alienating the victim from their peers in order to make them vulnerable to other forms of manipulation. An offender will start a rumour and then gets staff members to pass it around.

### Stage Four: Compromising of the Victim and Creation of a Lever

The fourth step is to “Compromise the Victim and Create a Lever”. With each successful manipulation, the victim’s actions result in further compromise. Through the process, the

victim is asked to progressively break increasingly serious rules, regulations, policies and even the law. The offender will continue to increase his/her hold on the victim by collecting enough evidence against him/her until the offender feels that enough has been accomplished to enter into the final stage of the manipulation.

### Stage Five: The Sting

The last stage is called “The Sting”. Once the offender feels confident that he/she has developed a strong “lever” against the victim, the offender will then expose the set-up and explain the evidence that he/she now has against the victim. The offender will then threaten to expose the victim if his/her demands are not met. This is usually done in the form of an ultimatum where the offender gives the victim a choice: either the victim complies with the offender’s demands or the victim’s wrong-doing will be exposed, forcing the victim to face the consequences.

## **9.2 Strategies to Prevent Manipulation**

An offender may have various reasons for engaging in manipulative behaviour. What is important is that you are aware of the stages of manipulation, notice the signs and exercise caution.

There are several strategies you can employ in order to discourage any attempt at manipulation:

### Paraverbal

- The tone of your voice should reflect confidence
- Keep your voice firm and non-threatening

### Non-Verbal

- Your body language should reflect confidence by using a supportive stance but should be non-confrontational
- Avoid nervous body movements such as wringing your hands, crossing & uncrossing your arms, shifting from one foot to the other, *etc.*
- Make eye contact without staring
- Avoid glancing away or looking down
- Your body and voice must support your verbal message; indicate clearly that you follow the rules and that you are not sorry you do so. Do not show regret or say “I’m sorry.”

### Send a clear message:

- Make your message factual without being confrontational or antagonistic;
- State that what they are asking for or what they are doing is inappropriate and you will not tolerate it;

- Ensure you are sending a "NO" message. **Avoid** phrases such as:
  - "I'd like to but I really can't ..."
  - "Not now ..."
  - "I don't think that it would be right ..."
  - "I'm sorry but ..."
  - "I'd like to but it is against the rules ..."
  - "I'm not allowed to do that ..."
- Use your communication skills to redirect them to appropriate channels (i.e. "No, I won't mail your letter on the way home. You know that it is against the rules. You can put it in the mail in the morning.")
- If you think you are being tested, say something. For example, "You know I can't do that!" perhaps in a slightly incredulous voice. Afterwards, change the subject to an appropriate topic.
- Remember that **if you say or do nothing, it is an invitation for more.**

### Behaviour:

- Do not do anything that an offender asks you to do if you know it is against the rules or if it is inappropriate even though there may be no specific rule against it.
- If you are not sure if it is OK to do something, check it out before agreeing and say so: "I'm not sure I can do that; I'll have to check first with staff."
- Do not discuss your personal problems with an offender.
- Do not allow an offender to touch you. This is against the rules and regulations. You can simply say that you do not like people touching you. If an offender does touch you, you need to report this immediately to staff.
- Tell staff about any incident; talk it over with them even if the offender denies it or it seems extremely minor to you.
- If you realize you have done something inappropriate, remember that it is not too late. Alert staff immediately. Yes, there may be consequences for you, but not as serious as what will happen if you do not report the situation promptly to staff.

Always remember that if you feel that you have been set-up or compromised, **talk to a CSC representative**. If you give in to the offender's demands, you will only dig yourself in deeper. It is always better for you to alert staff to a situation rather than allow it to continue and only become worse.

## 9.3 Obtaining Offender Updates

Another strategy for preventing manipulation is to be aware of the current status or emotional state of the offender(s) with whom are you in contact with, particularly when you have a close working relationship with an offender.

For example, if an offender has recently experienced a serious disappointment i.e. his/her parole was denied, or she/he in serious debt in the institution, he/she may be more volatile and/or exhibit unpredictable behaviour. It is to your advantage to be aware of any recent

changes in the lives of the offenders with whom you are working , particularly when you work in close proximity with them in the institutions.

Contracted workers who work in close proximity to offenders in the institutions would be wise to develop a system to receive regular offender updates. This could be accomplished by developing a close relationship with members of the offender's case management team to ensure that any relevant information that might affect the state of the offender's emotional well-being is passed on to the contracted worker so that he or she is better prepared to deal with any crisis. This information is also vital for the contracted worker to prevent attempted manipulation by the offender.

Regardless of which institution you are contracted to work in, if you are working closely with offenders, ensure that you work out a system to receive updates on the offenders with whom you work. Talk to the CSC staff with whom you have contact or your project authority for more information regarding how to best be kept apprised of this valuable information.

## **10.0 PROFESSIONAL RELATIONSHIPS WITH OFFENDERS**

In the course of your duties as a contracted worker in an institution, you will come into contact with offenders. In all your interactions with them, CSC expects you to act professionally and respectfully. CSC also requires you to respect offenders' cultural identity, racial and ethnic backgrounds, and religious beliefs, as well as their fundamental freedoms and rights under the law. Moreover, creating and maintaining professional relationships with offenders will help ensure you protect yourself from compromising situations.

### **10.1 General Offender Behaviour**

In order to maintain a professional relationship with an offender, it is important for you to gain an understanding of some commonalities in offender behaviour. Understanding what they do can assist you in how you interact professionally with them.

Note that all offenders do not fit one definitive profile. That being said, there are some similarities shared by most offenders since prison life will affect an offender's behaviour. The following are some commonalities among offenders that you may find:

- Lack of internal controls *i.e.* impulsiveness
- Grew up in a disruptive home environment
- Difficulties with learning and usually lacking formal education
- Low self-esteem and may display a helpless attitude
- Lack of marketable work skills and unstable work history
- Rationalization of behaviours
- Lack of adequate problem solving, social, and general life skills
- History of drug or alcohol abuse
- Generally negative attitude and a value system unique to the criminal subculture

## 10.2 Understanding the Offender's Frustration and Limitations

Offenders are confined and live with a great deal of frustration and stress in comparison with the general population. For example, offenders have:

- Less opportunity to exercise independence and individuality;
- More pressure to embrace criminal values;
- Less privacy;
- Infrequent change of routine and unchanging scenery;
- Restricted access to relationships and contact with their families and friends;
- Limited visits and calls to loved ones; and
- Restricted access to many goods and services commonly available outside prison.

Contractors and/or their employees and/or subcontractors who have contact with offenders must understand that the offender is a human being with problems and needs. Criminal behaviour is not always inherited. Often times, an offender did not have access to basic needs such as a stable home environment, self-respect, a sense of belonging or commitment to the community or economical security. In some cases, these deprivations may have provided motivation for the offender's criminal behaviour.

Being cognisant of these aspects of offender behaviour can help you keep your relationship with offenders more professional. Ensure that you develop personal techniques for maintaining your professionalism, even when faced with negative behaviour on the part of the offender.

## 11.0 HEALTH ISSUES: RISKS AND PREVENTIVE MEASURES

Being aware of the institutional environment and the potential for health issues that an offender may be exposed to or is afflicted by will assist you in taking any necessary precautions.

Some offenders arrive at a federal institution with physical and psychological conditions that could pose a risk to themselves, staff and others. Within the institutions there are some offenders who are considered a high risk for infectious disease such as HIV/AIDS, Hepatitis A, B and C, and Tuberculosis (TB). Research shows that many offenders have substance abuse problems and some have serious mental disorders that require specialized treatment.

Since the medical history of any offender falls under the protection of a doctor/patient confidentiality/privilege.

The following is an overview of the conditions that are most prevalent in the correctional setting:

## 11.1 Infectious Diseases

Incarcerated men and women are at a higher risk for HIV/AIDS, Hepatitis, and other infectious diseases due to high-risk behaviours they may engage in both before they arrive in prison and while incarcerated. High-risk behaviours include sharing needles, tattooing and piercing equipment, crack pipes and straws (for snorting) and having unprotected sex. These diseases are blood-borne and sexually transmitted and are not a threat to people who engage in casual contact with those infected.

Tuberculosis (TB), however, is transmitted through the inhalation of airborne germs. Shared air space and a large number of people living in a confined location, such as an institutional environment, increases the potential for transmission of this airborne disease.

In some cases, volunteers and contractors must provide documentation of their baseline TB status to CSC prior to starting work in a CSC facility. Further assessment, *i.e.* annual screening, may also be required if these individuals have direct and extended contact with offenders.

Should you wish to discuss any health issues, please speak with a CSC representative. They can provide you with specific policies and guidelines about how to prevent exposure to infectious diseases in an institutional environment.

## 11.2 Mental Disorders

There is a higher rate of mental disorders among prisoners than is found in the general population. Offenders with mental disorders have difficulty adjusting to life in prison. They have a higher risk of suicide or self-injury. They usually require more assistance for successful reintegration as they may need more support services in the community *i.e.* alternative housing and additional counselling. Unfortunately, there are limited community supports for these offenders and this adversely affects their eligibility for conditional release.

Roughly 19% of the offender population suffer from a mental disorder that may require specialized intervention. Upon entering a CSC facility, offenders are assessed to determine where they should be placed and what treatment they require.

Should you have any questions related to offenders with mental disorders, please speak with a CSC representative.

## 12.0 EMERGENCY, CRISIS AND CONFLICT MANAGEMENT

During the course of your contractual term, you may be involved in an emergency or crisis situation that may require conflict management. It is therefore important that you learn the rules and regulations of the institution you will be working in as well as the processes that are used by staff in order to manage the situation and bring it to a safe conclusion. With a clear understanding of the security issues that exist in the correctional environment, you will be able to contribute to the overall safety of yourself, staff and the offenders.



## 12.1 Management of Emergencies

When you work in an institutional environment, there are times when emergencies will occur. Some of these situations may be the result of an offender's actions while others may not. Emergencies can include major or minor disturbances, assaults as well as captive (hostage-taking) and barricade situations. The goal of CSC in responding to emergencies is to:

- Isolate and contain the emergency as soon as possible;
- Ensure personal safety;
- Prevent escapes, where applicable;
- Minimize damage to property;
- Resolve the situation using minimum level of force; and
- Restore order as soon as possible.

CSC staff are trained in crisis management to deal with and respond to various emergencies. During an emergency situation, all contractors must follow the direction of staff and/or stay in their assigned areas until directed otherwise.

When, however, you are dealing with a situation on your own *i.e.* in the case where you are alone with an offender in a private office, there are several strategies you can employ to protect yourself which are outlined in the following section.

### 12.1.1 Managing personal portable alarms<sup>6</sup>

Some CSC staff and contractors wear a personal portable alarm (PPA). A personal portable alarm is defined as:

- An alarm unit which, when activated, triggers an alarm at a central control centre, and identifies the specific alarm unit and/or its designated location. Please note that only institutions equipped with a Personal Alarm Locating System (PALS) are capable of displaying the alarm unit location.

Note that if your contractual obligations require you to carry a personal portable alarm on your person, you must test your alarm at the beginning of each shift. The test shall take place at the alarm's assigned location where the results will be recorded. Note that personal portable alarms that are assigned to a specific location are not to be removed unless they malfunction.

Offenders are NOT allowed to possess personal portable alarms. Report any such incidents immediately to CSC authorities.

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<sup>6</sup> For more information, please refer to the Commissioner's Directive 567-2 "Use of and Responding to Alarms." This can be found either on the CSC Infonet or by making a request to your project authority.

If you are required to wear one, you must leave it on for the duration of your shift. Note also that any press of the alarm will be treated as a genuine emergency, so do not use the alarm except for testing purposes at the beginning of your shift or in the case of a real emergency.

If you are not required to wear one, it is a good idea to be aware of who around you in your work environment does wear one. If you are faced with an emergency and are near a person with a PPA, you could alert them to your situation.

### **12.1.2 Managing fixed point alarms**

Institutions have fixed point alarms at various locations inside their facilities. A fixed point alarm is defined as:

- An alarm unit which is permanently installed in key locations of a facility.

Ask your CSC representative if there is a fixed point alarm established at your contractual work location and where it is located. Use the alarm only in the case of an emergency or if you are required to use for testing purposes as any press of the alarm will be treated as a genuine emergency.

## **12.2 Crisis and Conflict Management**

Interpersonal conflict is defined as a clash between the interests, values, actions or attitudes of two or more people. Interpersonal conflict is a fact of life and is inevitable. In an institution where offender behaviour can often be volatile, knowing how to properly manage interpersonal conflict will contribute to your personal safety, the safety of CSC staff, and the offender.

During your contract term, you may be a witness to or a victim of aggressive and hostile offender behaviour. You must be able to react effectively, while minimizing the risk of injury. It is also very important that you remain calm, whether you are involved in or are a witness to the incident. Furthermore, if you obtain any information or encounter a situation that risks compromising the safety of any person, you have a responsibility to inform staff immediately. In most cases, staff will make every attempt to diffuse the situation.

If you are alone, however, and/or there is no staff in the area, you will be required to diffuse the situation yourself.

If the incident involves an offender who appears to be in crisis to a degree where he has lost all rational thinking, if appropriate you may safely and effectively defuse this behaviour in a professional manner. This requires sound crisis intervention strategies and skills.

Once the emotion is defused, you can begin to manage the conflict underlying this emotional behaviour. Successful conflict management involves the effective use of problem solving

skills. Effectively defusing the other person's emotions increases the chances of enlisting that person as a cooperative partner in the problem solving process.

After the incident is diffused, report the incident to CSC staff.

### 12.2.1 Stages of the crisis cycle

In order to effectively diffuse a situation, you need to be aware of the various stages of the crisis cycle. When you know what stage of the crisis you are in, it will help you choose a better strategy for diffusing the situation:

Stage in the Crisis cycle	Warning signals
Beginning of the defensive stage	<ul style="list-style-type: none"> <li>• door banging, slamming behaviour</li> <li>• negative tone of voice</li> <li>• negative verbal comments</li> <li>• non-verbal signals of anger</li> </ul>
Deeper into defensive stage - losing rationality	<ul style="list-style-type: none"> <li>• shouting</li> <li>• very heated verbal exchanges</li> </ul>
Defensive stage: challenging	<ul style="list-style-type: none"> <li>• profanity</li> <li>• challenges of authority</li> <li>• blaming others</li> <li>• verbal and paraverbal signals more aggressive</li> </ul>
Borderline crisis stage	<ul style="list-style-type: none"> <li>• fight/flight reaction very close</li> <li>• non-verbal (body language) signals indicate that this situation could become physical very quickly</li> </ul>

### 12.2.2 Behaviours that may escalate a situation

There are several behaviours to avoid in order to prevent a crisis from escalating into a physical confrontation. These are:

- Ignoring the offender's first indications of anger;
- Immediately threatening the offender;
- Failing to listen to what the offender has to say;
- Interrupting the offender;
- Escalating verbal and paraverbal messages;
- Finger pointing;
- Non-verbal signals that are threatening and challenging;
- Losing personal self control, rationality and common sense;
- Invading the offender's body space;

- Overall strategy of trying to get the offender to do something on the basis that “offenders have to do what they are told to do”; and
- Overall strategy of “forcing” the offender to do something that in turn causes the offender to become more resistant and uncooperative.

### **12.2.3 Behaviours that effectively defuse crisis situations**

Should you encounter an offender entering or in the crisis stage, there are several strategies to employ that can help calm the offender down as well as reduce the possibility of a physical encounter:

- Using safe distance and a supportive stance;
- Using verbal intervention to defuse a verbal confrontation;
- Avoiding unnecessary physical contact or handling;
- When setting limits, phrasing the limits in such a manner that the consequences of continuing to be verbally loud and aggressive are clear AND the consequences of the offender ceasing this behaviour are clear and much more acceptable;
- Setting limits on the offender’s behaviour in a non-threatening manner;
- Allowing the offender to make the choice as to whether s/he will become less aggressive and loud;
- Demonstrating good listening skills (physical and verbal attending, mirroring, paraphrasing, and summarizing);
- Modeling appropriate behaviour (*i.e.* verbal, paraverbal and non-verbal messages are all acceptable examples of a normal conversation);
- Removing the offender from the source of conflict or anger, if possible. For example, if the offender is angry with a person in the room, remove the offender from that person’s presence; and
- Listening to the offender. Ask the offender to explain why they are angry and be non-judgemental in the process.

## **12.3 Hostage-taking and Forcible Confinement**

Hostage-taking can occur in either an institutional or community environment. Although it is a relatively rare occurrence, it is important to know what to do in the event that hostage-taking occurs. To prepare you, this section will provide you with an overview of how to apply preventative strategies to decrease the risk of hostage taking and forcible confinement as well as how to apply effective survival behaviours appropriate to a hostage taking and to a forcible confinement.

### **12.3.1 Motivations for hostage-taking and for forcible confinement**

There are many reasons why an offender may wish to take someone hostage, but some of the main reasons are:

- A desire to escape or gain freedom for the taker or for fellow offenders;
- A desire for recognition, attention, thrill seeking; and/or
- A desire to implement some change, promote some cause.

### **12.3.2 Key survival strategies if taken hostage**

If you are taken hostage, it is important that you do the following:

- Avoid resistance;
- Avoid sudden movements, gestures, loud noises;
- Be cooperative, follow orders;
- Reflect calmness;
- Reduce anxiety in the hostage taker(s);
- If the opportunity for communication occurs, speak softly and slowly;
- Watch the effects of your actions. Avoid actions that antagonize the offender;
- Be seen as a human being (i.e., say you are scared, tired, hungry, etc.);
- If the hostage taker(s) provides the opportunity to establish dialogue, take it;
- Try to develop a rapport with the hostage taker;
- Do not attempt to escape unless you are convinced that the attempt will succeed;
- Inform the hostage taker if you have medical problems/require medication;
- Try to stay together with other hostages;
- Try to stay in one spot if possible; and
- Be honest, don't lie. Getting caught in a lie will only antagonize the hostage taker.

Being aware of these strategies could help save your life should you ever find yourself in the position of being taken hostage.

### **12.3.3 Preventing forcible confinement and possible sexual assault**

Forcible confinement for sexual purposes is a different situation from being taken hostage. Where an offender has forcibly confined someone for sexual purposes, the following key information usually plays a role:

- Usually no substantive demands are being given by the offender;
- Any demands given appear spontaneous *i.e.* spur of the moment;
- The offender may have been charged with sexual assault against women;
- The offender has a history of violence against women;
- The offender fits the profile of an offender who confines for sexual purposes.

Research shows that sexual assault normally occurs within the first 20 minutes of a forcible confinement if the motivation is sexual. The goal of CSC is to resolve the incident before the offender assaults and/or is able to sexually assault again.

