



**Public Works and  
Government Services Canada**

Requisition No. EZ899-180014/A

**DRAWINGS & SPECIFICATIONS**

For

**Project No.: R.082472.001**

**Mission Institution Building LU 1 to LU 5**

**Cell Furniture Replacement**

**APPROVED BY:**

  
Regional Manager, AES

2017-03-20

Date

  
Construction Safety Coordinator

2016-03-17

Date

**TENDER:**

  
Project Manager

2017-04-10

Date



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**END OF SECTION**



## PART 1 GENERAL

### 1.1 SUMMARY OF WORK

- .1 Work covered by Contract Documents:
  - .1 This Contract covers the following work at the Mission Institution, Living Unit (LU) 1 to Living Unit (LU) 5, at 8751 Stave Lake Street, Mission B.C.
    - .1 Remove existing furniture, (including all double bunks), in all LU1 through LU5 cells excluding the 10 – C25 cells as noted on drawings.
    - .2 Remove top bunk and ladder only from the 10 – C25 cells: (LU1 – S11, S15) (LU2 – S7, S8, S13) (LU3 – S8, N6) (LU4 – S2, S11) (LU5 – S8).
    - .3 Make good associated surfaces affected by the construction process. Fill existing bolt / fastener holes with security sealant. New paint touch up over applied sealant to match existing wall colour.
    - .4 Install new cell furniture in 218 cells in LU1 through LU5 excluding the 10 – C25 cells. The pre-purchased furniture is stored at Matsqui Institution Building A15, Appendix C - Matsqui Institution Site Map.
    - .5 All furniture shall be bolted in place and security caulked at furniture to wall & floor connections. Apply paint touch up after installation for scratches and damages. Touch-up paint for pre-purchased furniture will be provided by Departmental Representative.
    - .6 Furniture to include bed, desk, wardrobe, medicine cabinet, slope topped breakaway cloth hooks, and mirror. Beds, desks, wardrobes and medicine cabinets will be pre-purchased by the Departmental Representative and installed by the contractor. Cloths hooks and mirrors will be purchased and installed by the contractor.
    - .7 Furniture and layout to conform to the style and placement previously completed in the 10 - C25 cells but without upper bunk and ladder.
    - .8 Current Barrier Free cells in LU2 to remain as Barrier Free with furniture compliant with Barrier Free requirements.
    - .9 Configuration of all cells in LU1 through LU5 to be single occupancy, (without upper bunk and ladder).
  - .2 Work to be performed under this Contract includes, but not limited to, the following items covered further in the Contract documents:
    - .1 Provide a detailed work plan including a project schedule and phasing. This detailed work plan shall be submitted to the Departmental Representative for review to verify that there will be no interruption of service.
    - .2 Do not start work until all essential equipment is delivered to the site and the work can proceed without delays.
    - .3 Provide as-built drawings and closeout submittals.
  - .3 Contractor's Use of Premises:
    - .1 Contractor has limited use of site for work of this contract until Substantial Completion:

- .1 Contractor use of premises for storage and access, as approved by the Departmental Representative.
  - .2 Obtain and pay for use of additional storage or work areas needed for operations under this Contract. The pre-purchased furniture (beds, desks, wardrobes and medicine cabinets) storage and transportation from manufacturer's plant to Matsqui Institution are paid by Departmental Representative.
- .2 Vehicular access through the Sally Port will be restricted during the inmate "count" at breakfast, lunch and dinner hours. Confirm times with Departmental Representative. Delays may occur when entering and exiting the Institution with vehicles due to security situations and heavy traffic.

## **1.2 WORK RESTRICTIONS**

- .1 Notify Departmental Representative of intended interruption of power, communication and water services and provide schedule of interruption times.
- .2 Where Work involves breaking into or connecting to existing services, give departmental Representative 48 hours of notice for necessary interruption of services throughout course of work. Keep duration of interruptions to a minimum. Coordinate interruptions with local authority having jurisdiction and local residences and businesses affected by the disruption.
- .3 Provide for access by pedestrian and vehicular traffic on and around site where work is in progress.
- .4 Construct barriers in accordance with Section Temporary Barriers and Enclosures.
- .5 Security Requirements: refer to Section 01 14 10 - Security Requirements.
- .6 Hours of work:
  - .1 Perform work during normal working hours of the Institution 0730 to 1600, Monday through Friday except holidays.
  - .2 When it is necessary, arrange in advance with Departmental Representative to work outside of normal working hours.

## **1.3 CONSTRUCTION WORK SCHEDULE**

- .1 Commence work immediately upon official notification of acceptance of offer and complete the work within 20 weeks from the date of such notification.
- .2 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Substantial Certificate and Final Certificate as defined times of completion are of essence of this contract.
- .3 Contractor can only access one living unit, 46 cells, on any working day. Constructor shall complete the work for one living unit within 3 weeks and allow 5 working days after turn over the completed living unit for inmate relocations before commencing furniture installation for the next living unit. Living unit working sequence will be determined during the construction period.
- .4 Submittal:
  - .1 Submit to Departmental Representative within 10 working days of Award of Contract, a Bar (GANNT) Chart as Master Plan for planning, monitoring and reporting of construction progress.

- .2 Identify each trade or operation.
- .3 Show dates for delivery of items requiring long lead time.
- .4 Departmental Representative will review schedule and return one copy.
- .5 Re-submit two (2) copies of finalized schedule to Departmental Representative within five (5) working days after return of reviewed preliminary copy.
- .5 Project Scheduling Reporting:
  - .1 Update Project Schedule on bi-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.
- .6 Project Meetings:
  - .1 Discuss Project Schedule at bi-weekly 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 Before submitting first progress claim submit breakdown of Contract price in detail as directed by Departmental Representative and aggregating contract price. After approval by Departmental Representative cost breakdown will be used as basis for progress payments. Use PWGSC standard templates for progress payment applications. Other noncompliance tabulation sheets or cost breakdowns are not acceptable for payment applications.

#### **1.4 SUBMITTAL PROCEDURES**

- .1 Administrative:
  - .1 Submit to Departmental Representative submittal listed for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
  - .2 Work affected by submittal shall not proceed until review is complete.
  - .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
  - .4 Where items or information is not produced in SI Metric units converted values are acceptable.
  - .5 Review submittal 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. Submittal not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
  - .6 Notify Departmental Representative in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
  - .7 Verify field measurements and affected adjacent Work are coordinated.

- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative review of submittal.
- .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.
- .2 Shop Drawings:
  - .1 Drawings to be originals prepared by Contractor, Subcontractor, Supplier or Distributor, which illustrate appropriate portion of work; showing fabrication, layout, setting or erection details as specified in appropriate sections.
- .3 Product Data:
  - .1 Certain specification Sections specify that manufacturer's standard schematic drawings, catalogue sheets, diagrams, schedules, performance charts, illustrations and other standard descriptive data will be accepted in lieu of shop drawings, provided that the product concerned is clearly identified. Submit in sets, not as individual submissions.
- .4 Samples:
  - .1 Submit samples in sizes and quantities specified.
  - .2 Where colour is criterion, submit full range of colours.
  - .3 Submit all samples as soon as possible after the contract is awarded, to facilitate production of complete colour scheme by the Departmental Representative.
- .5 Mock-ups:
  - .1 Prepare mock-ups for Work specifically requested in specifications. Include for Work of all Sections required to provide mock-ups.
  - .2 Construct in location as specified in specific Section.
  - .3 Prepare mock-ups for Departmental Representative' review with reasonable promptness and in an orderly sequence, so as not to cause any delay in Work.
  - .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
  - .5 Specification section identifies whether mock-up may remain as part of Work or if it is to be removed and when.
- .6 Progress Photographs:
  - .1 Provide construction photographs in accordance with procedures and submission requirements specified in this clause.
  - .2 Progress Photographs:
    - .1 Provide digital photographs with images of minimum 3.1 mega pixel resolution and stored in Jpeg format with minimal compression.
    - .2 Number of viewpoints: four (4), locations of viewpoints directed by Departmental Representative.
    - .3 Frequency: monthly, submitted on disk with monthly progress statement, sent via e-mail or as directed by Departmental Representative.
    - .4 Identify photos by location, date and sequential numbering system.



- .3 Final Photographs:
  - .1 Provide digital photographs with images of minimum 3.1 mega pixel resolution and stored in Jpeg format with minimal compression. Where photos are e-mailed compression can be increased.
  - .2 Number of viewpoints:
    - .1 Interior of rooms and finishes for a total of 8.
    - .2 Locations of viewpoints determined by Departmental Representative.
  - .3 Submit final photographs in digital format on CD, before final acceptance of building.
  - .4 Label disks and identify with name and project number of project. Indicate exposure dates and viewpoints of each photo and photo number.
- .7 Submission Requirements:
  - .1 Schedule submissions at least ten days before dates reviewed submissions will be needed.
  - .2 Submit number of copies of product data, shop drawings which Contractor requires for distribution plus four (4) copies which will be retained by Departmental Representative.
  - .3 Accompany submissions with transmittal letter in duplicate.
  - .4 Submit bond copies (hard copy) as directed by Departmental Representative.
- .8 Coordination of Submissions:
  - .1 Review shop drawings, product data and samples prior to submission.
  - .2 Coordinate with field construction criteria.
  - .3 Verify catalogue numbers and similar data.
  - .4 Coordinate each submittal with requirements of the work of all trades and contract documents.
  - .5 Responsibility for errors and omissions in submittal is not relieved by Departmental Representative's review of submittal.
  - .6 Responsibility for deviations in submittal from requirements of Contract documents is not relieved by Departmental Representative's review of submittal, unless Departmental Representative gives written acceptance of specified deviations.
  - .7 Notify Departmental Representative, in writing at time of submission, of deviations in submittal from requirements of Contract documents.
  - .8 Make any changes in submissions which Departmental Representative may require consistent with Contract Documents and re-submit as directed by Departmental Representative.
  - .9 After Departmental Representative's review, distribute copies.
  - .10 Shop Drawings Review:
    - .1 Review of shop drawings by Public Works and Government Services Canada (PWGSC) is for the sole purpose of ascertaining conformance with the general concept.

- .2 The Departmental Representative's review does not mean that PWGSC approves the detail design inherent in the shop drawings, responsibility remains with the contractor submitting same, and such review will not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the construction and contract documents.
- .3 Without restricting the generality of the foregoing, the Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation, and for co-ordination of the work of all subtrades.

#### **1.5 HEALTH AND SAFETY**

- .1 Specified in Section 01 35 33.

#### **1.6 ENVIRONMENTAL PROCEDURES**

- .1 Fires and burning of rubbish on site not permitted.
- .2 Do not bury rubbish and waste materials on site unless approved by Departmental Representative.
- .3 Do not dispose of waste or volatile materials such as oil, paint thinner or mineral spirits into waterways, storm or sanitary systems.
- .4 Control disposal of run-off of water containing suspended materials or other harmful substances in accordance with local authority requirements. Construct settlement ponds and silt fences as required by the Provincial Environmental authority.
- .5 Cover or wet down dry materials and rubbish to prevent blowing dust and debris.
- .6 Under no circumstances dispose of rubbish or waste materials on adjoining property.

#### **1.7 REGULATORY REQUIREMENTS**

- .1 References and Codes:
  - .1 Perform Work in accordance with National Building Code of Canada (NBCC2015) and where applicable British Columbia Building Code (BCBC2012) including all amendments up to bid closing date and other codes of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
- .2 Meet or exceed requirements of:
  - .1 Contract documents.
  - .2 Specified standards, codes and referenced documents.

#### **1.8 QUALITY CONTROL**

- .1 Inspection:
  - .1 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative instructions, or law of Place of Work.

- .2 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.
- .3 Departmental Representative may order any 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 such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Departmental Representative shall pay cost of examination and replacement.
- .2 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 and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay 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.
- .3 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.
- .4 Reports:
  - .1 Submit (4) four copies of inspection and test reports to Departmental Representative.
- .5 Mock-ups:
  - .1 Prepare mock-ups for Work specifically requested in specifications. Include for Work of all Sections required to provide mock-ups.
  - .2 Construct in locations acceptable to Departmental Representative and as specified in specific Section.
  - .3 Prepare mock-ups for Departmental Representative review with reasonable promptness and in an orderly sequence, so as not to cause any delay in Work.
  - .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for an 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 a 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.
  - .7 **Complete one standard cell and one barrier –free cell furniture replacement, including demolition and installation of new furniture as mock-up before proceeding with constructions on other cells described within the tender**

documents. Mock-up may remain as part of Work if accepted by Departmental Representative.

#### 1.9 TEMPORARY UTILITIES

- .1 Installation and Removal:
  - .1 Provide temporary utilities controls in order to execute work expeditiously.
  - .2 Remove from site all such work after use.
- .2 Temporary Power and Light:
  - .1 Existing electrical power and lighting may be used for construction purposes at no extra cost, provided that guarantees are not affected thereby and electrical components used for construction are replaced when damaged.
- .3 Temporary Communication Facilities:
  - .1 Provide and pay for temporary telephone and fax hook up, line(s) necessary for own use.
- .4 Fire Protection:
  - .1 Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.

#### 1.10 CONSTRUCTION FACILITIES

- .1 Installation and Removal:
  - .1 Provide construction facilities in order to execute work expeditiously.
  - .2 Remove from site all such work after use.
- .2 Scaffolding:
  - .1 Design, construct and maintain scaffolding in rigid, secure and safe manner, in accordance with WorkSafeBC regulations and Section 01 35 33.
  - .2 Erect scaffolding independent of walls. Remove promptly when no longer required.
- .3 Hoisting:
  - .1 Provide, operate and maintain hoists required for moving of workers, materials and equipment. Make financial arrangements with Subcontractors for use thereof.
  - .2 Hoists to be operated by qualified operator.
- .4 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 a weight or force that will endanger the Work.
- .5 Construction Parking:
  - .1 Make good damage to existing roads used for access to project site.
  - .2 Build and maintain temporary access where required and provide snow removal during period of Work.

- .3 Park vehicles outside perimeter fence in designated parking areas.
- .6 Contractor's Site Office and enclosure:
  - .1 Provide temporary office to accommodate Contractor's operations.
  - .2 Provide a clearly marked and fully stocked first-aid case in a readily available location.
  - .3 Provide temporary fenced area to enclose site and operations.
- .7 Equipment, Tools and Material Storage:
  - .1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
  - .2 Locate materials not required to be stored in weatherproof sheds on site in a manner to cause least interference with work activities.
- .8 Sanitary Facilities:
  - .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
  - .2 Do not use existing CSC sanitary facilities without approval of Departmental Representative.

#### **1.11 TEMPORARY BARRIERS AND ENCLOSURES**

- .1 Hoarding:
  - .1 Erect temporary site enclosure using new 1.8 m high temporary construction fencing. Provide lockable truck gate. Maintain fence in good condition.
- .2 Enclosure of Structure:
  - .1 Provide temporary enclosures to secure building from entry of unauthorized personnel during construction period.
- .3 Guardrails:
  - .1 Provide as required by governing authorities.
- .4 Access to Site:
  - .1 Maintain immediate local access roads in clean condition used during work of this contract.
- .5 Protection for Off-Site and CSC Property:
  - .1 Protect surrounding CSC property from damage during performance of Work.
  - .2 Be responsible for damage incurred.
- .6 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 Be responsible for damage incurred due to lack of or improper protection.

## **1.12 COMMON PRODUCT REQUIREMENTS**

- .1 Reference Standards:
  - .1 If there is question as to whether any product or system is in conformance with applicable standards, Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
  - .2 Cost for such testing will be born by Departmental Representative in event of conformance with Contract Documents or by Contractor in event of non-conformance.
  - .3 Conform to latest date of issue of referenced standards in effect on date of submission of Bids, except where specific date or issue is specifically noted.
- .2 Quality:
  - .1 Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in Work shall be new, not damaged or defective, and of best quality (compatible with specifications) for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
  - .2 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.
  - .3 Should any dispute arise as to quality or fitness of products, decision rests strictly with Departmental Representative based upon requirements of Contract Documents.
  - .4 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
  - .5 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.
  - .6 The use of asbestos containing materials is prohibited in this project. Contractor shall provide a letter to the Departmental Representative prior to Substantial Completion confirming that asbestos containing materials are not used in this project.
- .3 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 sheet materials 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, not including pre-purchased furniture from Departmental Representative, at own expense.
- .9 Touch-up damaged factory finished surfaces to Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over name plates.
- .4 Transportation:
  - .1 Pay costs of transportation of products required in performance of Work.
  - .2 The pre-purchased furniture will be paid and delivered to the temporary storage area in Matsqui Institution as identified on Appendix C. Contractor is responsible to transport furniture from Matsqui Institution to Mission Institution laydown area for installation. Contractor shall only move furniture which can be installed in a day.
  - .3 Constructor shall pay for transportation of the removed furniture to a disposal / recycle facility.
- .5 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 may 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.
- .6 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.
- .7 Co-ordination:
  - .1 Ensure cooperation of workers in laying out Work. Maintain efficient and continuous supervision.
- 8 Concealment:
  - .1 Before installation, inform Departmental Representative if there is interference. Install as directed by Departmental Representative.
- .9 Remedial Work:
  - .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Coordinate adjacent affected Work as required.

- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner neither to damage nor to put at risk any portion of Work.
- .10 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.
  - .3 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.
- .11 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 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 any 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.
  - .7 Where exposed fasteners are required to secure components, use “Tamper Resist TORX Plus screws (5 lobe design)” manufactured by Camcar, Textron of Rockford, Illinois.
- .12 Fastenings - Furniture:
- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service per furniture supplier recommendations.
  - .2 Use heavy hexagon heads, semi-finished unless otherwise specified.
  - .3 Bolts may not project more than one diameter beyond nuts.
  - .4 Use plain type washers on furniture, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.
  - .5 Bolts used for the pre-purchased furniture shall fit into the pre-drilled bolt holes (11 mm in diameter) without modifications on the furniture. Contractor shall verify the pre-purchased furniture in storage before commencing on shop drawings and bolt anchor design.
  - .6 For beds mounted on the same cell demising walls (same location on both sides of the walls), use through wall bolts to align and connect two beds together.
  - .7 The previous installed connection for wall mounted bed was done with Hilti HW 20, Hilti HY 150 Max, Hilti Hit Rods and Sika Anchor Fix-4CA for infill cap with security sealant at exposed surfaces. Apply spot weld for bolt and nut joint for security.



- .8 Contractor shall submit mounting detail shop drawings for the pre-purchased furniture for Departmental Representative approval before Mock Up installation. Shop drawings of furniture mounting details shall be signed and sealed by a B.C. Registered Professional Engineer.
- .9 All pre-purchased furniture bolt anchor designs shall be executed under direct supervision of a B.C. Registered Professional Engineer who shall provide signed and sealed B-1, B-2 and C-B Letters Of Assurance according to Chief Fire Protection Engineer Technical Service Branch, Correctional Service Canada, before substantial completion.
- .13 Protection of Work in Progress:
  - .1 Prevent overloading of any part of building. Do not cut, drill or sleeve any load bearing structural member, unless specifically indicated without written approval of Departmental Representative.
- .14 Existing Utilities:
  - .1 Where work involves breaking into or connecting to existing services, carry out work at times directed by governing authorities, with minimum of disturbance to pedestrian and vehicular traffic.
  - .2 Before commencing work, establish location and extent of service lines in areas of work and notify Departmental Representative of findings.
  - .3 Submit schedule to and obtain approval from Departmental Representative for any shut-down or closure of active service or facility. Adhere to approved schedule and provide notice to affected parties.
  - .4 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
  - .5 Record locations of maintained, capped and re-routed services lines.
- .15 Contractors Options for Selection of Products:
  - .1 Products specified by "**Prescriptive**" specifications: select any product meeting or exceeding specifications.
  - .2 Products specified under "**Acceptable Products**": select any one of the indicated manufacturers, or any other manufacturer meeting or exceeding the Prescriptive specifications and indicated Products.
  - .3 Products specified by performance and referenced standard: select any product meeting or exceeding the referenced standard.
  - .4 Products specified to meet particular design requirements or to match existing materials: use only material specified Approved Product. Alternative products may be considered provided full technical data is received in writing by Departmental Representative in accordance with "Instructions to Bidders".
  - .5 When products are specified by a referenced standard or by Performance specifications, upon request of Departmental Representative, obtain from manufacturer an independent laboratory report showing that the product meets or exceeds the specified requirements.
- .16 Substitution after award of Contract:
  - .1 No substitutions are permitted without prior written approval of the Departmental Representative.

- .2 Proposals for substitution may only be submitted after Contract award. Such request must include statements of respective costs of items originally specified and the proposed substitution.
- .3 Proposals will be considered by the Departmental Representative if:
  - .1 products selected by tenderer from those specified are not available;
  - .2 delivery date of products selected from those specified would unduly delay completion of Contract, or
  - .3 alternative product to that specified, which is brought to the attention of and considered by Departmental Representative as equivalent to the product specified, and will result in a credit to the Contract amount.
- .4 Should the proposed substitution be accepted either in part or in whole, assume full responsibility and costs when substitution affects other work on the project. Pay for design or drawing changes required as result of substitution.
- .5 Amounts of all credits arising from approval of the substitutions will be determined by the Departmental Representative, and the Contract price will be reduced accordingly.

#### **1.13 EXAMINATION AND PREPARATION**

- .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 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.

#### **1.14 EXECUTION REQUIREMENTS**

- .1 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.
- .2 Execution:
  - .1 Execute cutting, fitting, and patching to complete Work.
  - .2 Fit several parts together, to integrate with other Work.
  - .3 Remove and replace defective and non-conforming Work.

- .4 Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- .5 Cut rigid materials using purpose made saw or core drill. Pneumatic or impact tools not allowed on brittle materials without prior approval.
- .6 Restore work with new products in accordance with requirements of Contract Documents.

### **1.15 CLEANING**

- .1 Project Cleanliness:
  - .1 Maintain Work in tidy condition, free from accumulation of waste products and debris.
  - .2 Remove waste materials from site at regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site, unless approved by Departmental Representative.
  - .3 Clear snow and ice from access to building.
  - .4 Provide on-site containers for collection of waste materials and debris.
  - .5 Provide and use clearly marked separate bins for recycling. Refer to Construction/Demolition Waste Management And Disposal.
  - .6 Clean interior areas prior to start of finish work, and maintain areas free of dust and other contaminants during finishing operations.
  - .7 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
  - .8 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
  - .9 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
  - .10 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
- .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. Clean and polish mirrors and installed furniture. Replace broken, scratched or disfigured products.
  - .5 Remove stains, spots, marks and dirt from installed furniture.
  - .6 Vacuum clean and dust building interiors.
  - .7 Inspect installed furniture and ensure specified workmanship and operation.

- .8 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .9 Remove dirt and other disfiguration from exterior surfaces.
- .10 Sweep and wash clean paved areas.
- .11 Remove snow and ice from access to building.

**1.16 CONSTRUCTION/DEMOLITION WASTE MANAGEMENT AND DISPOSAL**

- .1 Provide on-site facilities for collection, handling, and storage of anticipated quantities of reusable and/or recyclable materials and waste.
  - .1 Separate non-salvageable materials from salvaged items.
  - .2 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.
  - .3 Transport and deliver non-salvageable items to licensed disposal facility.
- .2 Provide containers to deposit reusable and/or recyclable materials. Locate containers in locations, to facilitate deposit of materials without hindering daily operations. Provide containers to deposit reusable and/or recyclable materials.
- .3 Collect, handle, store on-site and transport off-site, salvaged materials in separate condition. Transport to approved and authorized recycling facility and/or users of material for recycling.
- .4 Locate waste and salvage storage bins on site beside the PSPC office as directed by Departmental Representative.

**1.17 CLOSEOUT PROCEDURES**

- .1 Inspection and Declaration:
  - .1 Contractor's Inspection: Conduct an inspection of Work with all subcontractors, 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 and that corrections have been made.
  - .3 Request Departmental Representative's Inspection.
- .2 Inspection: Departmental Representative and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
- .3 Substantial Completion: submit written certificate that following have been performed:
  - .1 Work has been completed and inspected for compliance with Contract Documents.
  - .2 Defects have been corrected and deficiencies have been completed.
  - .3 Equipment and systems have been tested, adjusted and balanced and are fully operational.
  - .4 Apply touch-up paint for scratches and damaged area for all pre-purchased furniture. Paint will be supplied by Departmental Representative.
  - .5 Work is complete and ready for Final Inspection.
  - .6 Asbestos containing materials are not used in this project.

- .4 Final Inspection: when items noted above are completed, request final inspection of Work by Departmental Representative. If Work is deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.