#### 12.3.4 Profile of an offender who forcibly confines for sexual purposes

Offenders who forcibly confine victims for sexual purposes often – but not always – fit into the following profile:

- Sexual offence history against adult women on record
- History of violent aggression against women
- May have unlawfully confined or sexually assaulted in a secure setting
- Serving a lengthy sentence (no imminent release)
- May be receiving or trying to receive medication or treatment to reduce sex drive
- Evidence of current stressors (recent detention, parole denial, *etc.*)
- Evidence of pre-planning may exist (targeting the victim)
- Male, 30-50 years of age

#### 12.3.5 Strategies to avoid being forcibly confined for sexual purposes

The sexual assault of a prison staff member is a rare phenomenon committed by a small minority of offenders. However, even one such assault can have devastating impacts.

Should you find yourself in a position where you fear that an offender is attempting to forcibly confine you for sexual purposes, there are several strategies you can employ to prevent the forcible confinement from occurring. These are:

- Being aware of your environment (doors, exits, when you are alone or isolated, *etc.*) - especially in regards to offender movement;
- Being aware of the presence/location of other staff;
- Follow security procedures and post orders;
- Do your job properly;
- Be aware that other staff are doing their job properly (*i.e.* searches);
- Wearing and testing your PPA at all times, if applicable;
- Knowing where the fixed point alarm or panic buttons are;
- Arranging your office so that you do not trap yourself in the room (if possible);
- Backing up other staff in monitoring offender activity;
- Reporting unusual offender activity (stalking behaviours, love letters, inappropriate conduct, *etc.*);
- Being alert to unusual offender behaviour;
- Not letting offenders into unauthorized areas;
- Not letting offenders manipulate you into not following proper security procedures;
- Not dealing with offenders who are extremely agitated by yourself. In such situations, obtain staff back-up;

- At the first signs of trouble summoning help, or going to where other staff are located;
- Making noise (especially if the offender closes and locks the door shut);
- If you feel threatened, summoning staff;
- If you work in an isolated area, becoming informed of the profile of offenders who work in your area. Talking to the parole officer;
- Being security conscious at all times;
- Setting limits or terminating the session with the offender when an offender tries to physically touch you;
- Continuing to work with the offender only AFTER advising security of your concerns about the offender's emotional state;
- Requesting other CSC staff or contracted workers to periodically check on you;
- Communicating your concerns with other staff at the time;
- Using the presence of other staff/contracted workers to terminate the interview as you now have "back-up";
- If the situation becomes volatile and you do not have access to a PPA or fixed point alarm, not hesitating to use the phone; and
- Use the desk or other equipment as a barrier to buy time while you make noise to alert staff to the problem – do not try to barge past the offender as that may give them the opportunity to take control of your person.

These are examples of some actions and behaviours that can be taken that may reduce the risk of being forcibly confined. Moreover, it is important to remember that as long as the offender does not have control of you, there may be opportunities for more active resistance (making noise or calling out to gain attention, pressing PPA, using the phone, *etc.*).

### **12.3.6 Survival behaviours to employ if you are forcibly confined**

If you are forcibly confined for sexual purposes, in order to prevent being further harmed or re-assaulted, there are some strategies you can employ while waiting for help or an opportunity to escape. These are:

- Keeping your voice and body language predominately calm;
- Keeping your body language non-aggressive, non-threatening;
- Attempting to humanize yourself,
- Not verbalizing your anger (*i.e.* purposely provoking the offender);
- Trying to develop rapport and empathy with the offender;
- Making eye contact with the offender;
- Making requests infrequently and quietly;
- Speaking softly;
- Staying away from topics which increase emotions; and
- Trying to reason with gain sympathy from the offender (*i.e.*, saying you have kids that need picking up at the day care).

If you are being threatened with a knife or weapon, however, there are some difficult choices you may have to make. For example, if the offender is threatening you with a knife, you will have to make a personal choice:

- offer no resistance in order to prevent being cut or injured; or
- offer resistance to prevent being raped.

If the offender does not have the knife or is not physically in control of you, however, you can be more flexible in your response, *i.e.* you can yell, scream, use the desk as a barrier, use something as a weapon to defend yourself, try to talk the offender out of his intentions, *etc.*

If the sexual assault is imminent, give the offender the clear message that you do not want to be assaulted. Changing the subject, *e.g.* asking for water, cigarette, toilet, crying, fainting or fighting may all be options depending on the circumstances.

### **12.3.7 When help arrives**

Should an emergency response team be deployed, it is suggested that you drop to the ground where you are, and not to run or seek a hiding place. There may be a loud noise and tear gas may be used. A removal team will bring you out quickly and let you shower/clean and see medical staff.

***Remember that prevention is your best defense.***

### **12.3.8 After it is over**

Survivors of hostage-taking and forcible confinement may experience a number of symptoms after the fact. These can include:

- Anxiety;
- Hyper-vigilance;
- Sleep disturbance;
- Hostility;
- Feelings of powerlessness;
- Shock;
- Fears/Phobias;
- Feelings of isolation; and/or
- Nightmares.

Often survivors experience a multitude of these symptoms. However, many survivors return to work within a few weeks and most by about 12 months.



Return to psychological health can be augmented by having supportive family, friends, co-workers and administration. It is also useful to know that CSC has a critical incident debriefing policy, and that employees and contractual workers can take advantage of the Employee Assistance Program (EAP) which provides free short-term counselling services for a variety of issues as well as referrals for longer term counselling. These services are also available for immediate family (*i.e.* spouses and children) of staff and contracted workers.

**Remember:** Anytime you are involved in an emergency, crisis or conflict situation, seek help from a staff member or inform a staff member as soon as possible.

### 13.0 GENERAL TIPS TO REMEMBER

GENERAL AREAS	TIPS
<b>Institutional Environment</b>	<ul style="list-style-type: none"> <li>♦ Ensure that you understand the rules and procedures of the institution where you are contracted to work.</li> <li>♦ Learn what is “usual” in your contracted work location, <i>i.e.</i> counts, routine, <i>etc.</i></li> <li>♦ Learn about the offenders with whom you will be working closely.</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>♦ Pay attention to your surroundings. If you hear or see something that is out of the ordinary, advise staff.</li> <li>♦ Remember that security is everyone’s job.</li> <li>♦ Your judgement when dealing with an offender is vital to your safety and to the safety of those around you.</li> <li>♦ An offender is constantly checking to see if you can be manipulated. Be aware of the signs and deal with the situation appropriately.</li> <li>♦ Print out the list of security strategies listed in this module and review them periodically.</li> <li>♦ Practice professional behaviour.</li> <li>♦ Dress professionally and with comfortable footwear.</li> <li>♦ Know where your keys are at all times.</li> <li>♦ Know where your tools are at all times.</li> <li>♦ Never give out your passwords.</li> <li>♦ Always log off your computer when it is not in use.</li> <li>♦ Always lock doors and never leave your office unlocked if it is unattended.</li> <li>♦ Do not bring large quantities of cash or valuables to your work environment.</li> <li>♦ Do not bring anything in or out for an offender, especially contraband or unauthorized items.</li> <li>♦ Report any inappropriate offender conduct.</li> </ul>

	<ul style="list-style-type: none"> <li>♦ Observe the precautions for information that is categorized as Protected A, B or C.</li> <li>♦ Understand the prison sub-culture.</li> <li>♦ Employ strategies to prevent manipulation by offenders.</li> <li>♦ Know what to do in case of a crisis or emergency.</li> <li>♦ Wear your PPA if applicable or know where panic buttons are located.</li> <li>♦ Remember that dynamic security is everyone's job.</li> </ul>
<b>Offender Code and Prison Sub-Culture</b>	<ul style="list-style-type: none"> <li>♦ Develop a solid understanding of the prison sub-culture and offender code.</li> <li>♦ Understand the dynamics that affect the prison hierarchy.</li> <li>♦ Understand how the prison economy works.</li> </ul>
<b>Manipulation Tactics</b>	<ul style="list-style-type: none"> <li>♦ Learn to recognize the 5 stages of a set-up.</li> <li>♦ Develop strategies to deal with attempted manipulation by offenders.</li> <li>♦ Keep up-to-date with changes that occur with offenders with whom will be in close contact.</li> <li>♦ Talk to a CSC representative anytime you feel an offender has tried to manipulate you or if you feel you have done something inappropriate. Stop the manipulation before it advances beyond your control.</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>♦ Communicate with staff/other team members.</li> <li>♦ Acquire skills to diffuse situations.</li> <li>♦ Work with CSC staff to receive updates on prisoners with whom you may be working.</li> </ul>
<b>Professional Relationships with Offenders</b>	<ul style="list-style-type: none"> <li>♦ Establish appropriate boundaries with offenders.</li> <li>♦ Act in a professional and respectful manner.</li> <li>♦ Understand frustrations that offenders have – this may help you deal more professionally with them.</li> <li>♦ Be respectful of diversity among offenders.</li> <li>♦ Do not make “friends” with offenders.</li> <li>♦ Do not discuss one offender with other offenders.</li> <li>♦ Do not divulge personal information to an offender.</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>♦ Be aware of potential health risks and take any necessary precautions.</li> <li>♦ Learn about protocols regarding health issues in an institution.</li> <li>♦ Talk to your CSC representative about any concerns you have regarding health issues such as infectious disease or working with offenders with mental health issues.</li> </ul>

<b>Conflict</b>	<ul style="list-style-type: none"> <li>♦ If you are a witness to a crisis or emergency situation, remain calm and take direction from CSC staff. If you are not asked to assist in the situation, do not interfere.</li> <li>♦ If you are the victim of a crisis or emergency situation, remain calm. Take direction from staff if present, and do not interfere unless told to do so.</li> <li>♦ Learn about strategies to use if you are ever in a hostage-taking or forcible-confinement situation.</li> <li>♦ If you are alone during the crisis or emergency situation, you must effectively and safely diffuse the situation yourself. Once you have safely diffused the situation, you must advise staff as soon as possible.</li> </ul>
<b>Seek advice or help</b>	<ul style="list-style-type: none"> <li>♦ Be aware of and adhere to CSC policy, routines and procedures.</li> <li>♦ When you do not know or are unsure of a routine or procedure, ask a CSC Representative or an experienced staff member for help. A CSC staff member will be glad to help you.</li> </ul>

# **Regional Psychiatric Centre (Prairies)**

## **Contractors Security Briefing Form**

**It is the responsibility of the CONTRACTOR to inform their staff of these security requirements and shall display a copy of these requirements at their job site.**

*Once read, there is room at the end of this document that requires the signature of all contract staff that will be conducting work on institutional property.*

### **1. ALCOHOL AND NARCOTICS / DISORDERLY CONDUCT**

- Alcoholic beverages and narcotics are not permitted on institutional property.
- Removal of any person employed on the project that appear to be intoxicated or under the influence.
- Removal of any person employed on the project that acts in a disorderly manner.

### **2. CORRECTIONAL AND CONDITIONAL RELEASE ACT**

- This is a medical facility within the Correctional Service of Canada, and as such is governed by Rules and Regulations as defined by both the Criminal Code of Canada, and the Corrections and Conditional Release Act and Regulations.
- Attached are the Corrections and Conditional Release Regulation Section 45 which is of **EXTREME IMPORTANCE** for your personnel to be informed of (ANNEX A and B).

- Searches of your person and vehicles will be done. This is part of our security procedure and is not intended to embarrass you, but rather to assist the Operations Division in maintaining the security of the Institution.
- Searches include, but are not limited to, searches by the Institutional Drug Dog, the Drug Detection Machine known as the Itemiser, X-ray machine, and the walk through/hand held scanner.

### 3. CONTRABAND AND UNAUTHORIZED ITEMS

- **"CONTRABAND"** and unauthorized items is indicated in section two (2) of the Act. It is an offence to use, trade, or barter with an inmate or for an inmate to attempt to barter with you. It is your responsibility to report any such bartering to the Correctional Staff.
- Offenders, staff members, **contractors**, volunteers and **visitors** are not permitted to smoke inside correctional facilities (including private family visiting units) or outdoors within the perimeter of a correctional facility.
- Staff members, **contractors**, volunteers and **visitors** must not possess unauthorized smoking items within the perimeter of a correctional facility.
- CSC **contractors**, volunteers and **visitors** who are in violation of this policy will be requested to cease smoking or dispose of any unauthorized smoking items and if they persist will be directed to leave the institution or CCC.
- **Definition:** Unauthorized smoking items: smoking items including, but not limited to, cigarettes, cigars, tobacco, chewing tobacco, cigarette making machines, matches and lighters are unauthorized items within the meaning of section 2 of the *Corrections and Conditional Release Regulations*, except tobacco and ignition sources used for the accommodation of Aboriginal spirituality or other religious practices.

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- While it is totally incomprehensible to expect yourself to identify any item as contraband, or an unauthorized item(s), if you accidentally find any item(s), inform the Correctional Supervisor or a staff member identified by a CSC tag, so that appropriate action can be taken. **WHAT MAY SEEM INNOCENT TO YOU MAY BE OF SERIOUS CONCERN TO US.**

#### 4. PERSONNEL

- In order to assist in providing a secure environment and a simple means of having all the work completed, we require information on the following :
  - 1) Names of all personnel who will be working on the project. This must include the full names of the individuals and their date of birth.
  - 2) Nature of the job (what is being done)
  - 3) Extent of the work (what you will be doing)
  - 4) Hours you intend to work
  - 5) Anticipated number of days required on site.

#### THE INSTITUTION IS OPEN FROM 0800-1200 AND 1230-1600

- All personnel working at the job site must have prior security clearance before any work is started. All names must be submitted on a CPIC Form. The names must be clearly printed and state the persons name in full and persons date of birth. **All clearance requests require at least 72 hours before approval or denial is granted.**
- All contract personnel must bring their identification, with picture ID to gain access into the Institution.

#### 5. ACCESS TO THE SITE

- You must inform the **Correctional Supervisor at 975-5402** of any overtime you intend to work at least 24 hours in advance. We must know your intentions in the event that we require any additional security measures. Be informed that overtime may not be granted although every consideration will be given.
- If you are working in two or more different areas within the Institution at the same time, inform the Correctional Supervisor at 975-5402 of your intention so that if required an escort can be provided. Movement within the Institution is restricted and prior arrangements must be made.

## **6. OBSERVATIONS, INSPECTIONS AND EMERGENCIES**

- Construction activity is subject to observation and inspection by Correctional Officers to ensure security of the Institution is maintained.
- It is not anticipated that an emergency will arise in which you will be asked to leave an area abruptly. However, if you are asked to vacate an area in a hurry, pick up all your equipment as best as you can and follow the Correctional Officer's instructions.

## **7. DISCIPLINE OF INMATES**

- When a contractor, or an employee of a contractor, witnesses unacceptable behaviour on the part of one or more inmates, he or she shall take the necessary immediate action :
  - 1) Inform a member of the Service immediately.
  - 2) Be prepared to provide a statement of the occurrence to a member of the service as required.

## 8. INSTITUTIONAL IDENTIFICATION

- The Institutional Head may require facial close-up photographs to be taken of construction personnel and to have them displayed in a prominent location within the premises. Normally photos will be taken when work will exceed two or more days on site.
- Should you be issued with an Identification card it must be worn at all times when working within the confines of the Institutional grounds. The ID cards shall be worn on the right chest at all times.
- **YOUR ID CARD IS YOUR RESPONSIBILITY AND SHOULD BE REPORTED TO THE SECURITY MAINTENANCE OFFICER OR THE CORRECTIONAL SUPERVISOR IMMEDIATELY IF LOST (on Institutional property, as well as off Institutional Property).**

## 9. TOOLS AND EQUIPMENT

- **TOOL POLICY** : It is RPC's policy **NOT** to provide, loan or otherwise distribute any tool, ladder, and / or miscellaneous part(s) to outside contractors.
- All outside contractors and service personnel are required to fill out an **"OUTSIDE CONTRACTORS TOOL INVENTORY"** prior to any tools being taken inside the Institution.
- The white copy of the "Outside Contractors Tool Inventory" form will then remain at the Principle Entrance so as to verify your tools going in and out of the Institution. You are to hold the yellow copy of the above stated form on your person at all times. When taking any tools out, the yellow copy must be given to the Visitor Security Officer at the Principle Entrance.

## 9. TOOLS AND EQUIPMENT CONTINUED



- You must report any additions and/or deletions to your tool list prior to bringing them in or removing them from the Institution.
- Tools are classified into three (3) basic groups:
  - N** = NON-RESTRICTED
  - R** = RESTRICTED
  - P** = PROHIBITED

Any tool classified as "**PROHIBITED**" will be allowed into the institution but must be removed from the Institution once the work with that tool is completed. There are times when these tools are allowed to remain within the institution but ensure that arrangements have been made with the Security Maintenance Officer for "secure storage".

- All power "shot," Ram-set, Hilit or any other power-driven tool must have all cartridges accounted for including those which have been used must be returned to the Principle Entrance so as to verify the correct count going in as well as going out on a daily basis.

## **10. TOOL SAFETY**

- Keep all tools and equipment under constant supervision and do not leave them unattended. Pay particular attention to power driven tools, files, saw blades, rod saws, wire, rope, and ladders. If you must leave the area ensure that your tool kits are locked or leave them with a fellow employee or in a secure area which has been designated for your use. This safe guard is done not only to protect your tools but also to prevent a tool from being stolen.
- All broken blades and tools must be accounted for. **DO NOT THROW OUT ANY BROKEN TOOLS.**

### **\*A DAILY INVENTORY OF YOUR TOOLS IS REQUIRED\***

- If you notice a tool missing, contact the Correctional Supervisor and/or the Security Maintenance Officer **IMMEDIATELY!** It is extremely important that we know when you last had the tool, what

the tool is, where you were working and if you noticed anyone in the area the time you last had the tool.

- **YOU ARE RESPONSIBLE FOR YOUR TOOLS. IN THE EVENT OF A LOST TOOL, YOU ARE RESPONSIBLE FOR LOCATING AND FINDING THE TOOL.**

## **11. CONTRACTORS AND CONSTRUCTION VEHICLES**

- You may park your vehicle(s) in the visitors parking area, but ensure all doors and windows are locked. In the event you require your vehicle inside the institution for the transportation of tools and/or materials, your vehicle(s) is subject to a search by the officer at the Principle Entrance.
- The driver of the vehicle and the passenger are required to step out of the vehicle before being let in or out of the institutional grounds.
- The driver of the vehicle will shut-off the vehicles motor and open all doors, hood and trunk of the vehicle.
- The driver will be required to sign the Vehicle Registration log book at the Principle Entrance.