### **1.18 CLOSEOUT SUBMITTAL**

- .1 Record Drawings:
  - .1 As work progresses, maintain accurate records to show all deviations from the Contract Drawings. Note on as-built drawings as changes occur. At completion supply:
    - .1 Four (4) sets of CD's in AutoCad file format (version: 2010) and PDF format with all as-built information on the diskettes.
    - .2 Four (4) sets of printed as-built drawings.
    - .3 Submit one copy of check plots to Departmental Representative prior to final printing of as-built drawings.
    - .4 Departmental Representative will supply copies of the original AutoCad files.
    - .5 Retain original logo and title block on the as-built drawings. Contractor may place on the upper right-hand title block area a small company logo, the text "AS-BUILT" and the date.
  - .2 Costs for transferring as-built information from marked up working set of drawings to electronic format using ACAD and plotting service is included in the Contract.
- .2 Operation and Maintenance Manuals:
  - .1 On completion of project submit to Departmental Representative four (4) CD R/disk copies and four (4) paper copies (in loose leaf type binder) of Operation and Maintenance Manual, made up as follows:
    - .1 Provide maintenance manual on CDs using pdf, or other approved format for descriptive writing, page size images and page size drawings. Organize manuals into industry standard maintenance manual tabs with links in index to each descriptive section describing the component or maintenance procedure etc.
    - .2 Organize files into CSI Masterformat numbering system or other approved descriptive titles.
    - .3 Label disk "Operation and Maintenance Data", project name, date, names of Contractor, subcontractors, consultants and subconsultants.
    - .4 Include scanned guarantees, diagrams and drawings.
    - .5 Organize contents into applicable sections of work to parallel project specification break-down. Mark each section by labeled tabs (navigational buttons).
    - .6 Drawings, diagrams and manufacturer's literature must be legible.
- .3 Maintenance Materials, Special Tools and Spare Parts:
  - .1 Specific requirements for maintenance materials, tools and spare parts are specified in individual sections.

- .2 Deliver maintenance materials, special tools and spare parts to Departmental Representative and store in designated area as directed by Departmental Representative.
- .3 Maintenance materials:
  - .1 Deliver wrapped, identify on carton or package, colour, room number, system or area as applicable where item is used.
- .4 Special tools:
  - .1 Assemble as specified;
  - .2 Include identifications and instructions on intended use of tools.
- .5 Spare parts:
  - .1 Assemble parts as specified;
  - .2 Include part number, identification of equipment or system for which parts are applicable;
  - .3 Installation instructions;
  - .4 Name and address of nearest supplier.
- .4 Warranties and Bonds:
  - .1 Separate each warranty with index tab sheets keyed to Table of Contents listing in maintenance manual.
  - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
  - .3 Obtain warranties, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work.
  - .4 Except for items put into use with Departmental Representative's permission, leave date of beginning of time of warranty until the Date of Interim Completion is determined.
  - .5 Verify that documents are in proper form, contain full information.
  - .6 Retain warranties until time specified for submittal.

#### **1.19 DEMONSTRATION AND TRAINING**

- .1 Demonstration and Training:
  - .1 Demonstrate operation and maintenance of furniture to maintenance personnel following interim Completion and prior to date of final certificate of completion
- .2 Departmental Representative will provide list of personnel to receive instructions, and will coordinate their attendance at agreed-upon times.

**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.

### **1.2 Purpose**

- .1 "Contraband" means:
  - .1 an intoxicant, including alcoholic beverages, drugs and narcotics
  - .2 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,
  - .3 an explosive or a bomb or a component thereof,
  - .4 currency over any applicable prescribed limit, \$25.00, and
  - .5 any item not described in paragraphs (a) to (d) 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 article 1.15 herein the section 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 or Warden of the Institution as applicable or their representative.
- .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 Public Works and Government Services Canada representative defined in General Conditions.
- .8 "Perimeter" means the fenced or walled area of the institution that restrains the movement of the inmates.
- .9 "Construction zone" means the area, as indicated in the contract documents, that the contractor will be allowed to work". This area may or may not be isolated from the security area of the institution. Limits to be confirmed at construction start-up meeting.

### **1.3 Preliminary Proceedings**

- .1 At construction start-up meeting:
  - .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 The Contractors' responsibilities:
  - .1 Ensure that all construction employees are aware of the CSC security requirements.
  - .2 Ensure that a copy of the CSC 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 CPIC form and scanned copy of government issued ID for each employee to the Departmental Representative.
- .2 Allow 10 working days for processing of security clearances. Employees will not be admitted to the Institution without a valid security clearance in place and a recent picture identification such as a provincial driver's license. Security clearances obtained from other CSC institutions are not valid at this institution except as approved otherwise.
- .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 workers. 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 employees are at 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.

#### **1.5 Vehicles**

- .1 All unattended vehicles on CSC property must have windows closed; fuel caps locked, doors and trunks locked and keys removed. The keys must 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 require security clearances and 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 PWGSC Construction Escorts while in the Institution.
- .4 If the Director permits trailers to be left inside the secure perimeter of the Institution, the trailer doors must be locked at all times. All windows must be securely locked bars when left unoccupied. Cover all windows with expanded metal mesh. When not in use lock all storage trailers located inside and outside the perimeter. All storage trailers inside and outside the perimeter must be locked when not in use.



**1.6 Parking**

- .1 The 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 To avoid confusion with the institution's own shipments, address all shipments of project material, equipment and tools in the Contractor's name and have a representative on site to receive any deliveries or shipments. CSC or PWGSC staff will **NOT** accept receipt of deliveries or shipments of any material equipment or tools for the contractor.

**1.8 Telephones**

- .1 The installation of telephones, facsimile machines and computers with Internet connections is not permitted within the Institution perimeter unless prior approved by the Director.
- .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, Blackberries, PDAs, 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 2-way radios.

**1.9 Work Hours**

- .1 Work hours within the Institution are: conform to Division.
- .2 Work is not 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 waved by the Director.

**1.10 Overtime Work**

- .1 Conform to Section 01 01 50.
- .2 Provide 48 hours advance notice to Director for all work to be performed after normal working hours of the Institution. Notify Director immediately if emergency work is required, such as to complete a concrete pour or make the construction site safe and secure.

**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 by the Institution.
- .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. Secure and lock scaffolding when not erected and when erected Secure in a manner agreed upon with the Institution designate.
- .6 Report all missing or lost tools or equipment immediately to the Departmental Representative/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 work day or shift upon entering and exiting the Institution.
  - .2 At any time when contractor is on Institution property.
- .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. Maintain up to date inventory of all used blades/cartridges.
- .9 If propane or natural gas is used for heating the construction, the institution will require that the contractor supervise the construction site during non-working hours.

#### **1.12 Keys**

- .1 Security Hardware Keys.
  - .1 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 SMO will provide a receipt to the Contractor for security hardware keys.
  - .3 Provide a copy of the receipt to the Departmental Representative.
- .2 Other Keys
  - .1 Use standard construction cylinders for locks for his use during the construction period.
  - .2 Issue instructions to 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.
- .4 Upon putting operational security keys into use, the PWGSC construction escort will obtain these keys as they are required from the SMO and open doors as required by the

Contractor. The Contractor shall issue instructions to his employees advising them that all security keys shall always remain with the PWGSC 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 Smoking is not permitted inside correctional facilities or outdoors within the perimeter of a correctional facility and persons must not possess unauthorized smoking items within the perimeter of a correctional facility.
- .2 Persons 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 permitted outside the perimeter of a correctional facility in an area designated by the Director.

**1.16 Contraband**

- .1 Weapons, ammunition, explosives, alcoholic beverages, drugs and narcotics are prohibited on institutional property.
- .2 The 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 should 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, he 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 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 Vehicles**

- .1 Construction vehicles are not to leave the Institution until an inmate count is completed. Escorted commercial vehicles will be allowed to enter or leave the institution through the vehicle access gate during the following hours:
  - .1 AM: 0745 hrs. to 1100 hrs.
  - .2 PM: 1300hrs. to 1530 hrs.
- .2 The contractor will advise the Director twenty four (24) hours in advance to the arrival on the site of heavy equipment such as concrete trucks, cranes, etc.
- .3 Vehicles being loaded with soil or other debris, or any vehicle considered impossible to search, must be under continuous supervision by CSC staff or PWGSC construction escorts working under the authority of the Director.
- .4 Commercial vehicles will only be allowed access to institutional property when their contents are certified by the Contractor or his representative as being strictly necessary to the execution of the construction project.
- .5 Vehicles will 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. Arrange with Director for parking of contractor's vehicles at minimum security Institutions.
- .6 Private vehicles of construction employees will not be allowed within the security wall or fence of medium or maximum security institutions without the authorization of the Director.
- .7 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 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 or PWGSC Construction Escort Officer.
- .3 During the lunch and coffee/health breaks, all construction employees will remain within the construction site. Construction employees are not permitted to eat in the Institution cafeteria 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 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 will note the name of the staff member giving the instruction, the time of the request and obey the order as quickly as possible.
- .2 The contractor shall advise the Departmental Representative of this interruption of the work within 24 hours.

**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 security clearance revoked.
- .2 Digital cameras (or any other type) are not allowed on CSC property.
- .3 Notwithstanding the above paragraph, if the director approves of the use of cameras, it is strictly 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**



## **PART 1 - GENERAL**

### **1.1 References**

- .1 Government of Canada.
  - .1 Canada Labour Code - Part II
  - .2 Canada Occupational Health and Safety Regulations.
- .2 National Building Code of Canada (NBC 2015):
  - .1 Part 8, Safety Measures at Construction and Demolition Sites.
- .3 The Canadian Electric Code (as amended)
- .4 Canadian Standards Association (CSA) as amended:
  - .1 CSA Z797-2009 Code of Practice for Access Scaffold
  - .2 CSA S269.1-1975 (R2003) Falsework for Construction Purposes
  - .3 CSA S350-M1980 (R2003) Code of Practice for Safety in Demolition of Structures
  - .4 CSA Z1006-10 Management of Work in Confined Spaces.
  - .5 CSA Z462- Workplace Electrical Safety Standard
- .5 National Fire Code of Canada 2015 (as amended)
  - .1 Part 5 – Hazardous Processes and Operations and Division B as applicable and required.
- .6 American National Standards Institute (ANSI):
  - .1 ANSI A10.3, Operations – Safety Requirements for Powder-Actuated Fastening Systems.
- .7 Province of British Columbia:
  - .1 Workers Compensation Act Part 3-Occupational Health and Safety.
  - .2 Occupational Health and Safety Regulation

### **1.2 Related Sections**

- .1 Refer to the following current NMS sections as required:
  - .1 Section 01 01 50 General Instructions

### **1.3 Workers' Compensation Board Coverage**

- .1 Comply fully with the Workers' Compensation Act, regulations and orders made pursuant thereto, and any amendments up to the completion of the work.
- .2 Maintain Workers' Compensation Board coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

### **1.4 Compliance with Regulations**

- .1 PWGSC may terminate the Contract without liability to PWGSC where the Contractor, in the opinion of PWGSC, refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- .2 It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.

### **1.5 Submittals**

- .1 Submit to Departmental Representative submittals listed for review in accordance with Section 01 01 50.
- .2 Work effected by submittal shall not proceed until review is complete.
- .3 Submit the following:
  - .1 Health and Safety Plan.
  - .2 Copies of reports or directions issued by Federal and Provincial health and safety inspectors.
  - .3 Copies of incident and accident reports.
  - .4 Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS) requirements.
  - .5 Emergency Procedures.
- .4 The Departmental Representative will review the Contractor's site-specific project Health and Safety Plan and emergency procedures, and provide comments to the Contractor within 10 days after receipt of the plan. Revise the plan as appropriate and resubmit to Departmental Representative.
- .5 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.
- .6 Submission of the Health and Safety Plan, and any revised version, to the Departmental Representative is for information and reference purposes only. It shall not:
  - .1 Be construed to imply approval by the Departmental Representative.
  - .2 Be interpreted as a warranty of being complete, accurate and legislatively compliant.
  - .3 Relieve the Contractor of his legal obligations for the provision of health and safety on the project.

### **1.6 Responsibility**

- .1 Assume responsibility as the Prime Contractor for work under this contract.
- .2 Be 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.



- .3 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.

#### **1.7 Health and Safety Coordinator**

- .1 The Health and Safety Coordinator (Registered Occupational Hygienist, Certified Industrial Specified Hygienist) must:
  - .1 Be responsible for completing all health and safety training, and ensuring that personnel that do not successfully complete the required training are not permitted to enter the site to perform work.
  - .2 Be responsible for implementing, daily enforcing, and monitoring the site specific Health and Safety Plan.
  - .3 Be on site during execution of work.

#### **1.8 General Conditions**

- .1 Provide safety barricades and lights around work site as required to provide a safe working environment for workers and protection for pedestrian and vehicular traffic.
- .2 Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the work site.
  - .1 Provide appropriate means by use of barricades, fences, warning signs, traffic control personnel, and temporary lighting as required.
  - .2 Secure site at night time or provide security guard as deemed necessary to protect site against entry.

#### **1.9 Project/Site Conditions**

- .1 Work at site will involve contact with:
  - .1 Multi-employer work site.
  - .2 Federal employees and general public.
  - .3 Energized electrical services.
  - .4 Working from heights
  - .5 Persons incarcerated in the federal institutional system

#### **1.10 Utility Clearances**

- .1 The Contractor is solely responsible for all utility detection and clearances prior to starting the work.
- .2 The Contractor will not rely solely upon the Reference Drawings or other information provided for utility locations.

#### **1.11 Regulatory Requirements**

- .1 Comply with specified codes, acts, bylaws, standards and regulations to ensure safe operations at site.

- .2 In event of conflict between any provision of the above authorities, the most stringent provision will apply. When a dispute arise in determining the most stringent requirement, the Departmental Representative will advise on the course of action to be followed.

#### **1.12 Work Permits**

- .1 Obtain specialty permit related to project before start of work.

#### **1.13 Filing of Notice**

- .1 The General Contractor is to complete and submit a Notice of Project as required by Provincial authorities.
- .2 Provide copies of all notices to the Departmental Representative.

#### **1.14 Site Specific Health and Safety Plan**

- .1 Conduct a site-specific hazard assessment based on review of Contract documents, required work, and project site. Identify any known and potential health risks and safety hazards.
- .2 Prepare and comply with a Site-Specific Health and Safety Plan based on hazard assessment, including, but not limited to, the following:
  - .1 Primary requirements:
    - .1 Contractor's safety policy.
    - .2 Identification of applicable compliance obligations.
    - .3 Definition of responsibilities for project safety/organization chart for project.
    - .4 General safety rules for project.
    - .5 Job-specific safe work, procedures.
    - .6 Inspection policy and procedures.
    - .7 Incident reporting and investigation policy and procedures.
    - .8 Occupational Health and Safety Committee/Representative procedures.
    - .9 Occupational Health and Safety meetings.
    - .10 Occupational Health and Safety communications and record keeping procedures.
  - .2 Summary of health risks and safety hazards resulting from analysis of hazard assessment, with respect to site tasks and operations which must be performed as part of the work.
  - .3 List hazardous materials to be brought on site as required by work.
  - .4 Indicate Engineering and administrative control measures to be implemented at the site for managing identified risks and hazards.
  - .5 Identify personal protective equipment (PPE) to be used by workers.
  - .6 Identify personnel and alternates responsible for site safety and health.
  - .7 Identify personnel training requirements and training plan, including site orientation for new workers.

- .3 Develop the plan in collaboration with all subcontractors. Ensure that work/activities of subcontractors are included in the hazard assessment and are reflected in the plan.
- .4 Revise and update Health and Safety Plan as required, and re-submit to the Departmental Representative.
- .5 Departmental Representative's review: the review of Health and Safety Plan by Public Works and Government Services Canada (PWGSC) shall not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of construction and Contract documents.

### **1.15 Emergency Procedures**

- .1 List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contacts (i.e. names/telephone numbers) of:
  - .1 Designated personnel from own company.
  - .2 Regulatory agencies applicable to work and as per legislated regulations.
  - .3 Local emergency resources.
  - .4 Departmental Representative.
- .2 Include the following provisions in the emergency procedures:
  - .1 Notify workers and the first-aid attendant, of the nature and location of the emergency.
  - .2 Evacuate all workers safely.
  - .3 Check and confirm the safe evacuation of all workers.
  - .4 Notify the fire department or other emergency responders.
  - .5 Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
  - .6 Notify Departmental Representative.
- .3 Provide written rescue/evacuation procedures as required for, but not limited to:
  - .1 Work at high angles.
  - .2 Work in confined spaces or where there is a risk of entrapment.
  - .3 Work with hazardous substances.
  - .4 Underground work.
  - .5 Work on, over, under and adjacent to water.
  - .6 Workplaces where there are persons who require physical assistance to be moved.
- .4 Design and mark emergency exit routes to provide quick and unimpeded exit.
- .5 Revise and update emergency procedures as required, and re-submit to the Departmental Representative.

### **1.16 Hazardous Products**

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials, and

regarding labeling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canada Labour Code.

- .2 Where use of hazardous and toxic products cannot be avoided:
  - .1 Advise Departmental Representative beforehand of the product(s) intended for use. Submit applicable MSDS and WHMIS documents as per Section 01 01 50.
  - .2 In conjunction with Departmental Representative, schedule to carry out work during "off hours" when tenants have left the building.
  - .3 Provide adequate means of ventilation in accordance with Section 01 51 00.
  - .4 The contractor shall ensure that the product is applied as per manufacturers recommendations.
  - .5 The contractor shall ensure that only pre-approved products are brought onto the work site in an adequate quantity to complete the work.

#### **1.17 Asbestos Hazard**

- .1 Carry out any activities involving asbestos in accordance with applicable Provincial Regulations.
- .2 Removal and handling of asbestos will be performed as indicated in Division 2 specifications.

#### **1.18 PCB Removals**

- .1 Mercury-containing fluorescent tubes and ballasts which contain polychlorinated biphenyls (PCBs) are classified as hazardous waste.
- .2 Remove, handle, transport and dispose of as indicated in Division 2 specifications.

#### **1.19 Removal of Lead-Containing Paint**

- .1 All paints containing TCLP lead concentrations above 5 ppm are classified as hazardous.
- .2 Carry out demolition activities involving lead-containing paints in accordance with applicable provincial regulations.
- .3 Work with lead containing paints shall be completed as per provincial and federal regulations.

#### **1.20 Electrical Safety Requirements**

- .1 Comply with authorities and ensure that, when installing new facilities or modifying existing facilities, all electrical personnel are completely familiar with existing and new electrical circuits and equipment and their operation.
  - .1 Before undertaking any work, coordinate required energizing and de-energizing of new and existing circuits with Departmental Representative.
  - .2 Maintain electrical safety procedures and take necessary precautions to ensure safety of all personnel working under this Contract, as well as safety of other personnel on site.

**1.21 Electrical Lockout**

- .1 Develop, implement and enforce use of established procedures to provide electrical lockout and to ensure the health and safety of workers for every event where work must be done on any electrical circuit or facility.
- .2 Prepare the lockout procedures in writing, listing step-by-step processes to be followed by workers, including how to prepare and issue the request/authorization form. Have procedures available for review upon request by the Departmental Representative.
- .3 Keep the documents and lockout tags at the site and list in a log book for the full duration of the Contract. Upon request, make such data available for viewing by Departmental Representative or by any authorized safety representative.

**1.22 Overloading**

- .1 Ensure no part of work is subjected to a load which will endanger its safety or will cause permanent deformation.

**1.23 Falsework**

- .1 Design and construct falsework in accordance with CSA S269.1-1975 (R2003).

**1.24 Scaffolding**

- .1 Design, construct and maintain scaffolding in a rigid, secure and safe manner, in accordance with CSA Z797-2009 Code of Practice for Access Scaffold and BC Occupational Health and Safety Regulations.

**1.25 Confined Spaces**

- .1 Carry out work in confined spaces in compliance with Provincial regulations.

**1.26 Power-Actuated Devices**

- .1 Use powder-actuated devices in accordance with ANSI A10.3 only after receipt of written permission from the Departmental Representative.

**1.27 Fire Safety and Hot Work**

- .1 Obtain Departmental Representative's authorization before any welding, cutting or any other hot work operations can be carried out on site.
- .2 Hot work includes cutting/melting with use of torch, flame heating roofing kettles, or other open flame devices and grinding with equipment which produces sparks.

**1.28 Fire Safety Requirements**

- .1 Store oily/paint-soaked rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
- .2 Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.
- .3 Portable gas and diesel fuel tanks are not permitted on most federal work sites. Approval from the Departmental Representative is required prior to any gas or diesel tank being brought onto the work site.

**1.29 Fire Protection and Alarm System**

- .1 Fire protection and alarm systems shall not be:
  - .1 Obstructed.
  - .2 Shut off.
  - .3 Left inactive at the end of a working day or shift.
- .2 Do not use fire hydrants, standpipes and hose systems for purposes other than firefighting.
- .3 Be responsible/liable for costs incurred from the fire department, the building owner and the tenants, resulting from false alarms.

**1.30 Unforeseen Hazards**

- .1 Should any unforeseen or peculiar safety-related factor, hazard or condition become evident during performance of the work, immediately stop work and advise the Departmental Representative verbally and in writing.

**1.31 Posted Documents**

- .1 Post legible versions of the following documents on site:
  - .1 Health and Safety Plan.
  - .2 Sequence of work.
  - .3 Emergency procedures.
  - .4 Site drawing showing project layout, locations of the first-aid station, evacuation route and marshalling station, and the emergency transportation provisions.
  - .5 Notice of Project.
  - .6 Floor plans or site plans. Must be posted in a non-inmate access area and locked up when not being used.
  - .7 Notice as to where a copy of the Workers' Compensation Act and Regulations are available on the work site for review by employees and workers.
  - .8 Workplace Hazardous Materials Information System (WHMIS) documents.
  - .9 Material Safety Data Sheets (MSDS).
  - .10 List of names of Joint Health and Safety Committee members, or Health and Safety Representative, as applicable.
- .2 Post all Material Safety Data Sheets (MSDS) on site, in a common area, visible to all workers and in locations accessible to tenants when work of this Contract includes construction activities adjacent to occupied areas.
- .3 Postings should be protected from the weather, and visible from the street or the exterior of the principal construction site shelter provided for workers and equipment, or as approved by the Departmental Representative.

**1.32 Meetings**

- .1 Attend health and safety pre-construction meeting and all subsequent meetings called by the Departmental Representative.

**1.33 Correction of Non-Compliance**

- .1 Immediately address health and safety non-compliance issues identified by the Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance with health and safety issues identified.
- .3 The Departmental Representative may issue a "stop work order" if non-compliance of health and safety regulations is not corrected immediately or within posted time. The General Contractor/subcontractors will be responsible for any costs arising from such a "stop work order".

**PART 2 - PRODUCTS**

**2.1 Not Used**

**PART 3 - EXECUTION**

**3.1 Not Used**

**END OF SECTION**





## **PART 1 GENERAL**

### **1.1 Related Sections**

- .1 Section 01 01 50 General Instructions
- .2 Section 01 35 33 Health and Safety Requirements

### **1.2 References**

- .1 Canadian Standards Association (CSA International)
  - .1 CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures.
- .2 WorksafeBC
  - .1 Safe Handling of Asbestos, A Manual of Standard Practices.

### **1.3 Health and Safety**

- .1 Do construction occupational health and safety in accordance with Section 01 35 33 - Health and Safety Requirements.

### **1.4 Waste Management and Disposal**

- .1 Separate waste materials for reuse and recycling in accordance with 01 01 50 – General Instructions.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Place materials defined as hazardous or toxic in designated containers.
- .4 Handle and dispose of hazardous materials in accordance with CEPA, TDGA, Regional and Municipal regulations.
- .5 Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan
- .6 Fold up metal banding, flatten and place in designated area for recycling.
- .7 Do not dispose of waste or volatile materials such as mineral spirits, oil petroleum based lubricant, or toxic cleaning solutions into storm or sanitary sewers. Ensure proper disposal procedures are maintained throughout project.

### **1.5 Environmental Protection**

- .1 Do not dispose of waste or volatile materials into watercourses, storm or sanitary sewers.
- .2 Prevent extraneous materials from contaminating air beyond deconstruction area, by providing temporary enclosures during Work.
- .3 Employ reasonable means necessary to protect salvaged materials from vandalism, theft, adverse weather, or inadvertent damage.
- .4 Organize site and workers in matter which promotes efficient flow of materials through disassembly, processing, stockpiling, and removal.
- .5 Remove and transport toxic or dangerous materials from site in accordance with authority having jurisdiction.