**ONCE YOUR VEHICLE(S) IS INSIDE THE INSTITUTION, REMOVE THE KEYS, HAVE ALL WINDOWS TURNED UP AND LOCK ALL DOORS. TOOL CRIBS WILL BE LOCKED AND ALL LOOSE ITEMS WILL BE SECURED ESPECIALLY THOSE ITEMS IN AN OPEN BOX TRUCK.**

- **Vehicle entry into the institution is on a "NEED ONLY" basis and not to be confused with convenience.** We do not encourage vehicles to be left inside the institution for any reason, therefore it is strongly recommended that if you must bring your vehicle into the institutional grounds that you do so with the intent that your vehicle will be brought out immediately.

**ALL VEHICLES COMING ONTO THE PROPERTY BEYOND THE PERIMETER GATES MUST HAVE LOCKING GAS CAPS.**

**12. DELIVERIES TO SITE OR FOR THE CONTRACTORS**

- No deliveries will be accepted by the Officer at the Principle Entrance. If deliveries are expected, it is advisable to notify the Officer(s) at the principle Entrance as to when and where any deliveries are to be made and whom to contact upon their arrival.
- Deliveries to departmental areas rather than job sites should be arranged through the appropriate departmental heads, as some departments will not accept deliveries between 1100 - 1300 hours.
- Vehicles must be out of the Institution by 1600 hours unless prior approval has been given to allow it to remain inside.

**13. KEY TAGS**

- One person out of the group of contractors is issued a set (2) of key tags which allow them to issue keys from key safes within the Institution. Only the person who is issued to the key tag is allowed to use this key tag. No one else can issue any keys using this key tag.
- If there is a time that the person who the key tags are issued to can not be here for the day, that said person can authorize one other person to issue the keys for that day. The said person shall notify the Security Maintenance Officer who the authorized person is.

**14. KEY CONTROL**

**A) THE GENERAL CONTRACTOR SHALL MAINTAIN CONTROL OF ALL NEW KEYS AS FOLLOWS:**

- I. **Upon receipt of keys from the Security hardware supplier / installer:**

- a) Provide a receipt to the security hardware supplier, listing all keys and quantity of each key code.
- b) Provide a copy of the receipt to the appropriate CSC representative at the site.
- c) Procure and install a locked metal cupboard adequately equipped with sufficient key hooks to receive and accommodate one of each key be key code.
- d) Store two (2) spare sets of all keys in bonded storage with access limited to one person in the employ of the general contractor and one person in the employ of CSC. Access to bonded storage shall be joint, i.e., one party cannot gain access to the storage without the presence of the other party.
- e) Supply proof to CSC that keys have been put in bonded storage such as a bank safety deposit vault or equal.
- f) Appoint one of his employees to be Key Control Officer responsible for the issue and receipt of keys.
- g) Issue instructions to all employees and sub-trades as necessary to ensure safe custody of the operational set of keys.

## **II. Upon putting Operational Keys into use:**

- a) Issue instructions to the company Key Control Officer to ensure that keys are issued to responsible personnel only and that keys are returned to the Key Control Officer when they are no longer required for the days work.
- b) Issue instructions that all keys are to be turned in at the end of each days work. Not keys are to be retained by any employee for any period longer than that for which the key is required.
- c) Institute a system whereby the issue and receipt of all keys is recorded showing the date, time key code number, whom issued to ,

including the name of the recipient and the employer. The time of return should be signed in by the Key Control Officer and witnessed by the CSC site representative at the end of each working day.

- d) **REPORT IN WRITING** any untoward circumstances such as loss, disfigurement, misuse, or mishandling, etc., to the Security Hardware Supplier, identifying key code and/or number so that appropriate action may be taken to effect replacement or abandonment of that particular code as circumstances may warrant.
- e) Send a copy of each report to the CSC site representative.

## **B) UPON COMPLETION OF THE CONTRACT AND TAKE-OVER OF THE BUILDING:**

- a) Provide a list of all keys by number and/or key code, with space for the signatures of recipients (both PWC representative(s) and CSC representative) and the date of receipt by the CSC representative.
- b) Provide certification to Public Works Canada that all reasonable caution and care has been exercised in accordance with these instructions and include a copy for CSC.

## **15. TELEPHONES**

- Obtain approval of telephone installation from the Institutional Head. Locate telephones to be inaccessible to inmates.
- Cell phones are not allowed in the institution. However, in special cases cell phones may be approved for entry into the Institution only by the Institutional Head. The cell phone will have to signed in and out daily with the number given to the Visitor Security Officer.

## 16. REMINDERS

- If you have any questions or concerns contact the Correctional Supervisor at 975-5402
- **BE PATIENT --** Expect that it takes some time to be processed. Our key objective is first and foremost for the **SECURITY** of the Institution and everyone in it.
- **Watch your wallets/currency/keys and /or ID** There are lockers available at the Principle Entrance if you would like to lock your wallets, keys or ID for the day.
- Ensure that all Federal and Provincial safety precautions are followed. Appropriate dress and protective clothing. Ensure use of all Personal Protective Equipment.
- **Maintenance Contact Numbers.** If no one is available to take your call, please leave a message.
  - Maintenance Supervisor - 975 - 5633**
  - Building Maintenance - 975 - 5383**
  - Grounds Maintenance - 975 - 4856**
  - Environmental - 975 - 4856**
  - Mechanic - 975 - 5525**
  - Department fax - 975 - 6493**

I, \_\_\_\_\_, have read the Regional Psychiatric Centre "**Contractor's Security Briefing Form**" and understand the requirements made out to myself and my employees and / or contractors.

\_\_\_\_\_  
(Signature of Contractor )

\_\_\_\_\_  
(Date)

Names and signatures of employees who have been informed and read this document.

Name	Signature

## **Annex A**

### **Summary Conviction Offences**

#### **Summary Conviction Offences:**

**45.** Every person commits a summary conviction offence who:

- (a) is in possession of contraband beyond the visitor control point in a penitentiary;
- (b) Is in possession of anything referred to in paragraph (b) or (c) of the definition "contraband" in section 2 before the visitor control point at a penitentiary;
- (c) Delivers contraband to, or receives contraband from, an inmate;
- (d) Without prior authorization, delivers jewellery to, or receives jewellery from, an inmate; or
- (e) Trespasses at a penitentiary.



## Annex B

### **"Contraband" is stated as:**

- (a) an intoxicant,
- (b) a weapon or a component thereof, ammunition for a weapon, and anything that is designed to kill, injure, or disable a person or that is altered so as to be capable of killing, injuring, or disabling a person, when possessed without prior authorization.
- (c) an explosive or a bomb or a component thereof,
- (d) currency over any applicable prescribed limit, when possessed without prior authorization, and
- (e) any item not described in paragraphs (a) to (d) that could jeopardise the security of a penitentiary or the safety of persons, when that item is possessed without prior authorization.

**Part 1            General**

**1.1                REFERENCES**

- .1        Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2        Province of Saskatchewan
  - .1        Occupational Health and Safety Act 1996, updated 2014.

**1.2                SAFETY PLAN**

- .1        Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2        Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

**1.3                RESPONSIBILITY**

- .1        The "Prime Contractor" according applicable local jurisdiction, is responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2        Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

**1.4                SUBMITTALS**

- .1        Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Submit site-specific Health and Safety Plan within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
  - .1        Results of site-specific safety hazard assessment.
  - .2        Results of safety and health risk or hazard analysis for site tasks and operation.
- .3        Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports weekly to Departmental Representative.
- .4        Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5        Submit copies of incident and accident reports.
- .6        Submit WHMIS MSDS - Material Safety Data Sheets.

- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 10 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 5 days after receipt of comments from Departmental Representative.
- .8 Departmental Representative review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .9 Medical Surveillance: Where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
- .10 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

## **1.5 FILING OF NOTICE**

- .1 If required by authority having jurisdiction, file Notice of Project with Provincial authorities prior to beginning of Work.

## **1.6 SAFETY ASSESSMENT**

- .1 Perform site-specific safety hazard assessment related to project.

## **1.7 MEETINGS**

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

## **1.8 REGULATORY REQUIREMENTS**

- .1 Perform Work in accordance with Section 01 41 00 - Regulatory Requirements.

## **1.9 COMPLIANCE REQUIREMENTS**

- .1 Comply with Saskatchewan Occupational Health and Safety Regulations.
- .2 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

## **1.10 UNFORESEEN HAZARDS**

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, advise Health and Safety co-ordinator, follow procedures in accordance with Acts and Regulations of Province having jurisdiction, and advise Departmental Representative verbally and in writing.

## **1.11 HEALTH AND SAFETY CO-ORDINATOR**

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:

- .1 Have working knowledge of occupational safety and health regulations.
- .2 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
- .3 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
- .4 Be on site during execution of Work.

**1.12 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Departmental Representative.

**1.13 CORRECTION OF NON-COMPLIANCE**

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

**1.14 BLASTING**

- .1 Blasting or other use of explosives is not permitted.

**1.15 POWDER ACTUATED DEVICES**

- .1 Use powder actuated devices only after receipt of written permission from Departmental Representative.

**1.16 WORK STOPPAGE**

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

**1.17 FIRE PROTECTION**

- .1 Comply with requirements of the local Fire Commissioner's Office.
- .2 Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.
- .3 Burning rubbish and construction waste materials is not permitted on site.
- .4 Maintain placed or installed firestopping to protect the portions of the Work during construction.

**Part 2 Products**

Not used.

**Part 3**            **Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1                REFERENCES AND CODES**

- .1        Perform Work in accordance with 2015 National Building Code of Canada (NBC) including amendments up to tender closing date, and other codes of provincial or local application; in case of conflict or discrepancy, more stringent requirements apply. The following governing standards are also to apply.
  - .1        Canadian Electrical Code, 2015.
  - .2        National Plumbing Code of Canada, 2015.
  - .3        National Fire Code of Canada, 2015.
- .2        Meet or exceed requirements of:
  - .1        Contract documents.
  - .2        Specified standards, codes and referenced documents.

**1.2                HAZARDOUS MATERIAL DISCOVERY**

- .1        Asbestos: Demolition of spray or trowel-applied asbestos is hazardous to health. Stop work immediately when material resembling spray or trowel-applied asbestos is encountered during demolition work. Notify Departmental Representative.
- .2        PCB: Polychlorinated Biphenyl: Stop work immediately when material resembling Polychlorinated Biphenyl is encountered during demolition work. Notify Departmental Representative.
- .3        Mould: Stop work immediately when material resembling mould is encountered during demolition work. Notify Departmental Representative.

**1.3                BUILDING SMOKING ENVIRONMENT**

- .1        Comply with smoking restrictions and municipal by-laws.

**Part 2            Products**

Not used.

**Part 3            Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1            INSPECTION**

- .1 Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work wherever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections, or approvals whether by Departmental Representative instructions, or by law of Place of Work.
- .3 If Contractor covers, or permits to be covered, Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination, such work is found not in accordance with Contract Documents, correct Work and pay cost of examination and correction. If Work is found in accordance with Contract Documents, cost of examination and replacement will be borne by Departmental Representative.

**1.2            INDEPENDENT INSPECTION AGENCIES**

- .1 Independent Inspection/Testing Agencies may be engaged by Departmental Representative for purpose of inspecting and testing portions of Work. Cost of such services will be borne by Departmental Representative.
- .2 Provide equipment required for executing inspection and testing by appointed agencies.
- .3 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .4 If defects are revealed during inspection and testing, appointed agency will request additional inspection and testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to Departmental Representative. Pay costs for retesting and re-inspection.

**1.3            ACCESS TO WORK**

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

**1.4            PROCEDURES**

- .1 Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.

- .2 Submit samples or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

#### **1.5 REJECTED WORK**

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If, in opinion of Departmental Representative, it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

#### **1.6 REPORTS**

- .1 Submit three hard copies and one electronic copy of inspection and test reports to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested and manufacturer or fabricator of material being inspected or tested.

#### **1.7 TESTS AND MIX DESIGNS**

- .1 Furnish test results and mix designs as requested.
- .2 Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by Departmental Representative and may be authorized as recoverable.

#### **1.8 MOCK-UPS**

- .1 Prepare mock-ups for Work specifically requested in specifications. Include for Work of Sections required to provide mock-ups.
- .2 Construct in locations acceptable to Departmental Representative.
- .3 Prepare mock-ups for Departmental Representative's review with reasonable promptness and in orderly sequence, to not cause delays in Work.
- .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for extension of Contract Time, and no claim for extension by reason of such default will be allowed.
- .5 If requested, Departmental Representative will assist in preparing schedule-fixing dates for preparation.



- .6 Specification section identifies whether mock-up may remain as part of Work or if it is to be removed and when.

**1.9 MILL TESTS**

- .1 Submit mill test certificates as requested.

**1.10 EQUIPMENT AND SYSTEMS**

- .1 Submit adjustment and balancing reports for mechanical, electrical, and building equipment systems.
- .2 Refer to Section 01 91 31 – Commissioning Plan for definitive requirements.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1                REFERENCES**

- .1 Canadian Standards Association (CSA)
  - .1 CAN/CSA S269.2-M87 (R2003), Access Scaffolding for Construction Purposes.

**1.2                SUBMITTALS**

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

**1.3                INSTALLATION AND REMOVAL**

- .1 Prepare site plan indicating proposed location and dimensions of area to be fenced and used by Contractor, avenues of ingress/egress to fenced area and details of fence installation.
- .2 Indicate use of supplemental or other staging area.
- .3 Provide construction facilities in order to execute work expeditiously.
- .4 Remove from site all such work after use.

**1.4                SCAFFOLDING**

- .1 Scaffolding in accordance with CSA S269.2.
- .2 Provide and maintain scaffolding, ramps, ladders, swing staging, platforms, temporary stairs.

**1.5                HOISTING**

- .1 Provide, operate and maintain hoists required for moving of workers, materials and equipment. Make financial arrangements with Subcontractors for their use of hoists.
- .2 Hoists to be operated by qualified operator.

**1.6                SITE STORAGE/LOADING**

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.

**1.7                CONSTRUCTION PARKING**

- .1 Parking will be permitted on site provided it does not disrupt performance of Work.

**1.8 SANITARY FACILITIES**

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

**1.9 CLEAN-UP**

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.

**Part 2 Products**  
Not used.

**Part 3 Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1                INSTALLATION AND REMOVAL**

- .1        Provide temporary controls in order to execute Work expeditiously.
- .2        Remove from site all such work after use.

**1.2                HOARDING**

- .1        Erect temporary site enclosure (hoarding) using 38 x 89 mm (1-1/2 x 3-1/2 inch) construction grade lumber framing at 600 mm (24 inches) on centre, and 1200 x 2400 mm (48 x 96 inch) size, 13 mm (1/2 inch) thick exterior grade fir plywood.
- .2        Apply plywood panels vertically flush and butt jointed.

**1.3                GUARD RAILS AND BARRICADES**

- .1        Provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs.
- .2        Provide as required by governing authorities.

**1.4                WEATHER ENCLOSURES**

- .1        Provide weather tight closures to unfinished door and window openings, tops of shafts and other openings in floors and roofs until they are permanently enclosed.
- .2        Erect enclosures to allow access for the installation of materials and to allow for work inside enclosure.
- .3        Close off floor areas where walls are not finished; seal off other openings; enclose building interior work for temporary heat.
- .4        Design enclosures to withstand wind pressure and snow loading.
- .5        Ensure that upon final construction, and during construction, the work is executed to prevent the entry of water, snow, and air infiltration into the interior of the building and to accept the responsibility to correct any deficient work. Bring to the attention of the Consultant prior to construction any detail that may compromise weather tightness.
- .6        Provide weather enclosures or other means as necessary to protect foundation excavations to maintain soil bearing capacity.

**1.5                DUST TIGHT SCREENS**

- .1        Provide dust tight screens or insulated partitions to localize dust-generating activities, and for protection of workers, finished areas of Work and facility staff and patients.
- .2        Maintain and relocate protection until such work is complete.

- .3 Coordinate location and security measures with Departmental Representative on Site.

## **1.6 ACCESS TO SITE**

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.

## **1.7 PUBLIC TRAFFIC FLOW**

- .1 Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect public.

## **1.8 FIRE ROUTES**

- .1 Maintain access to property including overhead clearances for use by emergency response vehicles.

## **1.9 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY**

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

## **1.10 PROTECTION OF BUILDING FINISHES**

- .1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.
- .2 Provide necessary screens, covers, and hoardings.
- .3 Confirm locations and installation schedule with Departmental Representative, minimum 3 days prior to installation.
- .4 Be responsible for damage incurred due to lack of or improper protection.

## **1.11 WASTE MANAGEMENT AND DISPOSAL**

- .1 Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

## **Part 2 Products**

Not used.

## **Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1        General**

**1.1        REFERENCES**

- .1        Within text of each specifications section, reference may be made to reference standards. Conform to these reference standards, in whole or in part as specifically requested in specifications.
- .2        If there is question as to whether products or systems are in conformance with applicable standards, Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
- .3        Cost for such testing will be borne by Departmental Representative in event of conformance with Contract Documents or by Contractor in event of non-conformance.

**1.2        QUALITY OF PRODUCTS**

- .1        Products, materials, equipment, and articles incorporated in Work are to be new, not damaged nor defective, and of best quality for purpose intended. If requested, furnish evidence as to type, source, and quality of products provided.
- .2        Procurement policy is to acquire, in cost effective manner, items containing highest percentage of recycled and recovered materials practicable consistent with maintaining satisfactory levels of competition. Make reasonable efforts to use recycled and recovered materials and in otherwise utilizing recycled and recovered materials in execution of work.
- .3        Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .4        Should disputes arise as to quality or fitness of products, decision rests strictly with Departmental Representative based upon requirements of Contract Documents.
- .5        Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
- .6        Permanent labels, trademarks, and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

**1.3        AVAILABILITY**

- .1        In event of failure to notify Departmental Representative at commencement of Work, and should it subsequently appear that Work may be delayed for such reason, Departmental Representative reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

#### **1.4 STORAGE, HANDLING, AND PROTECTION**

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration, and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Store products subject to damage from weather in weatherproof enclosures.
- .4 Store cementitious products clear of earth or concrete floors, and away from walls.
- .5 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet materials and lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .8 Remove and replace damaged products at own expense and to satisfaction of Departmental Representative.
- .9 Touch-up damaged factory finished surfaces to Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over nameplates.

#### **1.5 TRANSPORTATION**

- .1 Pay costs of transportation of products required in performance of Work.
- .2 Transportation cost of products supplied by Departmental Representative will be paid by Departmental Representative. Unload, handle, and store such products.

#### **1.6 MANUFACTURER'S INSTRUCTIONS**

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Departmental Representative in writing, of conflicts between specifications and manufacturer's instructions, so that Departmental Representative will establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Departmental Representative to require removal and re-installation at no increase in Contract Price or Contract Time.