### **1.5 Site Condition**

- .1 The existing site and buildings will be in use by Institution during work of this Contract. Maintain building access at all doorways and corridors.
- .2 Investigate site and building to determine dismantling, processing and storage logistics required prior to beginning of Work.
- .3 Develop strategy for deconstruction to facilitate optimum salvage of reusable and recyclable materials.
- .4 Notify Departmental Representative before disrupting building access or services.
- .5 Locate any existing conduit, rebar, etc. within floor or walls prior to drilling and/or coring. Contractor is responsible for repairing any such conduit, rebar, etc. that is damaged in the course of construction.
- .6 Take preventative measures during demolition process and do not disturb pipe elbow insulation, duct mastic or other suspicious substance which may contain hazardous materials. Exercise caution when cutting existing duct insulation.

### **1.6 Hazardous Materials**

- .1 Contractors shall expect to encounter Asbestos Containing Materials (ACM) and other hazardous building materials throughout the course of work. Appendix A contains Hazmat Reports relevant to this site and these reports identify ACM and hazardous materials that the Contractors will encounter. If even one surveyed sample of a material at a particular location is identified to be ACM and/or hazardous material, Contractors shall treat this material throughout the rest of the site as "identified" ACM and/or hazardous material. Removal of these identified ACM and hazardous materials that the Contractors will encounter shall be the responsibility of the Contractors.
- .2 Contractor shall prepare and submit a Site Specific Asbestos and Lead Exposure Control Plan to Departmental Representative within ten (10) working days of Award of Contract for review and approval, prior to start of construction. The Site Specific Asbestos and Lead Exposure Control Plan (ECP) shall be prepared by a specialist or a third party company with experience in preparing ECP's, and the Contractors shall implement the approved Site Specific Asbestos and Lead Exposure ECP.
- .3 Submit "Contractor Notification and Acknowledgement" for hazardous materials on site.
- .4 Should other suspected hazardous building substances not identified in the Contract Document be encountered, stop work, take preventative measures, and notify Departmental Representative immediately.
  - .1 Do not proceed until written instructions have been received from Departmental Representative.
  - .2 Removal of ACM and hazardous materials not identified in the Contract Document and Hazmat Reports will be under the control of the Departmental Representative and may be a change order to the contract price in accordance with General Conditions, or removed under a separate contract by the Departmental Representative.

**PART 2 PRODUCTS**

**2.1 Not Used**

- .1 Not used.

**PART 3 EXECUTION**

**3.1 Preparation**

- .1 Inspect site and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.
- .3 Notify and obtain approval of utility companies before starting demolition.

**3.2 Protection**

- .1 Prevent movement, settlement, or damage to adjacent structures, utilities and parts of building to remain in place. Provide bracing and shoring required.
- .2 Keep noise, dust, and inconvenience to occupants to minimum.
- .3 Protect building systems, services and equipment.
- .4 Provide temporary dust screens, covers, railings, supports and other protection as required.
- .5 Do Work in accordance with Section 01 35 33 - Health and Safety Requirements.
- .6 Prevent debris from blocking drainage which must remain in operation.
- .7 Take precaution during demolition to protect all adjacent finished surfaces. Make good any damage to adjacent surfaces.

**3.3 Salvage**

- .1 Refer to demolition drawings and specifications for items to be salvaged for reuse.
- .2 Remove items to be reused and protect items from damage.

**3.4 Disposal**

- .1 Dispose of removed materials, to appropriate recycling facilities except where specified otherwise, in accordance with authority having jurisdiction.
- .2 The Owner reserves the option to request some or all existing equipment being removed and not required to be relocated to remain the property of the Owner. When directed by the Departmental Representative, remove such equipment and turn over to the Owner. Provide receipt verifying disposition of such equipment.

**END OF SECTION**



**Part 1        General**

**1.1            SECTION INCLUDES**

- .1        Materials, preparation and application for caulking and sealants.

**1.2            RELATED SECTIONS**

- .1        Section 01 01 50 – General Instructions
- .2        Section 10 28 10 – Bath Accessories

**1.3            REFERENCES**

- .1        Canadian General Standards Board (CGSB)
  - .1        CAN/CGSB-19.13-M87, Sealing Compound, One-component, Elastomeric, Chemical Curing.
  - .2        CAN/CGSB-19.24-M90, Multi-component, Chemical Curing Sealing Compound.

**1.4            SUBMITTALS**

- .1        Submit product data, samples and manufacturer's instructions in accordance with Section 01 01 50.
- .2        Manufacturer's product to describe.
  - .1        Caulking compound.
  - .2        Primers.
  - .3        Sealing compound, each type, including compatibility when different sealants are in contact with each other.
- .3        Submit duplicate samples of each type of material and colour.
- .4        Cured samples of exposed sealants for each color where required to match adjacent material.

**1.5            QUALITY ASSURANCE/MOCK-UP**

- .1        Construct mock-up in accordance with Section 01 01 50 - Quality Control.
- .2        Construct mock-up to show location, size, shape and depth of joint s complete with back- up material, primer, caulking and sealant.
- .3        Mock-up will be used:
  - .1        To judge workmanship, substrate preparation, operation of equipment and material application.
- .4        Locate where directed.
- .5        Allow 24 hours for inspection of mock-up by Departmental Representative before proceeding with sealant work.

- .6 When accepted, mock-up will demonstrate minimum standard of quality required for this Work. Approved mock-up may remain as part of finished Work.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver, handle, store and protect materials in accordance with Section 01 01 50 - Product Requirements.
- .2 Deliver and store materials in original wrappings and containers with manufacturer's seals and labels, intact. Protect from freezing, moisture, water and contact with ground or floor.

**1.7 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 01 50 - Waste Management and Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard packaging material for recycling in accordance with Waste Management Plan.
- .4 Place materials defined as hazardous or toxic in designated containers.
- .5 Handle and dispose of hazardous materials in accordance with the Regional and Municipal regulations.
- .6 Unused sealant material must not be disposed of into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
- .7 Divert unused joint sealing material from landfill to official hazardous material collections site approved by Departmental Representative.
- .8 Empty plastic joint sealer containers are not recyclable. Do not dispose of empty containers with plastic materials destined for recycling.
- .9 Fold up metal banding, flatten, and place in designated area for recycling.

**1.8 PROJECT CONDITIONS**

- .1 Environmental Limitations:
  - .1 Do not proceed with installation of joint sealants under following conditions:
    - .1 When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 4.4 degrees C.
    - .2 When joint substrates are wet.
- .2 Joint-Width Conditions:
  - .1 Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.
- .3 Joint-Substrate Conditions:
  - .1 Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

## **1.9 ENVIRONMENTAL REQUIREMENTS**

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and provision of Material Safety Data Sheets (MSDS) acceptable to Labour Canada.
- .2 Conform to manufacturer's recommended temperatures, relative humidity, and substrate moisture content for application and curing of sealants including special conditions governing use.

## **Part 2 Products**

### **2.1 SEALANT MATERIALS**

- .1 Do not use caulking that emits strong odours, contains toxic chemicals or is not certified as mould resistant in air handling units and air distribution systems.
- .2 Where sealants are qualified with primers use only these primers.
- .3 Colours as selected by the Departmental Representative from manufacturer's complete range of available colours.

### **2.2 SEALANT MATERIAL DESIGNATIONS**

- .1 Security Sealants – Interior
  - .1 Two-part, non-sag, chemically curing epoxy adhesive/sealant, specifically designed for use in interior security areas.
  - .2 Acceptable Product: Pecora Dynapoxy EP-1100.
  - .3 Applicable: Interior joints between furniture and adjacent walls and floors continuously.
- .2 Preformed Compressible and Non-Compressible back-up materials.
  - .1 Polyethylene, Urethane, Neoprene or Vinyl Foam.
    - .1 Extruded closed cell foam backer rod.
    - .2 Size: oversize 30 to 50 %.
  - .2 Neoprene or Butyl Rubber.
    - .1 Round solid rod, Shore A hardness 70.
  - .3 High Density Foam.
    - .1 Extruded closed cell polyvinyl chloride (PVC), extruded polyethylene, closed cell, Shore A hardness 20, tensile strength 140 to 200 kPa, extruded polyolefin foam, 32 kg/m<sup>3</sup> density, or neoprene foam backer, size as recommended by manufacturer.
  - .4 Bond Breaker Tape.
    - .1 Polyethylene bond breaker tape which will not bond to sealant.

**2.3 JOINT CLEANER**

- .1 Non-corrosive and non-staining type, compatible with joint forming materials and sealant recommended by sealant manufacturer.
- .2 Primer: as recommended by manufacturer.

**Part 3 Execution**

**3.1 PROTECTION**

- .1 Protect installed Work of other trades from staining or contamination.

**3.2 SURFACE PREPARATION**

- .1 Examine joint sizes and conditions to establish correct depth to width relationship for installation of backup materials and sealants.
- .2 Clean bonding joint surfaces of harmful matter substances including dust, rust, oil grease, and other matter which may impair Work.
- .3 Do not apply sealants to joint surfaces treated with sealer, curing compound, water repellent, or other coatings unless tests have been performed to ensure compatibility of materials. Remove coatings as required.
- .4 Ensure joint surfaces are dry and frost free.
- .5 Prepare surfaces in accordance with manufacturer's directions.

**3.3 PRIMING**

- .1 Where necessary to prevent staining, mask adjacent surfaces prior to priming and caulking.
- .2 Prime sides of joints in accordance with sealant manufacturer's instructions immediately prior to caulking.

**3.4 BACKUP MATERIAL**

- .1 Apply bond breaker tape where required to manufacturer's instructions.
- .2 Install joint filler to achieve correct joint depth and shape, with approximately 30% compression.

**3.5 MIXING**

- .1 Mix materials in strict accordance with sealant manufacturer's instructions.

**3.6 APPLICATION**

- .1 Sealant.
  - .1 Apply sealant in accordance with manufacturer's written instructions.
  - .2 Mask edges of joint where irregular surface or sensitive joint border exists to provide neat joint.
  - .3 Apply sealant in continuous beads.



- .4 Apply sealant using gun with proper size nozzle.
- .5 Use sufficient pressure to fill voids and joints solid.
- .6 Form surface of sealant with full bead, smooth, free from ridges, wrinkles, sags, air pockets, embedded impurities.
- .7 Tool exposed surfaces before skinning begins to give slightly concave shape.
- .8 Remove excess compound promptly as work progresses and upon completion.
- .2 Curing.
  - .1 Cure sealants in accordance with sealant manufacturer's instructions.
  - .2 Do not cover up sealants until proper curing has taken place.
- .3 Paint touch up.
  - .1 Paint the new sealant with same colour as adjacent wall.
- .4 Clean up.
  - .1 Clean adjacent surfaces immediately and leave Work neat and clean.
  - .2 Remove excess and droppings, using recommended cleaners as work progresses.
  - .3 Remove masking tape after initial set of sealant.

**END OF SECTION**



**PART 1 GENERAL**

**1.1 Related Sections**

- .1 Section 01 01 50 General Instructions

**1.2 References**

- .1 American Society for Testing and Materials (ASTM)
  - .1 ASTM A167, Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
  - .2 ASTM B456, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
  - .3 ASTM A653/A653M, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - .4 ASTM A924/A924M, Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- .2 Canadian Standards Association (CSA)
  - .1 CAN/CSA-B651, Barrier-Free Design.

**1.3 Shop Drawings**

- .1 Submit shop drawings in accordance with Section 01 01 50.
- .2 Indicate size and description of components, base material, surface finish inside and out, hardware and locks, attachment devices, description of rough-in frame, building-in details of anchors for grab bars.

**1.4 Closeout Submittals**

- .1 Provide maintenance data for toilet and bath accessories for incorporation into manual specified in Section 01 01 50 – Closeout Submittals.

**1.5 Waste Management and Disposal**

- .1 Separate and recycle waste materials in accordance with Section 01 01 50 – Waste Management and Disposal.
- .2 Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan.

**1.6 Extra Materials**

- .1 Provide special tools required for accessing, assembly/disassembly or removal for toilet and bath accessories in accordance with requirements specified in Section 01 01 50 – Closeout Submittals.
- .2 Deliver special tools to Departmental Representative.

## **PART 2 PRODUCTS**

### **2.1 Materials**

- .1 Sheet steel: to ASTM A653/A653M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A167, Type 302 with No. 4 finish.
- .3 Stainless steel tubing: Type 304 commercial grade, seamless welded, 1.2 mm wall thickness.
- .4 Fasteners: concealed screws and bolts hot dip galvanized, exposed fasteners to match face of unit and use security fasteners. Expansion shields, fibre, lead or rubber as recommended by accessory manufacturer for component and its intended use. Use security fasteners for exposed fasteners.

### **2.2 Accessory Schedule**

- .1 For conformance to CSC facility's standard cell room accessories, submit all accessories product data sheets and shop drawings to Departmental Representative for approval before order the scheduled accessories. Each cell shall receive following accessories as acceptable products:
  - .1 Ball clothes hooks with shelf, Norix model S565-545, 305mm height, 457mm width, 229mm depth.
  - .2 One-piece stainless steel mirror – Norix model R565-410, 241mm width, 285mm height, 13mm depth.

### **2.3 Fabrication**

- .1 Weld and grind joints of fabricated components flush and smooth. Use mechanical fasteners only where approved.
- .2 Wherever possible form exposed surfaces from one sheet of stock, free of joints.
- .3 Brake form sheet metal with 1.5mm radius bends.
- .4 Form surfaces flat without distortion. Maintain flat surfaces without scratches or dents.
- .5 Back paint components where contact is made with building finishes to prevent electrolysis.
- .6 Hot dip galvanize concealed ferrous metal anchors and fastening devices to CSA G164.
- .7 Shop assemble components and package complete with anchors and fittings.
- .8 Deliver inserts and rough-in frames to job site at appropriate time for building-in. Provide templates, details and instructions for building anchors and inserts.
- .9 Provide steel anchor plates and components for installation on studding and building framing.

**PART 3 EXECUTION**

**3.1 Installation**

- .1 Install and secure accessories rigidly in place as follows:
  - .1 Hollow masonry units: use toggle bolts drilled into cell/wall cavity.
  - .2 Solid masonry, marble, stone or concrete: use bolt with lead expansion sleeve set into drilled hole.
- .2 Use tamper proof screws/bolts for exposed fasteners.
- .3 Apply security sealant for all joints between accessories to adjacent walls.

END OF SECTION



**APPENDIX A  
HAZMAT REPORT**







## PRE-RENOVATION HAZMAT ASSESSMENT – SITE REVIEW REPORT

<b>Project:</b>	<b>CELL FURNITURE UPGRADE PROJECT – MISSION MEDIUM INSTITUTION</b>		
<b>Client:</b>	Public Services and Procurement Canada	<b>Stantec Project #:</b>	123220823.200
<b>Stantec Site Assessor:</b>	Keith Irwin	<b>Date of Site Visit:</b>	February 28 & March 1, 2017
<b>Location:</b>	Living Units (LU1 – LU5) at CSC Mission Medium Institution, Mission, BC	<b>Issue Date:</b>	March 27, 2017

### BACKGROUND

Stantec Consulting Ltd. (Stantec) was retained by Public Services and Procurement Canada (PSPC) on behalf of Correctional Services Canada (CSC) to provide a pre-renovation hazardous materials assessment pertaining to the cell furniture upgrade project (the Project) planned for the Living Unit buildings (LU1–LU5) at the Mission Medium Institution (subject facility).

The purpose of the site review was to assess for hazardous building materials, particularly asbestos-containing materials (ACMs) and lead-containing paints (LCPs), that may require special handling and/or disposal practices in accordance with the requirements of the Canada Labour Code, Part II (Canada Labour Code) and the current version of British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97), during the Project.

### PREVIOUS REPORTS

The following documentation was reviewed prior to undertaking the assessment:

- Stantec Consulting Ltd. Report No. 123220769 entitled *Hazardous Building Materials Assessments, 31 Buildings at the Mission Medium Institution, Mission, BC - DRAFT*, dated March 2017, prepared for PSPC (Stantec Report)
- DST Consulting Engineers File No. BE-VC-017529 entitled *Pre-Renovation Hazardous Building Materials Assessment – Cell Window Upgrades – Mission Institution, Mission, BC*, dated October 10, 2013, prepared for Public Works and Government Services Canada (DST Report)

Stantec reviewed the above-noted previous reports for information purposes only. Although the information provided in the documentation outlined above was reviewed and considered in developing our sampling plan, Stantec did not rely on the documentation or the sample analytical results within.

### STANDARDS, SCOPE AND METHODOLOGY

Applicable standards for each hazardous material considered during this assessment are summarized below, along with the scope and methodology completed pertaining to those materials, during this assessment.

- Asbestos
  - The presence of asbestos in federal workplaces, and pertaining to federally regulated workers is governed by the Canada Labour Code. The presence of asbestos in the



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workplace in British Columbia pertaining to provincially regulated workers is governed by BC Reg. 296/97. As both federally regulated workers and provincially regulated workers (e.g., contractors) are expected to carry out work activities associated with the Project, and as the provincial regulations are generally more prescriptive pertaining to asbestos (and generally include the requirements noted in the Canada Labour Code), this assessment was conducted to meet the requirements of BC Reg. 296/97.

- According to the current version of BC Reg. 296/97, ACM means any material containing at least 0.5% asbestos, or vermiculite insulation with any asbestos.
- Representative cells within living units 1 through 5 were visually assessed for the presence of suspected ACMs.
- Lead
  - Exposure to lead is governed by the Canada Labour Code for federal workers, and by BC Reg. 296/97 for provincially regulated workers. According to both regulations, the Occupational Exposure Limit for lead is 0.05 milligram per cubic metre ( $\text{mg}/\text{m}^3$ ).
  - According to the WorkSafeBC manual titled *Lead-Containing Paint and Coatings: Preventing Exposure in the Construction Industry* (BC Lead Guideline), "...the improper removal of lead paint containing 600 mg/kg lead results in airborne lead concentrations that exceed half of the exposure limit". As the exposure limit for lead that is referenced in both federal and provincial regulations is the same, Stantec will reference this value (600 mg/kg, equivalent to 600 ppm) in defining paints as "lead-containing".
  - Samples of potential LCPs were collected from major paint applications in representative cells throughout the LU1-LU5 buildings. Paint applications were generally considered representative across buildings (i.e., similar paints on similar materials in different buildings were often considered to be the same paint, and represented by samples from one or two buildings only).
  - The sampling of paint applications involved the collection of paint chip samples of paint layers to the substrate, where possible. Samples collected were submitted to EMSL for analysis of total lead content using EPA Method SW 846 3050B\*/7000B. EMSL's analytical laboratory is also accredited by the AIHA Environmental Lead Laboratory Approval Program (ELLAP).
  - The DST Report was prepared based on measurements made using an X-Ray Fluorescence Analyzer, which provided readings in milligrams per square centimeter ( $\text{mg}/\text{cm}^2$ ), and indicates that measurements greater than  $0.05 \text{ mg}/\text{cm}^2$  relate to lead concentrations greater than 600 mg/kg.
- Other hazardous building materials
  - Although unlikely to be present in building materials that would be impacted by the Project, visual assessment was also completed for other building materials that may pose occupational health and safety hazards when disturbed and/or may require special handling/disposal, such as equipment with polychlorinated biphenyls (PCBs), equipment with mercury, equipment with ozone-depleting substances (ODSs) and materials containing silica.



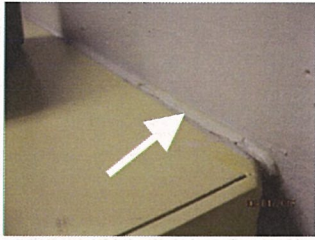
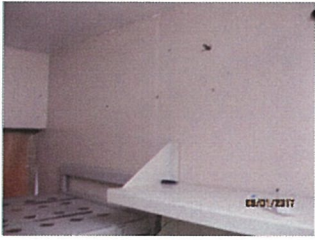

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**SITE REVIEW RESULTS**

The following paints, which may be impacted by project work, were identified in the DST Report as LCPs:

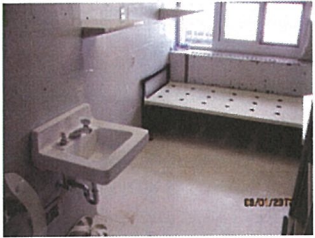
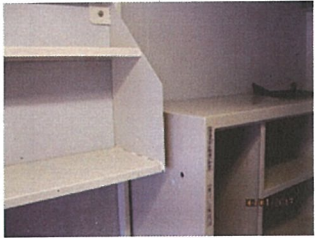
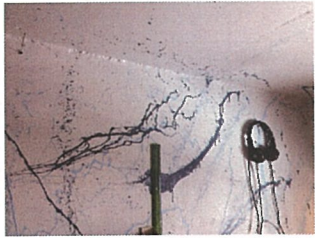

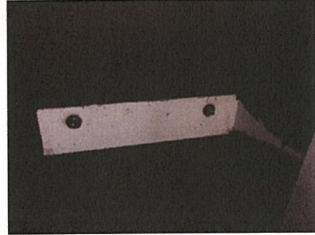
- Grey paint applied to the 3" x 6" ceramic tiles located on the cell window sills
- All paints applied to the walls, ceilings, and window areas of the cells
- All paint applied to the cell doors and frames

The table below summarizes the findings of the assessment and sampling activities undertaken by Stantec and DST.

Location	Photo	Hazardous Materials Observations	Samples collected?	Analytical Results
Around cell furniture (consistent throughout buildings)		Suspect ACM wall sealant. Tan painted grey.	LU1-S15-WS-01A LU1-S15-WS-01B LU1-S15-WS-01C	No asbestos detected
			LU5-S8-WS-01A LU5-S8-WS-01B LU5-S8-WS-01C	No asbestos detected
Metal shelf		Grey paint on metal shelf.	LU1-N13-P-01	<90 ppm Not considered to be an LCP
Bed frames		Light blue on metal bed frame.	LU1-N18-P-02 LU2-S9-P-12 LU2-S2-P-14 LU2-N4-P-15 LU3-N2-P-19 LU4-S4-P-34	<130 ppm <90 ppm 840 ppm 140 ppm <90 ppm 1,600 ppm <b>Confirmed LCP</b>


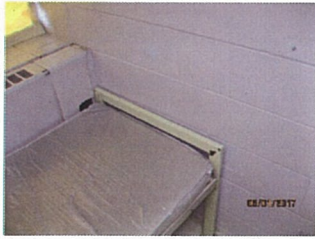


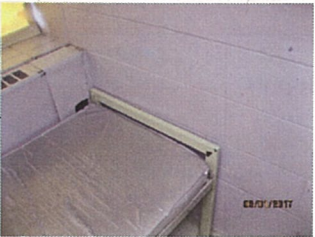


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Location	Photo	Hazardous Materials Observations	Samples collected?	Analytical Results
Walls and ceiling		Light blue on concrete walls and ceiling.	LU1-N18-P-03 LU2-S9-P-11 LU3-N2-P-18 LU3-N5-P-23 LU3-S3-P-24 LU3-S10-P-26 LU4-S15-P-30 LU4-S4-P-33 LU5-S6-P-35 LU5-N12-P-38 LU5-N3-P-41	<90 ppm <90 ppm <90 ppm <90 ppm <90 ppm <140 ppm <90 ppm <90 ppm <90 ppm <90 ppm <90 ppm Not considered LCP
Cabinets		Cream on metal cabinets.	LU1-N18-P-04 LU1-S7-P-06	9,200 ppm <90 ppm <b>Confirmed LCP</b>
Walls and door		Cream on concrete walls and metal door.	LU1-N8-P-05	2,100 ppm <b>Confirmed LCP</b>
Walls and ceiling		Cream on concrete walls and ceiling.	LU5-N19-P-40	180 ppm Not considered LCP
Walls and ceiling		Burgundy on concrete walls and ceiling.	LU1-S7-P-07	<90 ppm Not considered LCP

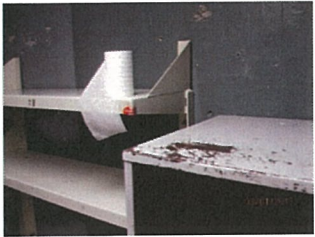
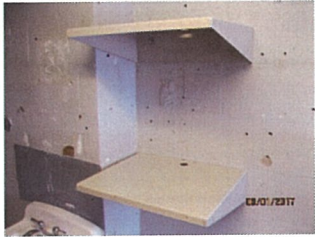
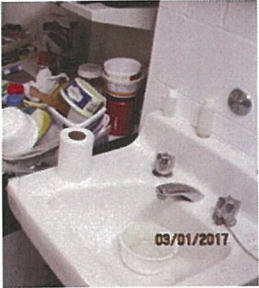