**1.7 QUALITY OF WORK**

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Departmental Representative if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Departmental Representative reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Departmental Representative, whose decision is final.

**1.8 CO-ORDINATION**

- .1 Ensure co-operation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

**1.9 CONCEALMENT**

- .1 In finished areas conceal pipes, ducts, and wiring in floors, walls and ceilings, except where indicated otherwise.
- .2 Before installation inform Departmental Representative if there is interference. Install as directed by Departmental Representative.

**1.10 REMEDIAL WORK**

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Co-ordinate adjacent affected Work as required. Perform in a manner to neither damage nor put at risk any portion of Work.
- .2 For remedial work, employ specialists familiar with materials affected.

**1.11 LOCATION OF FIXTURES**

- .1 Consider location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Inform Departmental Representative of conflicting installation. Install as directed.

**1.12 FASTENINGS**

- .1 Provide metal fastenings and accessories in same texture, colour, and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use non-corrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in affected specification Section.



- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood or other organic material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly, and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

**1.13 FASTENINGS - EQUIPMENT**

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.
- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

**1.14 PROTECTION OF WORK IN PROGRESS**

- .1 Prevent overloading of parts of building. Do not cut, drill or sleeve load bearing structural member, unless specifically indicated without written approval of Departmental Representative.

**1.15 EXISTING UTILITIES**

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, building occupants, and pedestrian and vehicular traffic.
- .2 Protect, relocate, or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1                EXISTING SERVICES**

- .1        Before commencing work, establish location and extent of service lines in area of Work and notify Departmental Representative of findings.
- .2        Remove abandoned service lines within 2 m of structures. Cap or otherwise seal lines at cut-off points as directed by Departmental Representative.

**1.2                LOCATION OF EQUIPMENT AND FIXTURES**

- .1        Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
- .2        Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3        Inform Departmental Representative of impending installation and obtain approval for actual location.
- .4        Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

**Part 2            Products**  
Not used.

**Part 3            Execution**  
Not used.

**END OF SECTION**

**Part 1        General**

**1.1        SUBMITTALS**

- .1        Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Submit written request in advance of cutting or alteration which affects:
  - .1        Structural integrity of elements of project.
  - .2        Integrity of weather-exposed or moisture-resistant elements.
  - .3        Efficiency, maintenance, or safety of operational elements.
  - .4        Visual qualities of sight-exposed elements.
  - .5        Work of separate contractor.
- .3        Include in request:
  - .1        Identification of project.
  - .2        Location and description of affected Work.
  - .3        Statement on necessity for cutting or alteration.
  - .4        Description of proposed Work, and products to be used.
  - .5        Alternatives to cutting and patching.
  - .6        Effect on Work of separate contractor.
  - .7        Written permission of affected separate contractor.
  - .8        Date and time work will be executed.

**1.2        MATERIALS**

- .1        As required for original installation.
- .2        Change in Materials: Submit request for substitution in accordance with Section 01 33 00 - Submittal Procedures.

**1.3        PREPARATION**

- .1        Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2        After uncovering, inspect conditions affecting performance of Work.
- .3        Beginning of cutting or patching means acceptance of existing conditions.
- .4        Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
- .5        Provide protection from elements for areas that are to be exposed by uncovering work; maintain excavations free of water.

**1.4        EXECUTION**

- .1        Execute cutting, fitting, and patching to complete Work.
- .2        Fit parts together, to integrate with other Work.

- .3 Uncover Work to install ill-timed Work.
- .4 Remove and replace defective and non-conforming Work.
- .5 Remove samples of installed Work for testing when requested.
- .6 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .7 Execute Work by methods to avoid damage to other Work, and that will provide proper surfaces to receive patching and finishing.
- .8 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed on masonry work without prior approval.
- .9 Restore work with new products in accordance with requirements of Contract Documents.
- .10 Fit Work to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .11 At penetration of fire rated wall, ceiling, or floor construction, completely seal voids with firestopping material in accordance with Section 07 84 00 – Firestopping, full thickness of the construction element.
- .12 Refinish surfaces to match adjacent finishes: Refinish continuous surfaces to nearest intersection. Refinish assemblies by refinishing entire unit.
- .13 Conceal pipes, ducts, and wiring in floor, wall, and ceiling construction of finished areas except where indicated otherwise.

**1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**Part 2 Products**  
Not used.

**Part 3 Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1            PROJECT CLEANLINESS**

- .1      Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by facility staff, patients, or other Contractors.
- .2      Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site, unless approved by Departmental Representative.
- .3      Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4      Provide on-site containers for collection of waste materials and debris.
- .5      Provide and use marked separate bins for recycling. Refer to Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .6      Dispose of waste materials and debris off site.
- .7      Clean interior areas prior to start of finishing work, and maintain areas free of dust and other contaminants during finishing operations.
- .8      Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .9      Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .10     Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .11     Schedule cleaning operations so that resulting dust, debris, and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

**1.2            FINAL CLEANING**

- .1      When Work is Substantially Performed, remove surplus products, tools, construction machinery, and equipment not required for performance of remaining Work.
- .2      Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3      Prior to final review remove surplus products, tools, construction machinery, and equipment.
- .4      Remove waste products and debris except that caused by facility staff, patients, or other contractors.
- .5      Remove waste materials from site at regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.

- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Clean and polish glass, mirrors, hardware, wall tile, stainless steel, chrome, porcelain enamel, baked enamel, plastic laminate, and mechanical and electrical fixtures. Replace broken, scratched or disfigured glass.
- .8 Remove stains, spots, marks and dirt from decorative work, electrical and mechanical fixtures, furniture fitments, walls, and floors.
- .9 Clean lighting reflectors, lenses, and other lighting surfaces.
- .10 Vacuum clean and dust building interiors, behind grilles, louvres, and screens.
- .11 Wax, seal, shampoo or prepare floor finishes, as recommended by manufacturer.
- .12 Inspect finishes, fitments, and equipment and ensure specified workmanship and operation.
- .13 Broom clean and wash exterior walks, steps and surfaces.
- .14 Remove dirt and other disfiguration from exterior surfaces.
- .15 Sweep and wash clean paved areas.
- .16 Clean equipment and fixtures to sanitary condition; clean or replace filters of mechanical equipment.
- .17 Remove debris and surplus materials from crawl areas and other accessible concealed spaces.

**1.3 WASTE MANAGEMENT AND DISPOSAL**

- .1 Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1                WASTE MANAGEMENT GOALS**

- .1      Prior to start of Work, conduct meeting with Departmental Representative to review and discuss PSPC's Waste Management Plan and Goals.
- .2      Accomplish maximum control of solid construction waste.
- .3      Preserve environment and prevent pollution and environment damage.

**1.2                DEFINITIONS**

- .1      Class III: Non-hazardous waste - construction renovation and demolition waste.
- .2      Cost/Revenue Analysis Workplan (CRAW): Based on information from WRW, and intended as financial tracking tool for determining economic status of waste management practices.
- .3      Demolition Waste Audit (DWA): Relates to actual waste generated from project.
- .4      Inert Fill: Inert waste - exclusively asphalt and concrete.
- .5      Materials Source Separation Program (MSSP): Consists of series of ongoing activities to separate reusable and recyclable waste material into material categories from other types of waste at point of generation.
- .6      Recyclable: Ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .7      Recycle: Process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .8      Recycling: Process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- .9      Reuse: Repeated use of product in same form but not necessarily for same purpose. Reuse includes:
  - .1      Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
  - .2      Returning reusable items including pallets or unused products to vendors.
- .10     Salvage: Removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .11     Separate Condition: Refers to waste sorted into individual types.
- .12     Source Separation: Acts of keeping different types of waste materials separate beginning from first time they became waste.
- .13     Waste Audit (WA): Detailed inventory of materials in building. Involves quantifying by volume/weight amounts of materials and wastes generated during

construction, demolition, deconstruction, or renovation project. Indicates quantities of reuse, recycling and landfill. Refer to Schedule A.

- .14 Waste Management Co-ordinator (WMC): Contractor representative responsible for supervising waste management activities as well as coordinating related, required submittal and reporting requirements.
- .15 Waste Reduction Workplan (WRW): Written report that addresses opportunities for reduction, reuse, or recycling of materials. Refer to Schedule B. WRW is based on information acquired from WA (Schedule A).

### **1.3 DOCUMENTS**

- .1 Maintain at job site, one copy of following documents:
  - .1 Waste Audit.
  - .2 Waste Reduction Workplan.
  - .3 Material Source Separation Plan.
  - .4 Schedules A, B, C, and D completed for project.

### **1.4 SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Prepare and submit following prior to project start-up:
  - .1 Submit 2 copies of completed Waste Audit (WA): Schedule A.
  - .2 Submit 2 copies of completed Waste Reduction Workplan (WRW): Schedule B.
  - .3 Submit 2 copies of completed Demolition Waste Audit (DWA): Schedule C.
  - .4 Submit 2 copies of Cost/Revenue Analysis Workplan (CRAW): Schedule D.
  - .5 Submit 2 copies of Materials Source Separation Program (MSSP) description.
- .3 Submit before final payment summary of waste materials salvaged for reuse, recycling or disposal by project using deconstruction/disassembly material audit form.
  - .1 Failure to submit could result in hold back of final payment.
  - .2 Provide receipts, scale tickets, waybills, and show quantities and types of materials reused, recycled, co-mingled and separated off-site or disposed.
  - .3 For each material reused, sold or recycled from project, include amount and destination.
  - .4 For each material land filled or incinerated from project, include amount of material and identity of landfill, incinerator, or transfer station.

### **1.5 WASTE AUDIT (WA)**

- .1 Conduct WA prior to project start-up.



- .2 Prepare WA: Schedule A.
- .3 Record, on WA - Schedule A, extent to which materials or products used consist of recycled or reused materials or products.

#### **1.6 WASTE REDUCTION WORKPLAN (WRW)**

- .1 Prepare WRW prior to project start-up.
- .2 WRW should include but not limited to:
  - .1 Destination of materials listed.
  - .2 Deconstruction/disassembly techniques and sequencing.
  - .3 Schedule for deconstruction/disassembly.
  - .4 Location.
  - .5 Security.
  - .6 Protection.
  - .7 Clear labelling of storage areas.
  - .8 Details on materials handling and removal procedures.
  - .9 Quantities for materials to be salvaged for reuse or recycled and materials sent to landfill.
- .3 Structure WRW to prioritize actions and follow 3R's hierarchy, with Reduction as first priority, followed by Reuse, then Recycle.
- .4 Describe management of waste.
- .5 Identify opportunities for reduction, reuse, and recycling of materials based on information acquired from WA.
- .6 Post WRW or summary where workers at site are able to review content.
- .7 Set realistic goals for waste reduction, recognize existing barriers and develop strategies to overcome these barriers.
- .8 Monitor and report on waste reduction by documenting total volume and cost of actual waste removed from project.

#### **1.7 DEMOLITION WASTE AUDIT (DWA)**

- .1 Prepare DWA prior to project start-up.
- .2 Complete DWA: Schedule C.
- .3 Provide inventory of quantities of materials to be salvaged for reuse, recycling, or disposal.

#### **1.8 COST/REVENUE ANALYSIS WORKPLAN (CRAW)**

- .1 Prepare CRAW: Schedule D.

#### **1.9 MATERIALS SOURCE SEPARATION PROGRAM (MSSP)**

- .1 Prepare MSSP and have ready for use prior to project start-up.

- .2 Implement MSSP for waste generated on project in compliance with approved methods and as reviewed by Departmental Representative.
- .3 Provide on-site facilities for collection, handling, and storage of anticipated quantities of reusable and recyclable materials.
- .4 Provide containers to deposit reusable and recyclable materials.
- .5 Locate containers in locations, to facilitate deposit of materials without hindering daily operations.
- .6 Locate separated materials in areas that minimize material damage.
- .7 Collect, handle, store on-site, and transport off-site, salvaged materials in separate condition.
  - .1 Transport to approved and authorized recycling facility.
- .8 Collect, handle, store on-site, and transport off-site, salvaged materials in combined condition.
  - .1 Ship materials to site operating under Certificate of Approval.
  - .2 Materials must be immediately separated into required categories for reuse or recycling.

#### **1.10 STORAGE, HANDLING AND PROTECTION**

- .1 Store, materials to be reused, recycled, and salvaged in locations as directed by Departmental Representative.
- .2 Unless specified otherwise, materials for removal become Contractor's property.
- .3 Protect, stockpile, store and catalogue salvaged items.
- .4 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .5 Protect structural components not removed for demolition from movement or damage.
- .6 Support affected structures. If safety of building is endangered, cease operations and immediately notify Departmental Representative.
- .7 Protect surface drainage, mechanical and electrical from damage and blockage.
- .8 Separate and store materials produced during dismantling of structures in designated areas.
- .9 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.
  - .1 On-site source separation is recommended.
  - .2 Remove co-mingled materials to off-site processing facility for separation.
  - .3 Provide waybills for separated materials.

**1.11 DISPOSAL OF WASTES**

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste, volatile materials, mineral spirits, oil, paint thinner into waterways, storm, or sanitary sewers.
- .3 Keep records of construction waste including:
  - .1 Number and size of bins.
  - .2 Waste type of each bin.
  - .3 Total tonnage generated.
  - .4 Tonnage reused or recycled.
  - .5 Reused or recycled waste destination.
- .4 Remove materials from deconstruction as deconstruction/disassembly Work progresses.
- .5 Prepare project summary to verify destination and quantities on a material-by-material basis as identified in pre-demolition material audit.

**1.12 USE OF SITE AND FACILITIES**

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Provide temporary security measures approved by Departmental Representative.

**1.13 SCHEDULING**

- .1 Co-ordinate Work with other activities at site to ensure timely and orderly progress of Work.

**Part 2 Products**

Not used.

**Part 3 Execution**

**3.1 APPLICATION**

- .1 Perform Work in compliance with WRW.
- .2 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

**3.2 CLEANING**

- .1 Remove tools and waste materials on completion of Work, and leave work area in clean and orderly condition.
- .2 Clean-up work area as work progresses.
- .3 Source separate materials to be reused/recycled into specified sort areas.

### 3.3 DIVERSION OF MATERIALS

- .1 From following list, separate materials from general waste stream and stockpile in separate piles or containers, as reviewed by Departmental Representative, and consistent with applicable fire regulations.
  - .1 Mark containers or stockpile areas.
  - .2 Provide instruction on disposal practices.
- .2 On-site sale of salvaged, recovered, reusable, and recyclable material is not permitted.
- .3 Demolition Waste:

Material Type	Recommended Diversion %	Actual Diversion %
Acoustic Tile	50	
Acoustical Insulation	100	
Carpet	100	
Demountable Partitions	80	
Doors and Frames	100	
Electrical Equipment	80	
Furnishings	80	
Mechanical Equipment	100	
Metals	100	
Rubble	100	
Wood (uncontaminated)	100	
Other		

- .4 Construction Waste:

Material Type	Recommended Diversion %	Actual Diversion %
Cardboard	100	
Plastic Packaging	100	
Rubble	100	
Steel	100	
Wood (uncontaminated)	100	
Other		

### 3.4 WASTE AUDIT (WA)

#### .1 Schedule A - Waste Audit (WA):

(1) Material Category	(2) Material Quantity Unit	(3) Estimated Waste %	(4) Total Quantity of Waste (unit)	(5) Generation Point	(6) % Recycled	(7) % Reused
Wood and Plastics						
Off-cuts						
Warped Pallet Forms						
Plastic Packaging						
Cardboard Packaging						
Other						
Doors and Windows Material Description						
Painted Frames						
Glass						
Wood						
Metal						
Other						

### 3.5 WASTE REDUCTION WORKPLAN (WRW)

#### .1 Schedule B:

(1) Material Category	(2) Person(s) Respon- sible	(3) Total Quantity of Waste (unit)	(4) Reused Amount (units) Projected	Actual	(5) Recycled Amount (unit) Projected	Actual	(6) Material(s) Destina- tion
Wood and Plastics Material Description							
Chutes							
Warped Pallet Forms							
Plastic Packaging							
Card- board Packaging							
Other							
Doors and Windows Material Description							
Painted Frames							
Glass							
Wood							
Metal							
Other							

### 3.6 DEMOLITION WASTE AUDIT (DWA)

#### .1 Schedule C - Demolition Waste Audit (DWA):

(1) Material Description	(2) Quantity	(3) Unit	(4) Total	(5) Volume (cumulative)	(6) Weight (cumulative)	(7) Remarks and Assumptions
Wood						
Wood Stud						
Plywood						
Baseboard-Wood						
Door Trim - Wood						
Cabinet						
Doors and Windows						
Panel Regular						
Slab Regular						
Wood Laminate						
Glazing						

### 3.7 COST/REVENUE ANALYSIS WORKPLAN (CRAW)

#### .1 Schedule D - Cost/Revenue Analysis Workplan (CRAW):

(1) Material Description	(2) Total Quantity (unit)	(3) Volume (cumulative)	(4) Weight (cumulative)	(5) Disposal Cost/Credit \$(+/-)	(6) Category Sub-Total \$(+/-)
Wood					
Wood Stud					
Plywood					
Baseboard - Wood					
Door Trim - Wood					
Cabinet					
Doors and Windows					
Panel Regular					
Slab Regular					
Wood Laminate					
Glazing					
		(7) Cost (-) / Revenue (+)			

**END OF SECTION**



**Part 1            General**

**1.1            ADMINISTRATIVE REQUIREMENTS**

- .1 Acceptance of Work Procedures:
  - .1 Contractor's Inspection:
    - .1 Contractor: Conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
    - .2 Notify Departmental Representative, in writing, of satisfactory completion of Contractor's inspection; submit verification that corrections have been made.
    - .3 Request Departmental Representative inspection.
  - .2 Departmental Representative Inspection:
    - .1 Departmental Representative and Contractor to inspect Work and identify defects and deficiencies.
    - .2 Contractor to correct Work as directed.
  - .3 Completion Tasks: Submit written certificates, in English, indicating that tasks have been performed as follows:
    - .1 Work: Completed and inspected for compliance with Contract Documents.
    - .2 Defects: Corrected and deficiencies completed.
    - .3 Equipment and systems: Tested, adjusted, balanced, and fully operational.
    - .4 Certificates required by Boiler Inspection Branch, Fire Commissioner, Utility companies: Submitted.
    - .5 Operation of systems: Demonstrated to designated personnel.
    - .6 Commissioning of mechanical systems: completed in accordance with 01 91 13 - General Commissioning (Cx) Requirements, and final Commissioning Report submitted to Departmental Representative.
    - .7 Work: Complete and ready for final inspection.
  - .4 Final Inspection:
    - .1 When completion tasks are done, request final inspection of Work by Departmental Representative and Contractor.
    - .2 When Work is incomplete according to Departmental Representative, complete outstanding items and request re-inspection.

**1.2            FINAL CLEANING**

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Remove surplus materials, excess materials, rubbish, tools, and equipment.

- .2 Waste Management: Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**Part 2 Products**

Not used.

**Part 3 Execution**

Not used.

**END OF SECTION**

**Part 1        General**

**1.1        ADMINISTRATIVE REQUIREMENTS**

- .1    Pre-warranty Meeting:
  - .1    Convene meeting one week prior to contract completion with Contractor's Representative and Departmental Representative, in accordance with Section 01 31 19 - Project Meetings to:
    - .1    Verify Project requirements.
    - .2    Review warranty requirements.
  - .2    Departmental Representative to establish communication procedures for:
    - .1    Notifying construction warranty defects.
    - .2    Determine priorities for type of defects.
    - .3    Determine reasonable response time.
  - .3    Contact information for bonded and licensed company for warranty work action: provide name, telephone number and address of company authorized for construction warranty work action.
  - .4    Ensure contact is located within local service area of warranted construction, is continuously available, and is responsive to inquiries for warranty work action.

**1.2        SUBMITTALS**

- .1    Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2    Two weeks prior to Substantial Performance of the Work, submit to the Departmental Representative, three print final copies of operating and maintenance manuals in English.
- .3    Provide spare parts, maintenance materials, and special tools of same quality and manufacture as products provided in Work.
- .4    Provide evidence, if requested, for type, source, and quality of products supplied.

**1.3        MECHANICAL AND ELECTRICAL SUBMITTALS**

- .1    For submittals related to Mechanical work, refer to Section 23 05 00.
- .2    For submittals related to Electrical work, refer to Section 26 05 00.

**1.4        FORMAT**

- .1    Organize data as instructional manual.
- .2    Binders: Vinyl, hard covered, 3 'D' ring, loose leaf 219 x 279 mm with spine and face pockets.
- .3    When multiple binders are used, correlate data into related consistent groupings.
  - .1    Identify contents of each binder on spine.

- .4 Cover: Identify each binder with type or printed title 'Project Record Documents'; list title of project and identify subject matter of contents.
- .5 Arrange content by systems, under Section numbers and sequence of Table of Contents.
- .6 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- .7 Text: Manufacturer's printed data, or typewritten data.
- .8 Drawings: Provide with reinforced punched binder tab.
  - .1 Bind in with text; fold larger drawings to size of text pages.
- .9 Provide 1:1 scaled CAD files in .dwg format on CD or DVD.

## **1.5 CONTENTS - PROJECT RECORD DOCUMENTS**

- .1 Table of Contents for Each Volume: provide title of project;
  - .1 Date of submission; names.
  - .2 Addresses, and telephone numbers of Consultant and Contractor with name of responsible parties.
  - .3 Schedule of products and systems, indexed to content of volume.
- .2 For each product or system:
  - .1 List names, addresses, and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product Data: Mark each sheet to identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: As required to supplement product data.
  - .1 Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 45 00 - Quality Control.
- .6 Training: Refer to Section 01 79 00 - Demonstration and Training.

## **1.6 AS-BUILT DOCUMENTS AND SAMPLES**

- .1 Maintain, in addition to requirements in General Conditions, at site for Departmental Representative one record copy of:
  - .1 Contract Drawings.
  - .2 Specifications.
  - .3 Addenda.
  - .4 Change Orders and other modifications to Contract.
  - .5 Reviewed shop drawings, product data, and samples.
  - .6 Field test records.

- .7 Inspection certificates.
- .8 Manufacturer's certificates.
- .2 Store as-built documents and samples in field office apart from documents used for construction.
  - .1 Provide files, racks, and secure storage.
- .3 Label as-built documents and file in accordance with Section number listings in List of Contents of this Project Manual.
  - .1 Label each document "AS-BUILT DOCUMENTS" in neat, large, printed letters.
- .4 Maintain as-built documents in clean, dry and legible condition.
  - .1 Do not use as-built documents for construction purposes.
- .5 Keep as-built documents and samples available for inspection by Departmental Representative.
- .6 Record as-built information on drawings and in designated copy of Project Manual provided by Departmental Representative.
- .7 Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
- .8 Maintain information during construction on project site drawings and accurately record deviations of newly installed or existing works from Contract documents.
- .9 Use red felt tip marking pens for recording information.
- .10 Mark on one set of prints and at completion of project and prior to final inspection; neatly transfer notations to second set.
- .11 Ensure but do not limit recording of following information on as-built drawings:
  - .1 Locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of structure.
  - .2 Changes made by Change Order.
  - .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
  - .4 Field changes of dimension and detail.
  - .5 Details not on original Contract Drawings.
  - .6 References to related shop drawings and modifications.
- .12 Incorporate as-built information into CAD drawings.
- .13 Submit as-built drawings to Departmental Representative.
  - .1 Provide in electronic form as CAD .dwg format, on CD or DVD.
- .14 Specifications: Mark each item to record actual construction, including:
  - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
  - .2 Changes made by Addenda and change orders.

## **1.7 RECORD DOCUMENTS**

- .1 Prior to Substantial Performance of the Work, provide on CD or DVD the marked-up information from the as-built documents to a master set of drawing files provided by the Departmental Representative:
- .2 Mark revised documents as "RECORD DOCUMENTS". Include all revisions.
- .3 Indicate changes on the electronic set of record drawings. Provide updated record drawings in .dwg format.
- .4 Submit completed record documents to Departmental Representative on CD or DVD.

## **1.8 EQUIPMENT AND SYSTEMS**

- .1 For each item of equipment and each system include description of unit or system, and component parts.
  - .1 Give function, normal operation characteristics and limiting conditions.
  - .2 Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- .2 Panel board circuit directories: provide electrical service characteristics, controls, and communications.
- .3 Include installed colour coded wiring diagrams.
- .4 Operating Procedures: include start-up, break-in, and routine normal operating instructions and sequences.
  - .1 Include regulation, control, stopping, shut-down, and emergency instructions.
  - .2 Include summer, winter, and any special operating instructions.
- .5 Maintenance Requirements: Include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- .6 Provide servicing and lubrication schedule, and list of lubricants required.
- .7 Include manufacturer's printed operation and maintenance instructions.
- .8 Include sequence of operation by controls manufacturer.
- .9 Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- .10 Provide installed control diagrams by controls manufacturer.
- .11 Provide Contractor's co-ordination drawings, with installed colour coded piping diagrams.
- .12 Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- .13 Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.

.14 Include test and balancing reports as specified in Section 01 91 13 - General Commissioning (Cx) Requirements.

.15 Additional requirements: as specified in individual specification sections.

## **1.9 MATERIALS AND FINISHES**

.1 Building products, applied materials, and finishes: Include product data, with catalogue number, size, composition, and colour and texture designations.

.2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

.3 Moisture-protection and weather-exposed products: include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

.4 Additional requirements: as specified in individual specifications sections.

## **1.10 MAINTENANCE MATERIALS**

.1 Spare Parts:

.1 Provide spare parts, in quantities specified in individual specification sections.

.2 Provide items of same manufacture and quality as items in Work.

.3 Deliver to site; place and store.

.4 Receive and catalogue items.

.1 Submit inventory listing to Departmental Representative.

.2 Include approved listings in Maintenance Manual.

.5 Obtain receipt for delivered products and submit prior to final payment.

.2 Extra Stock Materials:

.1 Provide maintenance and extra materials, in quantities specified in individual specification sections.

.2 Provide items of same manufacture and quality as items in Work.

.3 Deliver to site; place and store.

.4 Receive and catalogue items.

.1 Submit inventory listing to Departmental Representative.

.2 Include approved listings in Maintenance Manual.

.5 Obtain receipt for delivered products and submit prior to final payment.

.3 Special Tools:

.1 Provide special tools, in quantities specified in individual specification section.

.2 Provide items with tags identifying their associated function and equipment.

.3 Deliver to site; place and store.

- .4 Receive and catalogue items.
  - .1 Submit inventory listing to Departmental Representative.
  - .2 Include approved listings in Maintenance Manual.

#### **1.11 DELIVERY, STORAGE, AND HANDLING**

- .1 Store spare parts, maintenance materials, and special tools in manner to prevent damage or deterioration.
- .2 Store in original and undamaged condition with manufacturer's seal and labels intact.
- .3 Store components subject to damage from weather in weatherproof enclosures.
- .4 Store paints and freezable materials in a heated and ventilated room.
- .5 Remove and replace damaged products at own expense and for review by Departmental Representative.

#### **1.12 WARRANTIES AND BONDS**

- .1 Develop warranty management plan to contain information relevant to Warranties.
- .2 Submit warranty management plan, 30 days before planned pre-warranty conference, to Departmental Representative approval.
- .3 Warranty management plan to include required actions and documents to assure that Departmental Representative receives warranties to which it is entitled.
- .4 Provide plan in narrative form and contain sufficient detail to make it suitable for use by future maintenance and repair personnel.
- .5 Submit, warranty information made available during construction phase, to Departmental Representative for approval prior to each monthly pay estimate.
- .6 Assemble approved information in binder, submit upon acceptance of work and organize binder as follows:
  - .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
  - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
  - .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten days after completion of applicable item of work.
  - .4 Verify that documents are in proper form, contain full information, and are notarized.
  - .5 Co-execute submittals when required.
  - .6 Retain warranties and bonds until time specified for submittal.
- .7 Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial Performance is determined.



- .8 Conduct joint 4 month and 9 month warranty inspection, measured from time of acceptance, by Departmental Representative.
- .9 Include information contained in warranty management plan as follows:
  - .1 Roles and responsibilities of personnel associated with warranty process, including points of contact and telephone numbers within the organizations of Contractors, subcontractors, manufacturers or suppliers involved.
  - .2 Provide list for each warranted equipment, item, feature of construction or system indicating:
    - .1 Name of item.
    - .2 Model and serial numbers.
    - .3 Location where installed.
    - .4 Name and phone numbers of manufacturers or suppliers.
    - .5 Names, addresses and telephone numbers of sources of spare parts.
    - .6 Warranties and terms of warranty: include one-year overall warranty of construction. Indicate items that have extended warranties and show separate warranty expiration dates.
    - .7 Cross-reference to warranty certificates as applicable.
    - .8 Starting point and duration of warranty period.
    - .9 Summary of maintenance procedures required to continue warranty in force.
    - .10 Cross-Reference to specific pertinent Operation and Maintenance manuals.
    - .11 Organization, names and phone numbers of persons to call for warranty service.
    - .12 Typical response time and repair time expected for various warranted equipment.
  - .3 Contractor's plans for attendance at 4 and 9 month post-construction warranty inspections.
  - .4 Procedure and status of tagging of equipment covered by extended warranties.
  - .5 Post copies of instructions near selected pieces of equipment where operation is critical for warranty and/or safety reasons.
- .10 Respond in timely manner to oral or written notification of required construction warranty repair work.
- .11 Written verification to follow oral instructions.
  - .1 Failure to respond will be cause for the Departmental Representative to proceed with action against Contractor.

**1.13            WARRANTY TAGS**

- .1      Tag, at time of installation, each warranted item. Provide durable, oil and water resistant tag approved by Departmental Representative.
- .2      Attach tags with copper wire and spray with waterproof silicone coating.
- .3      Leave date of acceptance until project is accepted for occupancy.
- .4      Indicate following information on tag:
  - .1      Type of product/material.
  - .2      Model number.
  - .3      Serial number.
  - .4      Contract number.
  - .5      Warranty period.
  - .6      Inspector's signature.
  - .7      Construction Contractor.

**Part 2            Products**  
Not used.

**Part 3            Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1            ADMINISTRATIVE REQUIREMENTS**

- .1    Demonstrate operation and maintenance of equipment and systems to designated personnel two weeks prior to date of substantial performance.
- .2    Departmental Representative: Provide list of personnel to receive instructions, and co-ordinate their attendance at agreed-upon times.
- .3    Preparation:
  - .1    Verify conditions for demonstration and instructions comply with requirements.
  - .2    Verify designated personnel are present.
  - .3    Ensure equipment has been inspected and put into operation in accordance with Section 01 91 13 – General Commissioning (Cx) Requirements.
  - .4    Ensure testing, adjusting, and balancing have been performed in accordance with Section 01 91 13 - General Commissioning (Cx) Requirements and equipment and systems are fully operational.
- .4    Demonstration and Instructions:
  - .1    Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, and maintenance of each item of equipment at agreed-upon times, at the equipment location.
  - .2    Instruct personnel in phases of operation and maintenance using operation and maintenance manuals as basis of instruction.
  - .3    Review contents of manual in detail to explain aspects of operation and maintenance.
  - .4    Prepare and insert additional data in operations and maintenance manuals when needed during instructions.
- .5    Time Allocated for Instructions: Ensure amount of time provided for instruction of each item of equipment or system is adequate for full orientation and training of designated personnel.

**1.2            SUBMITTALS**

- .1    Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2    Submit schedule of time and date for demonstration of each item of equipment and each system two weeks prior to designated dates, for Departmental Representative's approval.
- .3    Submit reports within one week after completion of demonstration, that demonstration and instructions have been satisfactorily completed.
- .4    Give time and date of each demonstration, with list of persons present.

- .5 Provide copies of completed operation and maintenance manuals for use in demonstrations and instructions.

### **1.3 QUALITY ASSURANCE**

- .1 When specified in individual Sections requiring manufacturer to provide authorized representative to demonstrate operation of equipment and systems:
  - .1 Instruct designated personnel.
  - .2 Provide written report that demonstration and instructions have been completed.

**Part 2 Products**  
Not used.

**Part 3 Execution**  
Not used.

**END OF SECTION**

**Part 1            General**

**1.1            Summary**

- .1    Section Includes:
  - .1    General requirements relating to commissioning of project's components and systems, specifying general requirements to FPT of components, equipment, sub-systems, systems, and integrated systems.
- .2    Related Requirements
  - .1    Not Used
- .3    Acronyms:
  - .1    CO2 – Carbon Dioxide
  - .2    CWS – Cold Water System
  - .3    Cx – Commissioning
  - .4    EMCS - Energy Management Control System
  - .5    FPT - Functional Performance Testing
  - .6    HWS – Hot Water System
  - .7    M&D – Maintenance and Data Manual
  - .8    OPT – Optimization
  - .9    PI - Product Information
  - .10   SOM - System Operation Manual

**1.2            General**

- .1    Cx is a planned program of tests, procedures and checks carried out systematically on systems and integrated systems of the finished Project. Cx is performed after systems and integrated systems are completely installed, functional and Contractor's Performance Verification responsibilities have been completed and approved.  
Objectives:
  - .1    Verify installed equipment, systems and integrated systems operate in accordance with contract documents and design criteria and intent.
  - .2    Ensure appropriate documentation is compiled into the SOM.
  - .3    Effectively train M&D staff.
- .2    Contractor assists in Cx process, operating equipment and systems, troubleshooting and making adjustments as required.
  - .1    Systems to be operated at full capacity under various modes to determine if they function correctly and consistently at peak efficiency. Systems to be interactively with each other as intended in accordance with Contract Documents and design criteria.
  - .2    During these checks, adjustments to be made to enhance performance to meet environmental or user requirements.

- .3 Design Criteria: as per client's requirements or determined by designer. To meet Project functional and operational requirements.

### **1.3 Commissioning Overview**

- .1 Section 01 91 31 - Commissioning (Cx) Plan.
- .2 For Cx responsibilities refer to Section 01 91 31 - Commissioning (Cx) Plan.
- .3 Cx to be a line item of Contractor's cost breakdown.
- .4 Cx activities supplement field quality and testing procedures described in relevant technical sections.
- .5 Cx is conducted in concert with activities performed during stage of project delivery. Cx identifies issues in Planning and Design stages which are addressed during Construction and Cx stages to ensure the built facility is constructed and proven to operate satisfactorily under weather, environmental and occupancy conditions to meet functional and operational requirements. Cx activities includes transfer of critical knowledge to facility operational personnel.
- .6 Departmental Representative will issue Interim Acceptance Certificate when:
  - .1 Completed Cx documentation has been received, reviewed for suitability and approved by Departmental Representative.
  - .2 Equipment, components, systems and integrated systems have been fully commissioned and functional as per design intent within the context of the Owner Requirement.
  - .3 Final O&M and training manual receive, review and approve by Departmental Representative for suitability.
  - .4 Completion Training session to Operational and Maintenance staff.

### **1.4 Non-Conformance To Performance Verification Requirements**

- .1 Should equipment, system components, and associated controls be incorrectly installed or malfunction during Cx, correct deficiencies, re-verify equipment and components within the un-functional system, including related systems as deemed required by Departmental Representative to ensure effective performance.
- .2 Costs for corrective work, additional tests, inspections, to determine acceptability and proper performance of such items to be borne by Contractor. Above costs to be in form of progress payment reductions or hold-back assessments.

### **1.5 Pre-Cx Review**

- .1 Before Construction:
  - .1 Review contract documents, confirm by writing to Departmental Representative.
    - .1 Adequacy of provisions for Cx.
    - .2 Aspects of design and installation pertinent to success of Cx.
- .2 During Construction:
  - .1 Co-ordinate provision, location and installation of provisions for Cx.
- .3 Before start of Cx:

- .1 Have completed Cx Plan up-to-date.
- .2 Ensure installation of related components, equipment, sub-systems, systems are complete.
- .3 Fully understand Cx requirements and procedures.
- .4 Have Cx documentation shelf-ready.
- .5 Understand completely design criteria and intent and special features.
- .6 Submit complete start-up documentation to Departmental Representative.
- .7 Have Cx schedules up-to-date.
- .8 Ensure systems have been cleaned thoroughly.
- .9 Complete OPT procedures on systems, submit OPT reports to Departmental Representative for review and approval.
- .10 Ensure "As-Built" system schematics are available.
- .4 Inform Departmental Representative in writing of discrepancies and deficiencies on finished works.

#### **1.6 Conflicts**

- .1 Report conflicts between requirements of this section and other sections to Departmental Representative before start-up and obtain clarification.
- .2 Failure to report conflict and obtain clarification will result in application of most stringent requirement.

#### **1.7 Action And Informational Submittals**

- .1 Submittals: in accordance with Section 01 33 00 - Submittal Procedures.
  - .1 Submit no later than 4 weeks after award of Contract:
    - .1 Name of Contractor's Cx agent.
    - .2 Draft Cx documentation.
    - .3 Preliminary Cx schedule.
  - .2 Request in writing to Departmental Representative for changes to submittals and obtain written approval at least 8 weeks prior to start of Cx.
  - .3 Submit proposed Cx procedures to Departmental Representative where not specified and obtain written approval at least 8 weeks prior to start of Cx.
  - .4 Provide additional documentation relating to Cx process required by Departmental Representative.