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Location	Photo	Hazardous Materials Observations	Samples collected?	Analytical Results
Walls and ceiling		Dark blue on concrete walls and ceiling.	LU1-S12-P-08	<170 ppm Not considered LCP
Bedframe		Cream on metal bed frame.	LU1-S12-P-09	<99 ppm Not considered LCP
Metal furniture		Beige on all metal furniture.	LU1-S15-P-10	<190 ppm Not considered LCP
Cabinet		Grey on metal cabinet.	LU2-S2-P-13 LU2-N13-P-17 LU3-N2-P-20 LU3-N3-P-22 LU3-S10-P-27 LU5-S6-P-36	2,700 ppm 3,800 ppm 3,900 ppm <90 ppm <90 ppm 310 ppm <b>Confirmed LCP</b>
Walls and ceiling		Grey on concrete walls and ceiling.	LU2-N3-P-16	<90 ppm Not considered LCP



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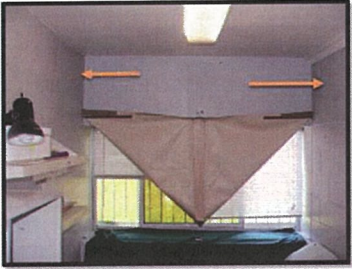
Location	Photo	Hazardous Materials Observations	Samples collected?	Analytical Results
Walls & ceiling		Green on concrete walls and ceiling.	LU3-N3-P-21	<90 ppm Not considered LCP
Metal shelves		Beige on metal shelf.	LU3-S3-P-25 LU4-S15-P-31	<120 ppm <210 ppm Not considered LCP
Walls & ceiling		White on concrete walls and ceiling.	LU3-S20-P-28	270 ppm Not considered LCP
Bed frame		Black on metal bed frame.	LU3-S20-P-29 LU5-N12-P-39	<250 ppm 2,500 ppm <b>Confirmed LCP</b>
Walls & ceiling		Dark grey on concrete walls and ceiling.	LU4-S18-P-32	<90 ppm Not considered LCP





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Location	Photo	Hazardous Materials Observations	Samples collected?	Analytical Results
Cell walls, ceilings, and window areas (CONT'D)		All paints applied to the walls, ceilings, and window areas of the cells (DST Report)	L-45 L-46 L-48 L-49 L-51 L-52 L-53 L-54 L-59 L-60 L-61 L-62 L-63 L-64 L-66 L-67 L-68 L-71 L-72 L-73 L-75 L-76 L-78 L-79 L-81 L-82 L-84 L-85 L-86 L-87 L-89 L-90 L-91 L-92	0.02 mg/cm <sup>2</sup> 0.03 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.03 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.03 mg/cm <sup>2</sup> 0.09 mg/cm <sup>2</sup> 0.06 mg/cm <sup>2</sup> 0.05 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.03 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.08 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.7 mg/cm <sup>2</sup> 0.6 mg/cm <sup>2</sup> 0.14 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> 0.02 mg/cm <sup>2</sup> <b>Identified LCPs</b>
Cell doors and frames	No Photo Available	All paints applied to the cell doors and frames (DST Report)	L-16 L-17 L-42 L-47 L-50 L-65 L-70 L-80	0.27 mg/cm <sup>2</sup> 0.15 mg/cm <sup>2</sup> 0.15 mg/cm <sup>2</sup> 0.08 mg/cm <sup>2</sup> 0.33 mg/cm <sup>2</sup> 0.1 mg/cm <sup>2</sup> 0.34 mg/cm <sup>2</sup> 0.1 mg/cm <sup>2</sup> <b>Identified LCPs</b>





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The certificates of analysis for the samples submitted as part of this project, as provided by EMSL, are attached to this document, for reference along with a site plan showing the location of each sample.

The following should also be noted regarding other potential hazardous building materials:

- Silica is expected to be present in concrete floors, walls, and masonry block walls, which may potentially be impacted by the Project.
- No other suspected hazardous building materials (e.g., PCB-containing equipment, mercury-containing equipment, equipment with ozone-depleting substances, mould-impacted building materials) that are expected to be impacted by the Project were observed during the site review.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of site review and associated sampling conducted as outlined above, along with our review of the information provided in the DST Report as well as our understanding of the Project requirements, the following conclusions and recommendations are provided:

- Asbestos
  - ACMs were not identified pertaining to building materials expected to be altered during the Project.
  - Should a material suspected to contain asbestos fibres become uncovered during the Project, all work in the areas that may disturb the material should be stopped. Samples of the suspect material should be submitted for laboratory analysis to determine if asbestos fibres are present. Confirmed ACMs should be handled in accordance with the requirements of BC Reg. 296/97 and the BC Asbestos Guide, which will be sufficient to meet the requirements of the Canada Labour Code.
- Lead
  - Varied results were obtained regarding the lead content of paints tested for this assessment as well as the previous reports.
  - Through the various assessments completed, paints on the following surfaces were found to have lead contents that would indicate that they are LCPs in various locations:
    - Walls
    - Ceilings
    - Doors/frames
    - Window sills
    - Bed frames, cabinets and other furniture



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- The above-noted materials represent the majority of those materials that will be impacted by the Project.
- Based on our observations pertaining to the inconsistency of paint colours throughout Buildings LU1–LU5 on these surfaces, it is not practical to delineate between lead-containing and non-lead-containing paints applied them. As such, these paint applications should be considered LCPs throughout the Project area (unless material-specific testing proves otherwise).
- When LCPs are to be disturbed and/or removed during the Project, ensure compliance with the following:
  - o Exposure protection requirements of the Canada Labour Code and BC Reg. 296/97, including the provisions of the BC Lead Guideline
  - o Transportation and disposal requirements of BC Reg. 63/88
  - o Transportation requirements of the Federal Transportation of Dangerous Goods Regulation
- Corrective action or remedial work on paint applications containing any concentration of lead should be undertaken in a manner so as to avoid generating fine particulate matter or dust (i.e., avoid sanding). Airborne lead dust or fumes should not exceed the Canada Labour Code/BC Reg. 296/97 8-hour Occupational Exposure Limit of 0.05 mg/m<sup>3</sup> during the removal of paints and products containing any concentration of lead. The use of personal protective equipment is recommended to reduce the potential for over-exposure to lead dust. This can be achieved by:
  - o Providing workers with protective clothing and PPE or devices as necessary to protect the worker against the hazards to which the worker may be exposed
  - o Providing workers with adequate and training in the care and use of clothing, equipment or device before wearing or using it
  - o Wetting the surface of the materials to prevent dust emissions
  - o Providing workers with washing facilities with clean water, soap and individual towels to properly wash prior to exiting the work area
- To avoid the inhalation of lead, it is essential to have the following control methods in place:
  - o Engineering controls
  - o Work practices and hygiene practices
  - o Respirators and personal protective equipment
  - o Training
- The work tasks required and the ways in which lead-containing materials (including paints) will be impacted will determine the appropriate respirators, measures and procedures that should be followed to protect workers from lead exposure.



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- Silica
  - If silica-containing materials are to be impacted by renovation/cell furniture upgrade activities, ensure dust control measures are employed such that airborne silica dust concentrations do not exceed the exposure limit as stipulated by BC Reg. 296/97 (0.025 mg/m<sup>3</sup>—more stringent than the Canada Labour Code provisions). This would include, but not be limited to, the following:
    - o Providing workers with respiratory protection
    - o Wetting the surface of the materials to prevent dust emissions
    - o Providing workers with facilities to properly wash prior to exiting the work area
    - o Providing dust control to mitigate the potential for demolition dust to escape from the work area into public and/or adjacent areas
- Other hazardous building materials
  - As other hazardous building materials are not anticipated to require disturbance during the Project, no project-specific recommendations have been provided.

#### **LIMITATIONS**

In preparation of this report, Stantec used professional judgment based on experience. The work was conducted in accordance with generally accepted professional standards. Stantec relied on information gathered during the site investigation, laboratory analytical reports and information provided in previous reports as outlined herein.

This report reflects the observations made within accessible and accessed areas of the subject facility that pertained to the Project only, and the results of analyses performed on the specific material sampled during the assessment. Analytical results reflect the sampled material at the specific sample locations.

This assessment was conducted pertaining only to the Project, and building materials expected to be disturbed by the Project. This assessment does not constitute a comprehensive hazardous materials assessment for the subject facility or the buildings included.

This report has been prepared for the exclusive use of Public Services and Procurement Canada and Correctional Services Canada for the purpose of assessing general conditions within the subject facility associated with the Project. Any use that a third party makes of this report, or reliance on, or decisions to be made on it, are the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



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### **CLOSING**

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this document, we request that we be notified immediately to reassess the information provided herein.

We trust that the document meets your current requirements. Should you have any questions or concerns regarding the above, please do not hesitate to contact the undersigned.

### **STANTEC CONSULTING LTD.**

Handwritten signature of Amanda Bell in black ink.

Amanda Bell, B.Sc., EPT  
Environmental Technologist  
Phone: 604-412-3006  
Amanda.Bell@stantec.com

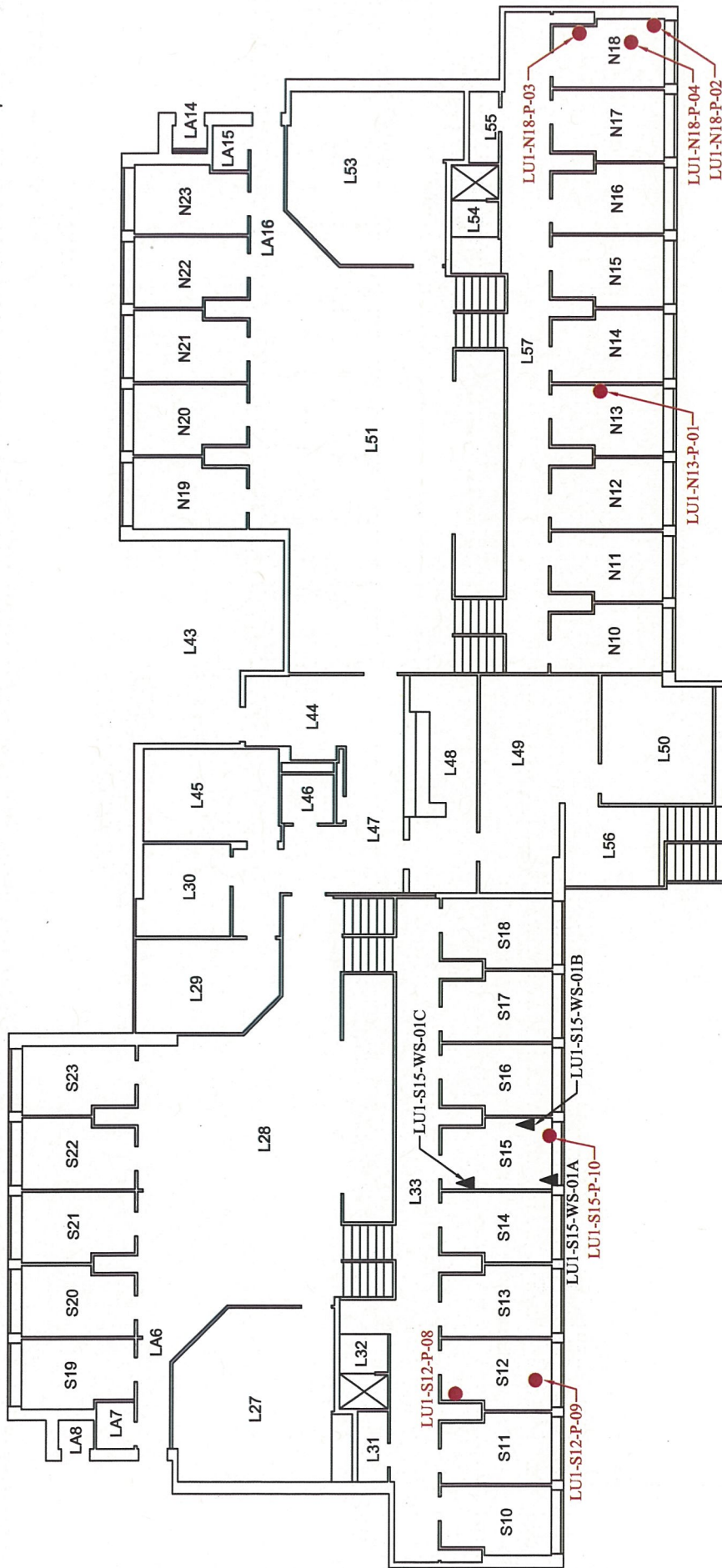
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Tiffany Waite, B.Sc.  
Associate  
Phone: 250-470-4498  
Tiffany.Waite@stantec.com

Handwritten signature of Sean Brigden in blue ink.