#### **1.8 Commissioning Documentation**

- .1 Refer to Section 01 91 33 - Commissioning (Cx) Forms: Installation Check Lists and Product Information (PI) / Functional Performance Testing (FPT) Forms for requirements and instructions for use.
- .2 Departmental Representative to review and approve Cx documentation.
- .3 Provide completed and approved Cx documentation to Departmental Representative.

**1.9 Commissioning Schedule**

- .1 Provide detailed Cx schedule as part of construction schedule in accordance with Section 01 32 16 - Construction Progress Schedules - Bar (GANTT) Chart.
- .2 Provide adequate time for Cx activities prescribed in technical sections and commissioning sections including:
  - .1 Approval of Cx reports.
  - .2 Verification of reported results.
  - .3 Repairs, retesting, re-commissioning, re-verification.
  - .4 Training.

**1.10 Commissioning Meetings**

- .1 Convene Cx meetings following project meetings: Section 01 32 16 - Construction Progress Schedules - Bar (GANTT) Chart and as specified herein.
- .2 Purpose: to resolve issues, monitor progress, identify deficiencies, relating to Cx.
- .3 Continue Cx meetings on regular basis until commissioning deliverables have been addressed.
- .4 At 60% construction completion stage. Section 01 32 16 - Construction Progress Schedules - Bar (GANTT) Chart. Departmental Representative to call a separate Cx scope meeting to review progress, discuss schedule of equipment start-up activities and prepare for Cx. Issues at meeting to include:
  - .1 Review duties and responsibilities of Contractor and subcontractors, addressing delays and potential problems.
  - .2 Determine the degree of involvement of trades and manufacturer's representatives in the commissioning process.
- .5 Thereafter Cx meetings to be held until project completion and as required during equipment start-up and functional testing period.
- .6 Meeting will be chaired by Departmental Representative, who will record and distribute minutes.
- .7 Ensure subcontractors and relevant manufacturer representatives are present at 60% and subsequent Cx meetings and as required.

**1.11 Starting And Testing**

- .1 Contractor assumes liabilities and costs for inspections. Including disassembly and re-assembly after approval, starting, testing and adjusting, including supply of testing equipment.

**1.12 Witnessing Of Starting And Testing**

- .1 Provide 14 days notice prior to commencement.
- .2 Departmental Representative to witness of start-up and testing.
- .3 Contractor's Cx Agent to be present at tests performed and documented by sub-trades, suppliers and equipment manufacturers.



**1.13 Manufacturer's Involvement**

- .1 Factory testing: manufacturer to:
  - .1 Coordinate time and location of testing.
  - .2 Provide testing documentation for approval by Departmental Representative
  - .3 Arrange for Departmental Representative to witness tests.
  - .4 Obtain written approval of test results and documentation from Departmental Representative before delivery to site.
- .2 Obtain manufacturers installation, start-up and operations instructions prior to start-up of components, equipment and systems and review with Departmental Representative.
  - .1 Compare completed installation with manufacturer's published data, record discrepancies, and review with manufacturer.
  - .2 Modify procedures detrimental to equipment performance and review same with manufacturer before start-up.
- .3 Integrity of warranties:
  - .1 Use manufacturer's trained start-up personnel where specified elsewhere in other divisions or required to maintain integrity of warranty.
  - .2 Verify with manufacturer that testing as specified will not void warranties.
- .4 Qualifications of manufacturer's personnel:
  - .1 Experienced in design, installation and operation of equipment and systems.
  - .2 Ability to interpret test results accurately.
  - .3 To report results in clear, concise, logical manner.

**1.14 Procedures**

- .1 Verify that equipment and systems are complete, clean, and operating in normal and safe manner prior to conducting start-up, testing and Cx.
- .2 Conduct start-up and testing in following distinct phases:
  - .1 Included in delivery and installation:
    - .1 Verification of conformity to specification, approved shop drawings and completion of PI report forms.
    - .2 Visual inspection of quality of installation.
  - .2 Start-up: follow accepted start-up procedures.
  - .3 Operational testing: document equipment performance.
  - .4 System FPT: include repetition of tests after correcting deficiencies.
  - .5 Post-substantial functional performance testing: to include fine-tuning.
- .3 Correct deficiencies and obtain approval from Departmental Representative after distinct phases have been completed and before commencing next phase.
- .4 Document require tests on approved FPT forms.
- .5 Failure to follow accepted start-up procedures will result in re-evaluation of equipment by an independent testing agency selected by Departmental

Representative. If results reveal that equipment start-up was not in accordance with requirements, and resulted in damage to equipment, implement following:

- .1 Minor equipment/systems: implement corrective measures approved by Departmental Representative.
- .2 Major equipment/systems: if evaluation report concludes that damage is minor, implement corrective measures approved by.
- .3 If evaluation report concludes that major damage has occurred, Departmental Representative shall reject equipment.
  - .1 Rejected equipment to be remove from site and replace with new.
  - .2 Subject new equipment/systems to specified start-up procedures.

#### **1.15 Start-Up Documentation**

- .1 Assemble start-up documentation and submit to Departmental Representative for approval before commencement of commissioning.
- .2 Start-up documentation to include:
  - .1 Factory and on-site test certificates for specified equipment.
  - .2 Pre-start-up inspection reports.
  - .3 Signed installation/start-up check lists.
  - .4 Start-up reports,
  - .5 Step-by-step description of complete start-up procedures, to permit Departmental Representative to repeat start-up at any time.

#### **1.16 Operation And Maintenance Of Equipment And Systems**

- .1 After start-up, operate and maintain equipment and systems as directed by equipment/system manufacturer.
- .2 With assistance of manufacturer develop written maintenance program and submit Departmental Representative for approval before implementation.
- .3 Operate and maintain systems for length of time required for commissioning to be completed.
- .4 After completion of commissioning, operate and maintain systems until issuance of certificate of interim acceptance.

#### **1.17 Test Results**

- .1 If start-up, testing and/or FPT produce unacceptable results, repair, replace or repeat specified starting and/or FPT procedures until acceptable results are achieved.
- .2 Provide manpower and materials, assume costs for re-commissioning.

#### **1.18 Start Of Commissioning**

- .1 Notify Departmental Representative at least 21 days prior to start of Cx.
- .2 Start Cx after elements of building affecting start-up and functional performance testing of systems have been completed.

**1.19 Instruments / Equipment**

- .1 Submit to Departmental Representative for review and approval:
  - .1 Complete list of instruments proposed to be used.
  - .2 Listed data including, serial number, current calibration certificate, calibration date, calibration expiry date and calibration accuracy.
- .2 Provide the following equipment as required:
  - .1 2-way radios.
  - .2 Ladders.
  - .3 Equipment as required to complete work.

**1.20 Commissioning Functional Performance Testing**

- .1 Carry out Cx:
  - .1 Under actual operating conditions, over entire operating range, in all modes.
  - .2 On independent systems and interacting systems.
- .2 Cx procedures to be repeatable and reported results are to be verifiable.
- .3 Follow equipment manufacturer's operating instructions.
- .4 EMCS trending to be available as supporting documentation for functional performance testing.

**1.21 Witnessing Commissioning**

- .1 Departmental Representative to witness activities and verify results.

**1.22 Authorities Having Jurisdiction**

- .1 Where specified start-up, testing or commissioning procedures duplicate verification requirements of authority having jurisdiction, arrange for authority to witness procedures so as to avoid duplication of tests and to facilitate expedient acceptance of facility.
- .2 Obtain certificates of approval, acceptance and compliance with rules and regulation of authority having jurisdiction.
- .3 Provide copies to Departmental Representative within 5 days of test and with Cx report.

**1.23 Commissioning Constraints**

- .1 Since access into secure or sensitive areas will be very difficult after occupancy it is necessary to complete Cx of occupancy, weather, and seasonal sensitive equipment and systems in these areas before issuance of the Interim Certificate, using, if necessary, simulated thermal loads.

**1.24 Extrapolation Of Results**

- .1 Where Cx of weather, occupancy, or seasonal-sensitive equipment or systems cannot be conducted under near-rated or near-design conditions, extrapolate part-load results to design conditions when approved by Departmental Representative in

accordance with equipment manufacturer's instructions, using manufacturer's data, with manufacturer's assistance and using approved formulae.

**1.25 Extent Of Verification**

- .1 Kitchen areas:
  - .1 Provide manpower and instrumentation to verify up to 100 % of reported results.
- .2 Elsewhere:
  - .1 Provide manpower and instrumentation to verify up to 30 % of reported results, unless specified otherwise in other sections.
- .3 Number and location to be at discretion of Departmental Representative.
- .4 Conduct tests repeated during verification under same conditions as original tests, using same test equipment, instrumentation.
- .5 Review and repeat commissioning of systems if inconsistencies found in more than 20% of reported results.
- .6 Perform additional commissioning until results are acceptable to Departmental Representative.

**1.26 Repeat Verifications**

- .1 Assume costs incurred by Departmental Representative for third and subsequent verifications where:
  - .1 Verification of reported results fail to receive Departmental Representative's approval.
  - .2 Repetition of second verification again fails to receive approval.
  - .3 Departmental Representative deems Contractor's request for second verification was premature.

**1.27 Sundry Checks And Adjustments**

- .1 Make adjustments and changes which become apparent as Cx proceeds.
- .2 Perform static and operational checks as applicable and as required.

**1.28 Deficiencies, Faults, Defects**

- .1 Correct deficiencies found during start-up and Cx to satisfaction of Departmental Representative.
- .2 Report problems, faults or defects affecting Cx to Departmental Representative in writing. Stop Cx until problems are rectified. Proceed with written approval from Departmental Representative.

**1.29 Completion Of Commissioning**

- .1 Upon completion of Cx leave systems in normal operating mode.
- .2 Except for warranty and seasonal verification activities specified in Cx specifications, complete Cx prior to issuance of Interim Certificate of Completion.

- .3 Cx to be considered complete when contract Cx deliverables have been submitted and accepted by Departmental Representative.

**1.30 Activities Upon Completion Of Commissioning**

- .1 When changes are made to baseline components or system settings established during Cx process, provide updated Cx form for affected item.

**1.31 Training**

- .1 In accordance with Section 01 91 41 - Commissioning (Cx) - Training.

**1.32 Maintenance Materials, Spare Parts, Special Tools**

- .1 Supply, deliver, and document maintenance materials, spare parts, and special tools as specified in contract.

**1.33 Occupancy**

- .1 Cooperate fully with Departmental Representative during stages of acceptance and occupancy of facility.

**1.34 Installed Instrumentation**

- .1 Use instruments installed under Contract for OPT and FPT if:
  - .1 Accuracy complies with these specifications.
  - .2 Calibration certificates have been deposited with Departmental Representative.
- .2 Calibrated EMCS sensors may be used to obtain performance data provided that sensor calibration has been completed and accepted.

**1.35 Functional Performance Testing Tolerances**

- .1 Application tolerances:
  - .1 Specified range of acceptable deviations of measured values from specified values or specified design criteria. Except for special areas, to be within +/- 10% of specified values.
- .2 Instrument accuracy tolerances:
  - .1 To be of higher order of magnitude than equipment or system being tested.
- .3 Measurement tolerances during verification:
  - .1 Unless otherwise specified actual values to be within +/- 2 % of recorded values.

**1.36 Owner's Performance Testing**

- .1 Performance testing of equipment or system by Departmental Representative will not relieve Contractor from compliance with specified start-up and testing procedures.

**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            Summary**

- .1    Section Includes:
  - .1    Description of overall structure of Cx Plan and roles and responsibilities of Cx team.

**1.2            References**

- .1    American Water Works Association (AWWA)
- .2    National Fire Protection Association (NFPA)
  - .1    NFPA-13-16, Installation of Sprinkler Systems Handbook.
  - .2    NFPA-14-16, Automatic Sprinkler Systems Handbook.
  - .3    NFPA-20-16, Standard for the Installation of Stationary Fire Pumps for Fire Protection.
- .3    Canadian Standards Association (CSA)
  - .1    CSA Z320-11 Building Commissioning.
- .4    Underwriters' Laboratories of Canada (ULC)
- .5    ASHRAE 202-2013 – Commissioning Process for Building and System

**1.3            General**

- .1    Provide a fully functional facility:
  - .1    Systems, equipment and components meet user's functional requirements before date of acceptance, and operate consistently at peak efficiencies and within specified energy budgets under normal loads.
  - .2    Facility user and M&D personnel have been fully trained in aspects of installed systems.
  - .3    Optimized life cycle costs.
  - .4    Complete documentation relating to installed equipment and systems.
- .2    Term "Cx" in this section means "Commissioning".
- .3    Use this Cx Plan as master planning document for Cx:
  - .1    Outlines organization, scheduling, allocation of resources, documentation, pertaining to implementation of Cx.
  - .2    Communicates responsibilities of team members involved in Cx Scheduling, documentation requirements, and verification procedures.
  - .3    Sets out deliverables relating to M&D, process and administration of Cx.
  - .4    Describes process of verification of how built works meet Owner's and design requirements.
  - .5    Produces a complete functional system prior to issuance of Certificate of Occupancy.

- .6 Management tool that sets out scope, standards, roles and responsibilities, expectations, deliverables, and provides:
  - .1 Overview of Cx.
  - .2 General description of elements that make up Cx Plan.
  - .3 Process and methodology for successful Cx.
- .4 Acronyms:
  - .1 CO2 – Carbon Dioxide
  - .2 CWS – Cold Water System
  - .3 Cx - Commissioning.
  - .4 EMCS - Energy Management Control Systems.
  - .5 FPT - Functional Performance Testing
  - .6 HVAC – Heating Ventilating and Air Conditioning
  - .7 HWS – Hot Water System
  - .8 MSDS - Material Safety Data Sheets.
  - .9 M&D – Maintenance and Data Manual
  - .10 OPT – Optimization
  - .11 PI - Product Information.
  - .12 SOM - System Operation Manual.
  - .13 VOC – Volatile Organic Compound.
  - .14 WHMIS - Workplace Hazardous Materials Information System.
- .5 Commissioning terms used in this Section:
  - .1 Bumping: short term start-up to prove ability to start and prove correct rotation.
  - .2 Deferred Cx - Cx activities delayed for reasons beyond Contractor's control due to lack of occupancy, weather conditions, need for heating/cooling loads.

#### **1.4 Development Of 100% Cx Plan**

- .1 Cx Plan to be 95% completed by the Departmental Representative and transmit to the contractor.
- .2 Cx Plan to be 100% completed within 8 weeks of award of contract to take into account:
  - .1 Approved shop drawings and product data.
  - .2 Approved changes to contract.
  - .3 Contractor's project schedule.
  - .4 Cx schedule.
  - .5 Contractor's, sub-contractor's, suppliers' requirements.
  - .6 Project construction team's and Cx team's requirements.
- .3 Submit completed Cx Plan to Departmental Representative and obtain written approval.



## **1.5 Refinement Of Cx Plan**

- .1 During construction phase, revise, refine and update Cx Plan to include:
  - .1 Changes resulting from Client program modifications.
  - .2 Approved design and construction changes.
- .2 Revise, refine and update every 6 weeks during construction phase. At each revision, indicate revision number and date.
- .3 Submit each revised Cx Plan to Departmental Representative for review and obtain written approval.
- .4 Include testing parameters at full range of operating conditions and check responses of equipment and systems.

## **1.6 Composition, Roles And Responsibilities Of Cx Team**

- .1 Departmental Representative to maintain overall responsibility for project and is sole point of contact between members of commissioning team.
- .2 Project Manager will select Cx Team consisting of following members:
  - .1 PWGSC Design Quality Review Team: during construction, will conduct periodic site reviews to observe general progress.
  - .2 PWGSC Quality Assurance Commissioning Manager: confirm Cx processes, forms and procedures are developed by the Departmental Representative to deliver a fully operational project to meet owner requirements:
  - .3 Departmental Representative is responsible for:
    - .1 Review of Cx documentation from operational perspective.
    - .2 Review for performance, reliability, durability of operation, accessibility, maintainability, operational efficiency under conditions of operation.
    - .3 Protection of health, safety and comfort of occupants and M&D personnel.
    - .4 Monitoring of Cx activities, training, development of Cx documentation.
    - .5 Work closely with members of Cx Team.
    - .6 Organizing Cx.
    - .7 Monitoring operations Cx activities.
    - .8 Witnessing, certifying accuracy of reported results.
    - .9 Witnessing and certifying TAB and other tests.
    - .10 Developing BMM.
    - .11 Ensuring implementation of final Cx Plan.
    - .12 Performing verification of performance of installed systems and equipment.
    - .13 Implementation of Training Plan.
  - .4 Construction Team: contractor, sub-contractors, suppliers and support disciplines, is responsible for construction/installation in accordance with contract documents, including:
    - .1 Testing.

- .2 OPT.
- .3 Performance of Cx activities.
- .4 Delivery of training and Cx documentation.
- .5 Assigning one person as point of contact with Departmental Representative and PWGSC Cx Manager for administrative and coordination purposes.
- .5 Contractor's Cx agent implements specified Cx activities including:
  - .1 Demonstrations.
  - .2 Training.
  - .3 Testing.
  - .4 Preparation, submission of test reports.
- .6 Property Manager: represents lead role in Operation Phase and onwards and is responsible for:
  - .1 Receiving facility.
  - .2 Day-To-Day operation and maintenance of facility.

## **1.7 Cx Participants**

- .1 Employ the following Cx participants to verify performance of equipment and systems:
  - .1 Installation contractor/subcontractor:
    - .1 Equipment and systems except as noted.
- .2 Equipment manufacturer: equipment specified to be installed and started by manufacturer.
  - .1 To include Functional Performance Testing.
- .3 Specialist subcontractor: equipment and systems supplied and installed by specialist subcontractor.
- .4 Specialist Cx agency:
  - .1 Possessing specialist qualifications and installations providing environments essential to client's program but are outside scope or expertise of Cx specialists on this project.
- .5 Client responsible for intrusion and access security systems. Contractor to provide raceway conduits for office only.
- .6 Ensure that Cx participant:
  - .1 Could complete work within scheduled time frame.
  - .2 Available for emergency and troubleshooting service during first year of occupancy by user for adjustments and modifications outside responsibility of O M personnel, including:
    - .1 Modify ventilation rates to meet changes in off-gassing.
    - .2 Changes to heating or cooling loads beyond scope of EMCS.
    - .3 Changes to EMCS control strategies beyond level of training provided to M&D personnel.
    - .4 Redistribution of electrical services.

- .5 Modifications of fire alarm systems.
- .6 Modifications to voice communications systems.
- .7 Provide names of participants to Departmental Representative and details of instruments and procedures to be followed for Cx 3 months prior to starting date of Cx for review and approval.

## **1.8 Extent Of Cx**

- .1 Cx Structural and Architectural Systems:
  - .1 Architectural and structural:
    - .1 Equipment:
      - .1 Kitchen equipment installed under contract.
    - .2 Doors related hardware:
      - .1 new door hardware.
- .2 Commission mechanical systems and associated equipment:
  - .1 Plumbing systems:
    - .1 Connection for Dishwasher to be remove and reinstall after the re-installation of kitchen counter.
  - .2 HVAC and exhaust systems:
    - .1 Exhaust Fan system.
- .3 Commission electrical systems and equipment:
  - .1 Low voltage below 750 V:
    - .1 Low voltage equipment.
    - .2 Low voltage distribution systems.
    - .3 Grounding system
  - .2 Lighting systems:
    - .1 Lighting equipment.
    - .2 Lighting distribution system.
  - .3 Fire alarm systems, equipment:
    - .1 Annunciators.
    - .2 Control panels.
    - .3 Fire alarm battery banks.

## **1.9 Deliverables Relating To M&D Perspectives**

- .1 General requirements:
  - .1 Compile English documentation.
  - .2 Documentation to be computer-compatible format ready for inputting for data management.
- .2 Provide deliverables:
  - .1 Warranties.

- .2 Project record documentation.
- .3 Inventory of spare parts, special tools and maintenance materials.
- .4 Maintenance Management System (MMS) identification system used.
- .5 WHMIS information.
- .6 MSDS data sheets.
- .7 Electrical Panel inventory containing detailed inventory of electrical circuitry for each panel board. Duplicate of inventory inside each panel.
- .3 Preventive maintenance program.
- .4 Contractor's and sub-contractor's as-built drawings.

#### **1.10 Deliverables Relating To The Cx Process**

- .1 General:
  - .1 Start-up, testing and Cx requirements, conditions for acceptance and specifications form part of relevant technical sections of these specifications.
- .2 Definitions:
  - .1 Cx as used in this section includes:
    - .1 Cx of components, equipment, systems, subsystems, and integrated systems.
    - .2 Factory inspections and Functional Performance Testing tests.
- .3 Deliverables: provide:
  - .1 Cx Specifications.
  - .2 Startup, pre-Cx activities and documentation for systems, and equipment.
  - .3 Completed installation checklists (ICL).
  - .4 Completed product information (PI) report forms.
  - .5 Completed Functional Performance Testing (FPT) report forms.
  - .6 Results of Functional Performance Testing Tests and Inspections.
  - .7 Description of Cx activities and documentation.
  - .8 Description of Cx of integrated systems and documentation.
  - .9 Tests of following witnessed by PWGSC Design Quality Review Team:
    - .1 Plumbing Fixtures
  - .10 Tests performed by Owner/User.
  - .11 Training Plans.
  - .12 Cx Reports.
  - .13 Prescribed activities during warranty period.
- .4 Departmental Representative to witness and certify tests and reports of results provided to Departmental Representative.
- .5 Departmental Representative to participate.

#### **1.11 Pre-Cx Activities And Related Documentation**

- .1 Items listed in this Cx Plan include the following:

- .1 Pre-Start-Up inspections: by Departmental Representative prior to permission to start up and rectification of deficiencies to Departmental Representative's satisfaction.
- .2 Departmental Representative to use approved check lists.
- .3 Departmental Representative will monitor all of these pre-start-up inspections.
- .4 Include completed documentation with Cx report.
- .5 Conduct pre-start-up tests: conduct pressure, static, flushing, cleaning, and "bumping" during construction as specified in technical sections. To be witnessed and certified by Departmental Representative and does not form part of Cx specifications.
- .6 Departmental Representative will monitor some of these inspections and tests.
- .7 Include completed documentation in Cx report.
- .2 Pre-Cx activities - ARCHITECTURAL AND STRUCTURAL:
  - .1 Equipment:
    - .1 Kitchen equipment.
  - .2 Doors related hardware
    - .1 Door hardware
- .3 Pre-Cx activities - MECHANICAL:
  - .1 Plumbing systems:
    - .1 "Bump" each item of equipment in its "stand-alone" mode.
    - .2 Complete pre-start-up checks and complete relevant documentation.
    - .3 After equipment has been started, test related systems in conjunction with control systems on a system-by-system basis.
  - .2 HVAC equipment and systems:
    - .1 "Bump" each item of equipment in its "stand-alone" mode.
    - .2 At this time, complete pre-start-up checks and complete relevant documentation.
    - .3 After equipment has been started, test related systems in conjunction with control systems on a system-by-system basis.
    - .4 Perform OPT on systems. OPT reports to be approved by Departmental Representative.
- .4 Pre-Cx activities - LIFE SAFETY SYSTEMS
  - .1 Include equipment and systems identified above.
  - .2 Reports of test results to be witnessed and certified by Departmental Representative before verification.
- .5 Pre-Cx activities - ELECTRICAL:
  - .1 Low voltage distribution systems under 750 V:
    - .1 Requires independent testing agency to perform pre- energization and post-energization tests.
  - .2 Lighting systems:

- .1 Emergency lighting systems:
  - .1 Tests to include verification of lighting levels and coverage, initially by disrupting normal power.
- .3 Low voltage systems: these include:
  - .1 Low voltage lighting control systems.
- .6 Start up components, equipment and systems.
- .7 Equipment manufacturer, supplier, installing specialist sub-contractor, as appropriate, to start-up, under Contractor's direction, following equipment, systems:
- .8 Departmental Representative to monitor all of these start-up activities.
  - .1 Rectify start-up deficiencies to satisfaction of Departmental Representative.
- .9 Functional Performance Testing (FPT):
  - .1 Approved Cx Agent to perform.
    - .1 Repeat when necessary until results are acceptable to Departmental Representative.
  - .2 Use procedures modified generic procedures to suit project requirements.
  - .3 Departmental Representative to witness and certify reported results using approved PI and FPT forms.
  - .4 Departmental Representative to approve completed FPT reports. Departmental Representative reserves right to verify up to 30% of reported results at random.
  - .5 Failure of randomly selected item shall result in rejection of FPT report or report of system startup and testing.

#### **1.12 Cx Activities And Related Documentation**

- .1 Perform Cx by specified Cx agency using procedures developed by Departmental Representative and approved by Departmental Representative.
- .2 Departmental Representative to monitor Cx activities.
- .3 Upon satisfactory completion, Cx agency performing tests to prepare Cx Report using approved FPT forms.
- .4 Departmental Representative to witness, certify reported results of, Cx.
- .5 Departmental Representative reserves right to verify a percentage of reported results at no cost to contract.

#### **1.13 Installation Check Lists (LCL)**

- .1 Refer to Section 01 91 33 - Commissioning (Cx) Forms: Installation Check Lists and Product Information (PI) / Functional Performance Testing (FPT) Forms.

#### **1.14 Product Information (PI) Report Forms**

- .1 Refer to Section 01 91 33 - Commissioning (Cx) Forms: Installation Check Lists and Product Information (PI) / Functional Performance Testing (FPT) Forms.

**1.15 Functional Performance Testing (FPT) Report**

- .1 Refer to Section 01 91 33 - Commissioning (Cx) Forms: Installation Check Lists and Product Information (PI) / Functional Performance Testing (FPT) Forms.

**1.16 Deliverables Relating To Administration Of Cx**

- .1 General:
  - .1 Because of risk assessment, complete Cx of occupancy, weather and seasonal-sensitive equipment and systems in these areas before building is occupied.

**1.17 Cx Schedules**

- .1 Prepare detailed critical path Cx Schedule and submit to Departmental Representative for review and approval same time as project Construction Schedule. Include:
  - .1 Milestones, testing, documentation, training and Cx activities of components, equipment, subsystems, systems and integrated systems, including:
    - .1 Design criteria, design intents.
    - .2 Pre-OPT review: 28 days after contract award, and before construction starts.
    - .3 Cx agents' credentials: 60 days before start of Cx.
    - .4 Cx procedures: 3 months after award of contract.
    - .5 Cx Report format: 3 months after contract award.
    - .6 Discussion of heating/cooling loads for Cx: 3 months before start-up.
    - .7 Submission of list of instrumentation with relevant certificates: 21 days before start of Cx.
    - .8 Notification of intention to start OPT: 21 days before start of OPT.
    - .9 OPT: after successful start-up, correction of deficiencies and verification of normal and safe operation.
    - .10 Notification of intention to start Cx: 14 days before start of Cx.
    - .11 Notification of intention to start Cx of integrated systems: after Cx of related systems is completed 14 days before start of integrated system Cx.
    - .12 Identification of deferred Cx.
    - .13 Implementation of training plans.
    - .14 Cx of smoke management/control systems: after Cx of related systems is completed and 7 days before proposed date of Cx these systems.
    - .15 Cx stair shaft pressurization systems: before issuance of occupancy certificate.
    - .16 Cx reports: immediately upon successful completion of Cx.
    - .17 Emergency evacuation exercises: after 80% occupancy.
  - .2 Detailed training schedule to demonstrate no conflicts with testing, completion of project and hand-over to Property Manager.

- .3 6 months in Cx schedule for verification of performance in all seasons and wear conditions.
- .2 After approval, incorporate Cx Schedule into Construction Schedule.
- .3 Departmental Representative, Contractor, Contractor's Cx agent, and Departmental Representative will monitor progress of Cx against this schedule.

#### **1.18 Cx Reports**

- .1 Submit reports of tests, witnessed and certified by Departmental Representative to Departmental Representative who will verify reported results.
- .2 Include completed and certified FPT reports in properly formatted Cx Reports.
- .3 Before reports are accepted, reported results to be subject to verification by Departmental Representative.

#### **1.19 Activities During Warranty Period**

- .1 Cx activities must be completed before issuance of Interim Certificate, it is anticipated that certain Cx activities may be necessary during Warranty Period, including:
  - .1 Fine tuning of HVAC systems.
  - .2 Adjustment of ventilation rates to promote good indoor air quality and reduce deleterious effects of VOCs generated by off-gassing from construction materials and furnishings.
  - .3 Full-scale emergency evacuation exercises.

#### **1.20 Tests To Be Performed By Owner/User**

- .1 None is anticipated on this project.

#### **1.21 Training Plans**

- .1 Refer to Section 01 91 41 - Commissioning (Cx) - Training.

#### **1.22 Final Settings**

- .1 Upon completion of Cx to satisfaction of Departmental Representative lock control devices in their final positions, indelibly mark settings marked and include in Cx Reports.

#### **1.23 Payments For Cx**

- .1 All payments required for Cx to be borne by the contractor.

### **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            Summary**

- .1    Section Includes:
  - .1       Commissioning forms to be completed for equipment, system and integrated system.
- .2    Related Requirements
  - .1       Not Used

**1.2            Installation/Start-Up Check Lists**

- .1    Include the following data:
  - .1       Product manufacturer's installation instructions and recommended checks.
  - .2       Special procedures as specified in relevant technical sections.
  - .3       Items considered good installation and engineering industry practices deemed appropriate for proper and efficient operation.
- .2    Equipment manufacturer's installation/start-up check lists are acceptable for use. As deemed necessary by Departmental Representative supplemental additional data lists will be required for specific project conditions.
- .3    Use check lists for equipment installation. Document check list verifying checks have been made, indicate deficiencies and corrective action taken.
- .4    Installer to sign check lists upon completion, certifying stated checks and inspections have been performed. Return completed check lists to Departmental Representative. Check lists will be required during Commissioning and will be included in System Operation Manual (SOM) at completion of project.
- .5    Use of check lists will not be considered part of commissioning process but will be stringently used for equipment pre-start and start-up procedures.

**1.3            Product Information (Pi) Report Forms**

- .1    Product Information (PI) forms compiles gathered data on items of equipment produced by equipment manufacturer, includes nameplate information, parts list, operating instructions, maintenance guidelines and pertinent technical data and recommended checks that is necessary to prepare for start-up and functional testing and used during operation and maintenance of equipment. This documentation is included in the SOM at completion of work.
- .2    Prior to Functional Performance Testing (FPT) of systems complete items on PI forms related to systems and obtain Departmental Representative's approval.

**1.4            Functional Performance Testing (Fpt) Forms**

- .1    FPT forms to be used for checks, running dynamic tests and adjustments carried out on equipment and systems to ensure correct operation, efficiently and function independently and interactively with other systems as intended with project requirements.

- .2 FPT report forms include those developed by Contractor records measured data and readings taken during functional testing and Performance Verification procedures.
- .3 Prior to FPT of integrated system, complete FPT forms of related systems and obtain Departmental Representative's approval.

### **1.5 Samples Of Commissioning Forms**

- .1 Departmental Representative will develop and provide to Contractor required project-specific Commissioning forms in electronic format complete with specification data.
- .2 Revise items on Commissioning forms to suit project requirements.
- .3 Samples of Commissioning forms and a complete index of produced to date will be attached to this section.

### **1.6 Changes And Development Of New Report Forms**

- .1 When additional forms are required, but are not available from Departmental Representative develop appropriate verification forms and submit to Departmental Representative for approval prior to use.
  - .1 Additional commissioning forms to be in same format as provided by Departmental Representative.

### **1.7 Commissioning Forms**

- .1 Use Commissioning forms to verify installation and record performance when starting equipment and systems.
- .2 Strategy for Use:
  - .1 Departmental Representative provides Contractor project-specific Commissioning forms with Specification data included.
  - .2 Contractor will provide required shop drawings information and verify correct installation and operation of items indicated on these forms.
  - .3 Confirm operation as per design criteria and intent.
  - .4 Identify variances between design and operation and reasons for variances.
  - .5 Verify operation in specified normal and emergency modes and under specified load conditions.
  - .6 Record analytical and substantiating data.
  - .7 Verify reported results.
  - .8 Form to bear signatures of recording technician and reviewed and signed off by Departmental Representative.
  - .9 Submit immediately after tests are performed.
  - .10 Reported results in true measured SI unit values.
  - .11 Provide Departmental Representative with originals of completed forms.
  - .12 Maintain copy on site during start-up, testing and commissioning period.
  - .13 Forms to be both hard copy and electronic format with typed written results in Building Management Manual in accordance with Section 01 91 51 – System Operational Manual (SOM).

**1.8 Language**

- .1 To suit the language profile of the awarded contract.

**Part 2 Products**

**2.1 Not Used**

- .1 Not Used.

**Part 3 Execution**

**3.1 Not Used**

- .1 Not Used.

**END OF SECTION**



# VOLTAGE TRANSFORMERS

## Static Verification



REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

### NAMEPLATE DATA

MANUFACTURER		TYPE	
SERIAL NO.		CATALOG NO.	
PRIMARY VOLTAGE		NAMEPLATE RATIO	KVA
SECONDARY VOLTAGE		CLASS	

### PRIMARY FUSE DATA

MANUFACTURER		TYPE	
SIZE			

### SECONDARY FUSE DATA

MANUFACTURER		TYPE	
SIZE			

### ADDITIONAL NAMEPLATE

--	--	--	--

DESCRIPTION	INSPECTED	N/A	COMMENTS
* VT DATA COMPARES WITH DRAWINGS & SPECIFICATIONS			
PHYSICAL & MECHANICAL CONDITION			
CORRECT CONNECTION WITH SYSTEM REQUIREMENTS			
* CLEARANCES BETWEEN PRIMARY & SECONDARY CIRCUIT WIRING			
CLEANLINESS			
GROUNDING & SHORTING CONNECTIONS			
WITHDRAWAL MECHANISM & GROUNDING OPERATION			
CORRECT FUSE SIZES			
LUBRICATION			
POTENTIAL CIRCUITS ARE GROUNDED WITH ONLY ONE GROUNDING POINT			

\* ACCEPTANCE TESTING ONLY

### ELECTRICAL CONNECTIONS VERIFIED BY:

	CONNECTION TIGHTNESS
	THERMOGRAPHIC SURVEY
	MEASURED RESISTANCE

# VOLTAGE TRANSFORMERS

## Static Verification



REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

**GENERAL COMMENTS:**

POSITION/TITLE	SIGNATURE	DATE

# VOLTAGE TRANSFORMERS

## Start-Up



REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

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### GENERAL COMMENTS:

POSITION/TITLE	SIGNATURE	DATE



# VOLTAGE TRANSFORMERS

## Functional Performance Testing



REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

### NAMEPLATE DATA

MANUFACTURER		SERIAL NO.	
--------------	--	------------	--

EQUIP. TEMPERATURE

°C

Indicates Temperature Corrected Reading to 20°C

RESISTANCE TCF

VT CONNECTION

1 PHASE

3 PHASE

PRIMARY

WYE

DELTA

OPEN DELTA

SECONDARY

WYE

DELTA

OPEN DELTA

VT IDENTIFICATION

SERIAL NUMBER

### URNS RATIO TEST

TAP POSITION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CALCULATED RATIO	MEASURED RATIO

### INSULATION TESTS

PRIMARY - SECONDARY		PRIMARY - GROUND		SECONDARY - GROUND	
	KV		KV		KV
	MEG OHMS		MEG OHMS		MEG OHMS
	MEG OHMS		MEG OHMS		MEG OHMS
POLARITY					

VT IDENTIFICATION

SERIAL NUMBER

### URNS RATIO TEST

TAP POSITION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CALCULATED RATIO	MEASURED RATIO

### INSULATION TESTS

PRIMARY - SECONDARY		PRIMARY - GROUND		SECONDARY - GROUND	
	KV		KV		KV
	MEG OHMS		MEG OHMS		MEG OHMS
	MEG OHMS		MEG OHMS		MEG OHMS
POLARITY					

VT IDENTIFICATION

SERIAL NUMBER

### URNS RATIO TEST

TAP POSITION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CALCULATED RATIO	MEASURED RATIO

### INSULATION TESTS

PRIMARY - SECONDARY		PRIMARY - GROUND		SECONDARY - GROUND	
	KV		KV		KV
	MEG OHMS		MEG OHMS		MEG OHMS
	MEG OHMS		MEG OHMS		MEG OHMS

# VOLTAGE TRANSFORMERS

## Functional Performance Testing



REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

					POLARITY	

GENERAL COMMENTS:

POSITION/TITLE	SIGNATURE	DATE

# FANS

## Static Verification

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

### NAMEPLATE

MANUFACTURER		EQUIPMENT NO.	
SERVICE		LOCATION	

EXHAUST FAN	SPECIFIED	SHOP DRAWINGS	INSTALLED
MANUFACTURER			
TYPE/ SIZE			
MODEL NO.			
MOTOR CONTROL CENTRE NO.			
MOTOR HP			
VOLTAGE / PHASE / FREQUENCY			
STATIC PRESSURE AIR (PA)			
FAN RPM			
AIR VOLUME (L/S)			
VIBRATION ISOLATOR TYPE			

EXHAUST FAN	STATUS	COMMENTS
INSTALLED AS PER DRAWINGS & SPECIFICATIONS		
INSTALLED AS PER MANUFACTURER'S REQUIREMENTS		
FAN BEARINGS LUBRICATED		
GREASE EXTENSION LEADS REQUIRED		
FAN ROTATION CORRECT		
FAN CASING CLEANED		
BELT GUARDS INSTALLED		
ALIGNMENT REPORT ATTACHED		
INLET & OUTLET GUARDS INSTALLED		
DUCT GEOMETRY CORRECT		
FLEXIBLE CONNECTORS CORRECT		
VIBRATION ISOLATORS CORRECT		
STARTER & DISCONNECT COMPLETE		
DISCONNECT LOCATION CORRECT		
BELT TENSION		
FAN WHEEL CLEARANCE		
FAN INTERLOCKS CORRECT		
VARIABLE SPEED DRIVE/VOLUME CONTROLS		

# FANS

## Static Verification

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

### NAMEPLATE

MANUFACTURER		EQUIPMENT NO.	
SERVICE		LOCATION	

AIR DISTRIBUTION SYSTEM	STATUS	COMMENTS
QUALITY OF DUCT CONSTRUCTION		
SUITABILITY OF DUCT FITTINGS		
DUCTWORK INSULATION		
WALL PENETRATIONS SEALED		
ACCESS FOR INSPECTION & SERVICING		
DUCT MOUNTED ACCESS DOORS CLOSED		
FIRE DAMPERS OPEN		

START-UP	STATUS	COMMENTS
ALL SYSTEM COMPONENTS STARTED AS DETAILED ON EQUIPMENT START-UP SHEETS.		
DUCTWORK PRESSURE TESTED		
NOISE & VIBRATION		
AIR BALANCING COMPLETE		
AIR BALANCE REPORT ATTACHED		

MOTORIZED DAMPER	SPECIFIED	SHOP DRAWINGS	INSTALLED
MANUFACTURER			
TYPE OR MODEL NO.			
SUPPLY DAMPER SIZE			
RETURN DAMPER SIZE			

MOTORIZED DAMPER	STATUS		
	NO. 1	NO. 2	NO. 3
DAMPERS			
DAMPER LOCATION			
AIR LEAKAGE AT SHUTOFF			
NO CRACKS AROUND DAMPER FRAME			
BLADES CLOSE FULLY, SEAL TIGHTLY			
MOTORIZED DAMPER STROKES FULLY OPEN TO FULLY CLOSED			
DAMPER ACCESSIBLE & IDENTIFIED			

### NAMEPLATE

## Static Verification

NAME:

COMPANY:

ADDRESS:

CUSTOMER:

PROJECT:

FILE NUMBER:

DATE:

MOTORIZED DAMPER	STATUS		
	NO. 1	NO. 2	NO. 3
LINKAGE CONNECTIONS INSTALLED			
FREE MOVEMENT & STROKE			
ACCESS TO DAMPER			
ACTUATOR NOT IN AIR STREAM			
NORMAL POSITIONS AS SPECIFIED			
DAMPER CONTROL SEQUENCES			
MIXING DAMPERS STROKE IN UNISON			
LINKAGE CONNECTIONS INSTALLED			
FREE MOVEMENT & STROKE			
ACCESS TO DAMPER			
ACTUATOR NOT IN AIR STREAM			
NORMAL POSITIONS AS SPECIFIED			
DAMPER CONTROL SEQUENCES			
MIXING DAMPERS STROKE IN UNISON			

**GENERAL COMMENTS:**

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# FANS

## Start-Up

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

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### GENERAL COMMENTS:

POSITION/TITLE	SIGNATURE	DATE

**FANS**  
**Functional Performance Testing**

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

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**GENERAL COMMENTS:**

POSITION/TITLE	SIGNATURE	DATE

# INSULATED MOLDED CASE CIRCUIT BREAKERS

## Functional Performance Testing

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
 PROJECT: \_\_\_\_\_  
 FILE NUMBER: \_\_\_\_\_  
 DATE: \_\_\_\_\_

NAMEPLATE DATA			
MANUFACTURER		SERIAL NO.	

EQUIP. TEMPERATURE	°C	Indicates Temperature Corrected Reading to 20°C
--------------------	----	---

CONTACT RESISTANCE	RESISTANCE TCF:		
	PHASE A	PHASE B	PHASE C
INITIAL (MICRO-OHMS)			
INITIAL (MICRO-OHMS)			
CLEANED (MICRO-OHMS)			
CLEANED (MICRO-OHMS)			

ELECTRICAL OPERATIONS			
CLOSE		OK	N/A
TRIP		OK	N/A
TRIP-FREE		OK	N/A
ANTIPUMP		OK	N/A

MINIMUM COIL PICKUPS	
CLOSE COIL	V
TRIP COIL	V

BOLTED CONNECTION RESISTANCE	FROM	MICRO-OHMS	MILLI-OHMS	RESISTANCE TCF:				
				PHASE A	PHASE B	PHASE C	NEUTRAL	GROUND

INSULATION TESTS	MEG-OHMS		MICRO-AMPS	INSULATION TCF:			
	KV	TIME (min)		PHASE A	PHASE B	PHASE C	NEUTRAL
PHASE-TO-PHASE							
PHASE-TO-GROUND							
LINE-TO-LOAD							

BREAKER NAMEPLATE
-------------------



# INSULATED MOLDED CASE CIRCUIT BREAKERS

## Functional Performance Testing

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

PROJECT: \_\_\_\_\_

FILE NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

MANUFACTURER		SERIAL NO.	
TYPE		CATALOG NO.	
FRAME SIZE (F)		MOUNTING	B.I. D.O.

TRIP UNIT NAMEPLATE									
MANUFACTURER							CT RATIO		
TYPE							RATING PLUG(R)		
THERMAL MEMORY				ON			OFF		SENSOR TAP
	ZONE INTLK			TARGETS					

SETTINGS AS FOUND		LONG TIME PU		DELAY					
RATING PLUG(R)		SHORT TIME PU		DELAY		I <sup>2</sup> T	IN	OUT	N/A
SENSOR TAP		INST. PU	ON OFF						
GRD. FLT.	3W 4W	GRD. FLT. PU	ON OFF	DELAY		I <sup>2</sup> T	IN	OUT	N/A

SETTINGS AS LEFT		LONG TIME PU		DELAY					
RATING PLUG(R)		SHORT TIME PU		DELAY		I <sup>2</sup> T	IN	OUT	N/A
SENSOR TAP		INST. PU	ON OFF						
GRD. FLT.	3W 4W	GRD. FLT. PU	ON OFF	DELAY		I <sup>2</sup> T	IN	OUT	N/A

PRIMARY INJECTION	SECONDARY INJECTION	MFG. TIME CURRENT CURVE NO.	
-------------------	---------------------	-----------------------------	--

PICKUP TESTS	MFG STANDARD		PHASE A		PHASE B		PHASE C	
	MIN	MAX	FOUND	LEFT	FOUND	LEFT	FOUND	LEFT
INSTANTANEOUS								
LONG TIME								
SHORT TIME								
GROUND FAULT								

TIME DELAY TESTS			PHASE A				PHASE B				PHASE C			
	MFG STANDARD		FOUND		LEFT		FOUND		LEFT		FOUND		LEFT	
	MIN	MAX	AMPS	DELAY	AMPS	DELAY	AMPS	DELAY	AMPS	DELAY	AMPS	DELAY	AMPS	DELAY
INSTANTANEOUS														
LONG TIME														
SHORT TIME														
GROUND FAULT														

GENERAL COMMENTS:

**INSULATED MOLDED CASE CIRCUIT BREAKERS**  
**Functional Performance Testing**

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

POSITION/TITLE	SIGNATURE	DATE

## Static Verification

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

MANUFACTURER		EQUIPMENT NO.	
SERVICE		LOCATION	

[illegible]

## Static Verification

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

MANUFACTURER		EQUIPMENT NO.	
SERVICE		LOCATION	

START-UP	SPECIFIED	COMMENTS
INSTALLED AS PER DRAWINGS & SPECIFICATIONS		
INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS		
COLD WATER FEED CLEAN		
COLD WATER FEED PRESSURE		
HOT WATER FEED CLEAN		
HOT WATER FEED PRESSURE		
FIXTURE CLEAN		
PIPE ARRANGEMENT & SUPPORT		
NO LEAKAGE FROM SEALS		
FIXTURE WORKS CORRECTLY		

<b>POSITION/TITLE</b>	<b>SIGNATURE</b>	<b>DATE</b>

**PLUMBING FIXTURE**

**Start-Up**

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

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**GENERAL COMMENTS:**

POSITION/TITLE	SIGNATURE	DATE

**PLUMBING FIXTURE**  
**Functional Performance Testing**

REVISION #: \_\_\_\_\_

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
FILE NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_

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**GENERAL COMMENTS:**

POSITION/TITLE	SIGNATURE	DATE

**Part 1            General**

**1.1            Summary**

- .1    Section Includes:
  - .1       This Section specifies roles and responsibilities of Commissioning Training.
- .2    Related Requirements
  - .1       Not used

**1.2            Trainees**

- .1    Trainees: personnel selected for operating and maintaining this facility. Includes Property Manager, building operators, maintenance staff, security staff, and technical specialists as required.
- .2    Trainees will be available for training during later stages of construction for purposes of familiarization with systems.

**1.3            Instructors**

- .1    Consultant will provide:
  - .1       Descriptions of systems.
  - .2       Instruction on design philosophy, design criteria, and design intent.
- .2    Contractor and certified factory-trained manufacturers' personnel: to provide instruction on the following:
  - .1       Start-Up, operation, shut-down of equipment, components and systems.
  - .2       Control features, reasons for, results of, implications on associated systems of, adjustment of set points of control and safety devices.
  - .3       Instructions on servicing, maintenance and adjustment of systems, equipment and components.
- .3    Contractor and equipment manufacturer to provide instruction on:
  - .1       Start-up, operation, maintenance and shut-down of equipment they have certified installation, started up and carried out FPT tests.

**1.4            Training Objectives**

- .1    Training to be detailed and duration to ensure:
  - .1       Safe, reliable, cost-effective, energy-efficient operation of systems in normal and emergency modes under all conditions.
  - .2       Effective on-going inspection, measurements of system performance.
  - .3       Proper preventive maintenance, diagnosis and trouble-shooting.
  - .4       Ability to update documentation.
  - .5       Ability to operate equipment and systems under emergency conditions until appropriate qualified assistance arrives.

## **1.5 Training Materials**

- .1 Instructors to be responsible for content and quality.
- .2 Training materials to include:
  - .1 "As-Built" Contract Documents.
  - .2 Operating Manual.
  - .3 Maintenance Manual.
  - .4 Management Manual.
  - .5 OPT and FPT Reports.
- .3 Project Manager, Commissioning Manager and Property Manager will review training manuals.
- .4 Training materials to be in a format that permits future training procedures to same degree of detail.
- .5 Supplement training materials:
  - .1 Transparencies for overhead projectors.
  - .2 Multimedia presentations.
  - .3 Manufacturer's training videos.
  - .4 Equipment models.

## **1.6 Scheduling**

- .1 Include in Commissioning Schedule time for training.
- .2 Deliver training during regular working hours, training sessions to be 3 hours in length.
- .3 Training to be completed prior to acceptance of facility.

## **1.7 Responsibilities**

- .1 Be responsible for:
  - .1 Implementation of training activities,
  - .2 Coordination among instructors,
  - .3 Quality of training, training materials,
- .2 Departmental Representative will evaluate training and materials.
- .3 Upon completion of training, provide written report, signed by Instructors, witnessed by Departmental Representative.

## **1.8 Training Content**

- .1 Training to include demonstrations by Instructors using the installed equipment and systems.
- .2 Content includes:
  - .1 Review of facility and occupancy profile.
  - .2 Functional requirements.
  - .3 System philosophy, limitations of systems and emergency procedures.



- .4 Review of system layout, equipment, components and controls.
- .5 Equipment and system start-up, operation, monitoring, servicing, maintenance and shut-down procedures.
- .6 System operating sequences, including step-by-step directions for starting up, shut-down, operation of valves, dampers, switches, adjustment of control settings and emergency procedures.
- .7 Maintenance and servicing.
- .8 Trouble-shooting diagnosis.
- .9 Inter-Action among systems during integrated operation.
- .10 Review of M&D documentation.
- .3 Provide specialized training as specified in relevant Technical Sections of the construction specifications.

#### **1.9 Video-Based Training**

- .1 Manufacturer's videotapes to be used as training tool with Departmental Representative's review and written approval 3 months prior to commencement of scheduled training.
- .2 On-Site training videos:
  - .1 Videotape training sessions for use during future training.
  - .2 To be performed after systems are fully commissioned.
  - .3 Organize into several short modules to permit incorporation of changes.
- .3 Production methods to be professional quality.

#### **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            Summary**

- .1    Section Includes:
  - .1    This section is limited to portions of the System Operations Manual (SOM) provided to Departmental Representative by Contractor.
- .2    Acronyms:
  - .1    Cx - Commissioning.
  - .2    FPT - Functional Performance Testing
  - .3    HVAC - Heating, Ventilation and Air Conditioning.
  - .4    M&D – Maintenance and Data Manual
  - .5    OPT – Optimization
  - .6    PI - Product Information.
  - .7    SOM – Systems Operations Manual.
  - .8    WHMIS - Workplace Hazardous Materials Information System.

**1.2            General Requirements**

- .1    Standard letter size paper 216 mm x 279 mm.
- .2    Methodology used to facilitate updating.
- .3    Drawings, diagrams and schematics to be professionally developed.
- .4    Electronic copy of data to be in a format accepted and approved by Departmental Representative.

**1.3            Approvals**

- .1    Prior to commencement, co-ordinate requirements for preparation, submission and approval with Departmental Representative.

**1.4            General Information**

- .1    Provide Departmental Representative the following for insertion into appropriate Part and Section of SOM:
  - .1    Complete list of names, addresses, telephone and fax numbers of contractor, sub-contractors that participated in delivery of project - as indicated in Section 1.2 of SOM.
  - .2    Summary of architectural, structural, fire protection, mechanical and electrical systems installed and commissioned - as indicated in Section 1.4 of SOM.
    - .1    Including sequence of operation as finalized after commissioning is complete as indicated in Section 2.0 of SOM.
  - .3    Description of building operation under conditions of heightened security and emergencies as indicated in Section 2.0 of SOM.
  - .4    System, equipment and components Maintenance Management System (MMS) identification - Section 2.1 of SOM.

- .5 Information on operation and maintenance of architectural systems and equipment installed and commissioned - Section 2.0 of SOM.
- .6 Information on operation and maintenance of fire protection and life safety systems and equipment installed and commissioned - Section 2.0 of SOM.
- .7 Information on operation and maintenance of mechanical systems and equipment installed and commissioned - Section 2.0 of SOM.
- .8 Operating and maintenance manual - Section 3.2 of SOM.
- .9 Final commissioning plan as actually implemented.
- .10 Completed commissioning checklists.
- .11 Commissioning test procedures employed.
- .12 Completed Product Information (PI) and Functional Performance Testing (FPT) report forms, approved and accepted by Departmental Representative.
- .13 Commissioning reports.

#### **1.5 Contents Of Operating And Maintenance Manual**

- .1 For detailed requirements refer to Section 01 78 00 - Closeout Submittals.
- .2 Departmental Representative to review and approve format and organization within 12 weeks of award of contract.
- .3 Include original manufactures brochures and written information on products and equipment installed on this project.
- .4 Record and organize for easy access and retrieval of information contained in SOM.
- .5 Include completed PI report forms, data and information from other sources as required.
- .6 Inventory directory relating to information on installed systems, equipment and components.
- .7 Approved project shop-drawings, product and maintenance data.
- .8 Manufacturer's data and recommendations relating: manufacturing process, installation, commissioning, start-up, M&D, shutdown and training materials.
- .9 Inventory and location of spare parts, special tools and maintenance materials.
- .10 Warranty information.
- .11 Inspection certificates with expiration dates, which require on-going re-certification inspections.
- .12 Maintenance program supporting information including:
  - .1 Recommended maintenance procedures and schedule.
  - .2 Information to removal and replacement of equipment including, required equipment, points of lift and means of entry and egress.

#### **1.6 Life Safety Compliance (Lsc) Manual**

- .1 Samples of LSC Manual will be available from Departmental Representative.
- .2 Content of Manual:

- .1 All possible Emergency situations modes including: presence of fire and smoke, power failure, lose of water or pressure, chemical spills and refrigerant release.
- .2 Failure of elevators and escalators.
- .3 HVAC emergencies and fuel supply failures.
- .4 Intrusion and security breach.
- .5 Emergency provisions for natural disasters, bomb threats and other disruptive situations.
- .6 Dedicated emergency generators for high security projects, medical facilities and computer systems.
- .7 Emergency control procedures for fire, power and major equipment failure.
- .8 Emergency contacts and numbers.
- .9 Manual to be readily available and comprehensible to non- technical readers.

## **1.7 Supporting Documentation For Insertion Into Supporting Appendices**

- .1 Provide Departmental Representative supporting documentation relating to installed equipment and system, including:
  - .1 General:
    - .1 Finalized commissioning plan.
    - .2 WHMIS information manual.
    - .3 Approved "as-built" drawings and specifications.
    - .4 Procedures used during commissioning.
    - .5 Cross-Reference to specification sections.
  - .2 Architectural and structural:
    - .1 Inspection certificates, construction permits.
    - .2 Roof anchor log books.
    - .3 FPT reports.
  - .3 Mechanical:
    - .1 Installation permits, inspection certificates.
    - .2 OPT and FPT reports.
    - .3 Charts of valves and steam traps.
    - .4 Copies of posted instructions.
  - .4 Electrical:
    - .1 Installation permits, inspection certificates.
    - .2 OPT and FPT reports.
    - .3 Electrical work log book.
    - .4 Charts and schedules.
    - .5 Locations of cables and components.
    - .6 Copies of posted instructions.
- .2 Assist Departmental Representative with preparation of SOM.

**1.8 Language**

- .1 English Language to be in binders.

**1.9 Identification Of Facility**

- .1 When submitting information to Departmental Representative for incorporation into SOM, use following system for identification of documentation:

**1.10 Use Of Current Technology**

- .1 Use current technology for production of documentation. Emphasis on ease of accessibility at all times, maintain in up-to-date state, compatibility with user's requirements.
- .2 Obtain Departmental Representative's approval before starting Work.

**Part 2 Products**

**2.1 Not Used**

- .1 Not used.

**Part 3 Execution**

**3.1 Not Used**

- .1 Not used.

**END OF SECTION**