Sean Brigden, B.Sc., P.B.Dipl., CRSP  
Senior Associate  
Phone: 250-389-2346  
Sean.Brigden@stantec.com

Attachments: Site Plan—10 pages  
Suspected ACM Bulk Sample Analytical Record (EMSL)—2 pages  
Suspected LCP Paint Chip Sample Analytical Record (EMSL)—4 pages



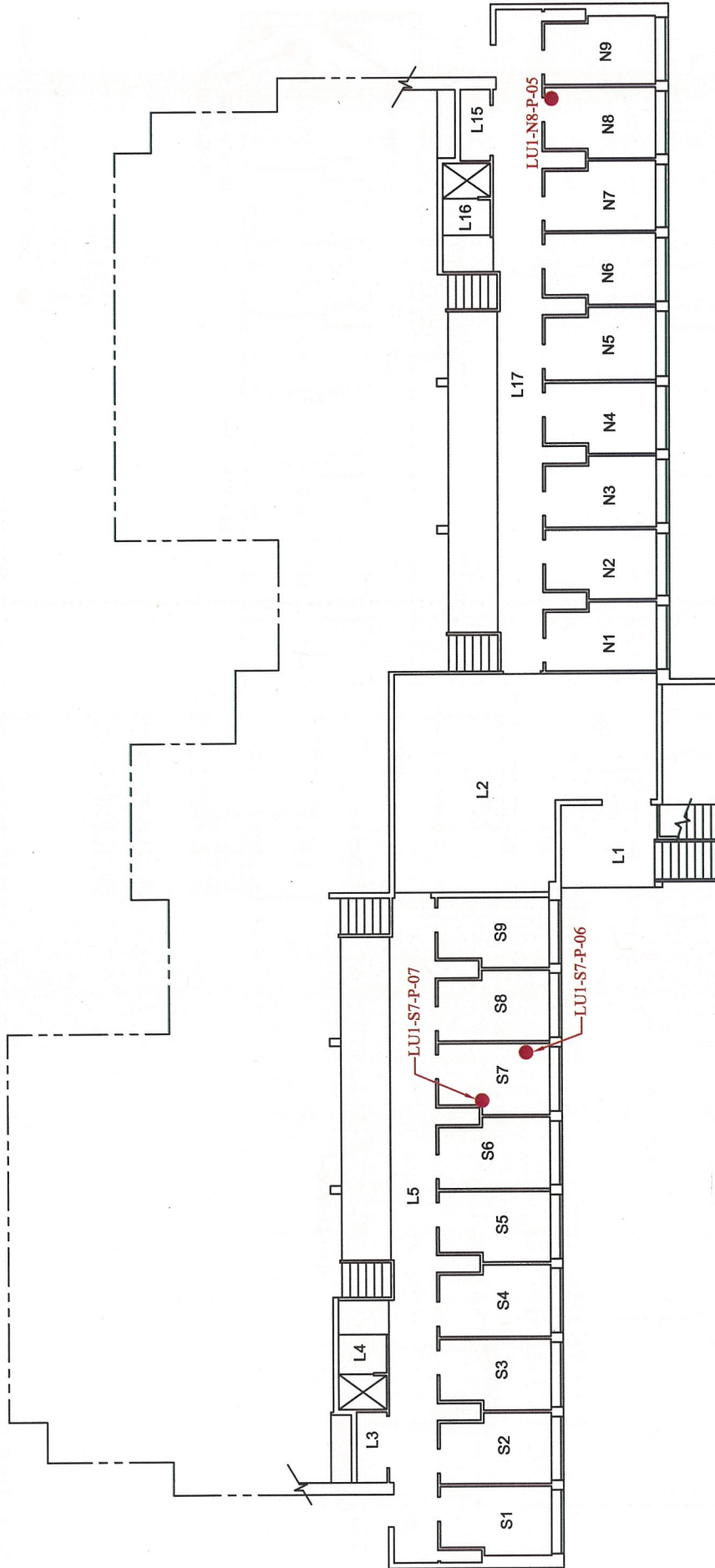
**MAIN FLOOR  
BUILDING LU1**

**LEGEND**

- ▲ BULK SAMPLE LOCATION
- PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

<b>FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS AND BULK SAMPLE LOCATIONS</b> CSC MISSION MEDIUM INSTITUTION 8751 STAVE LAKE STREET, MISSION, BC PUBLIC SERVICES AND PROCUREMENT CANADA		Project No.: 123220823	Dwg. No.: 1	
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**LOWER FLOOR  
BUILDING LU1**

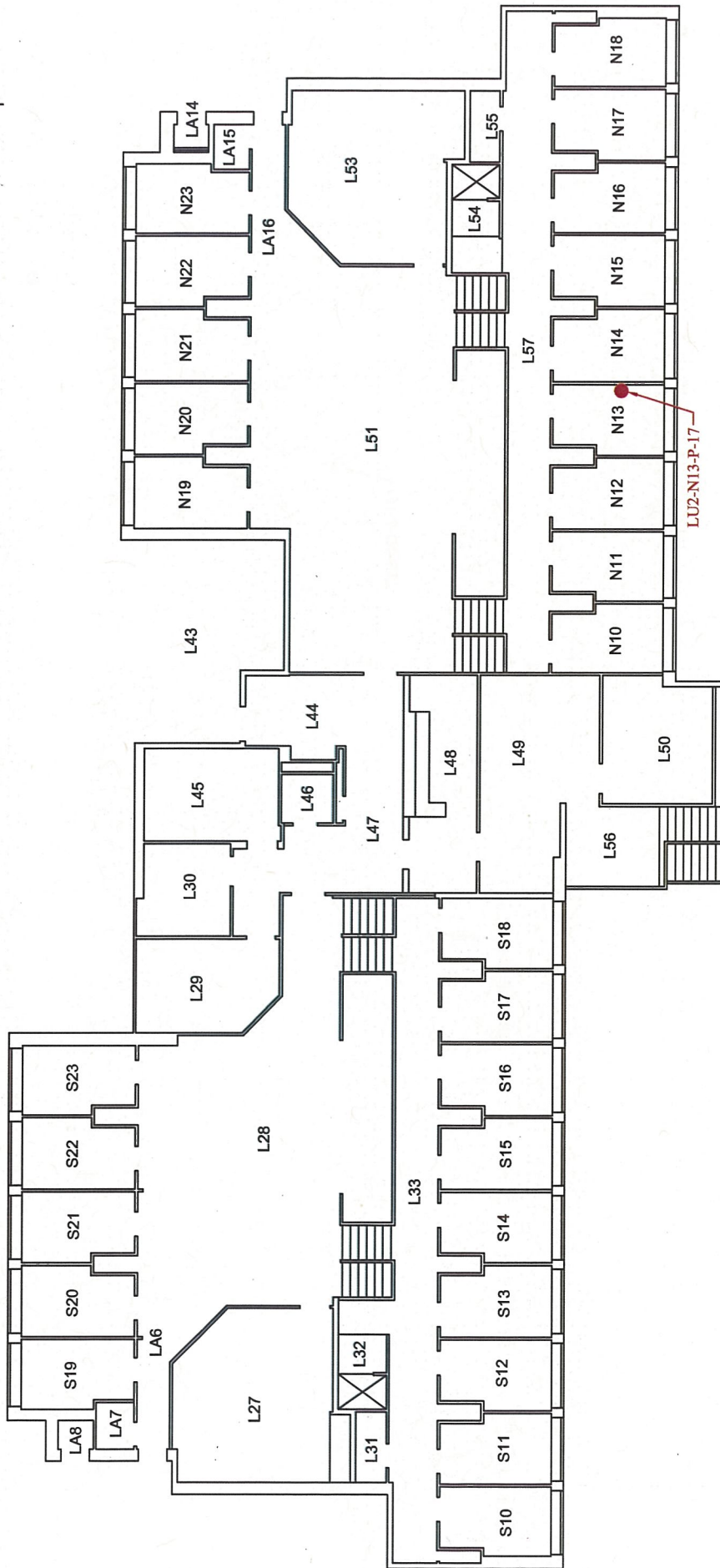
**LEGEND**

● PAINT CHIP SAMPLE LOCATION

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**FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS  
AND BULK SAMPLE LOCATIONS**  
 CSC MISSION MEDIUM INSTITUTION  
 8751 STAVE LAKE STREET, MISSION, BC  
 PUBLIC SERVICES AND PROCUREMENT CANADA

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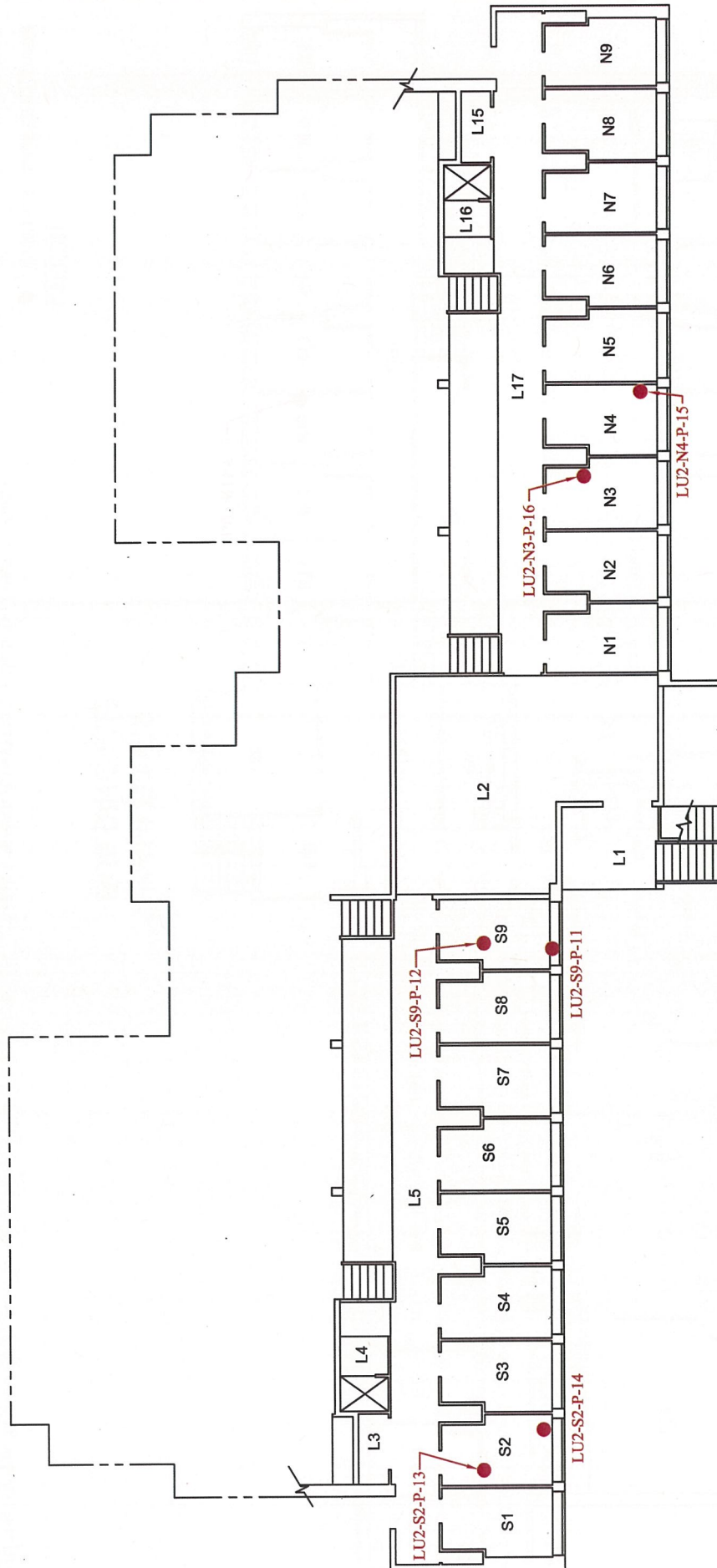


**MAIN FLOOR  
BUILDING LU2**

**LEGEND**  
● PAINT CHIP SAMPLE LOCATION

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<b>Project No.:</b> 123220823		<b>Dwg. No.:</b>
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<b>FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS AND BULK SAMPLE LOCATIONS</b> CSC MISSION MEDIUM INSTITUTION 8751 STAVE LAKE STREET, MISSION, BC PUBLIC SERVICES AND PROCUREMENT CANADA		
<b>Client:</b>		



**LOWER FLOOR  
BUILDING LU2**

**LEGEND**

● PAINT CHIP SAMPLE LOCATION

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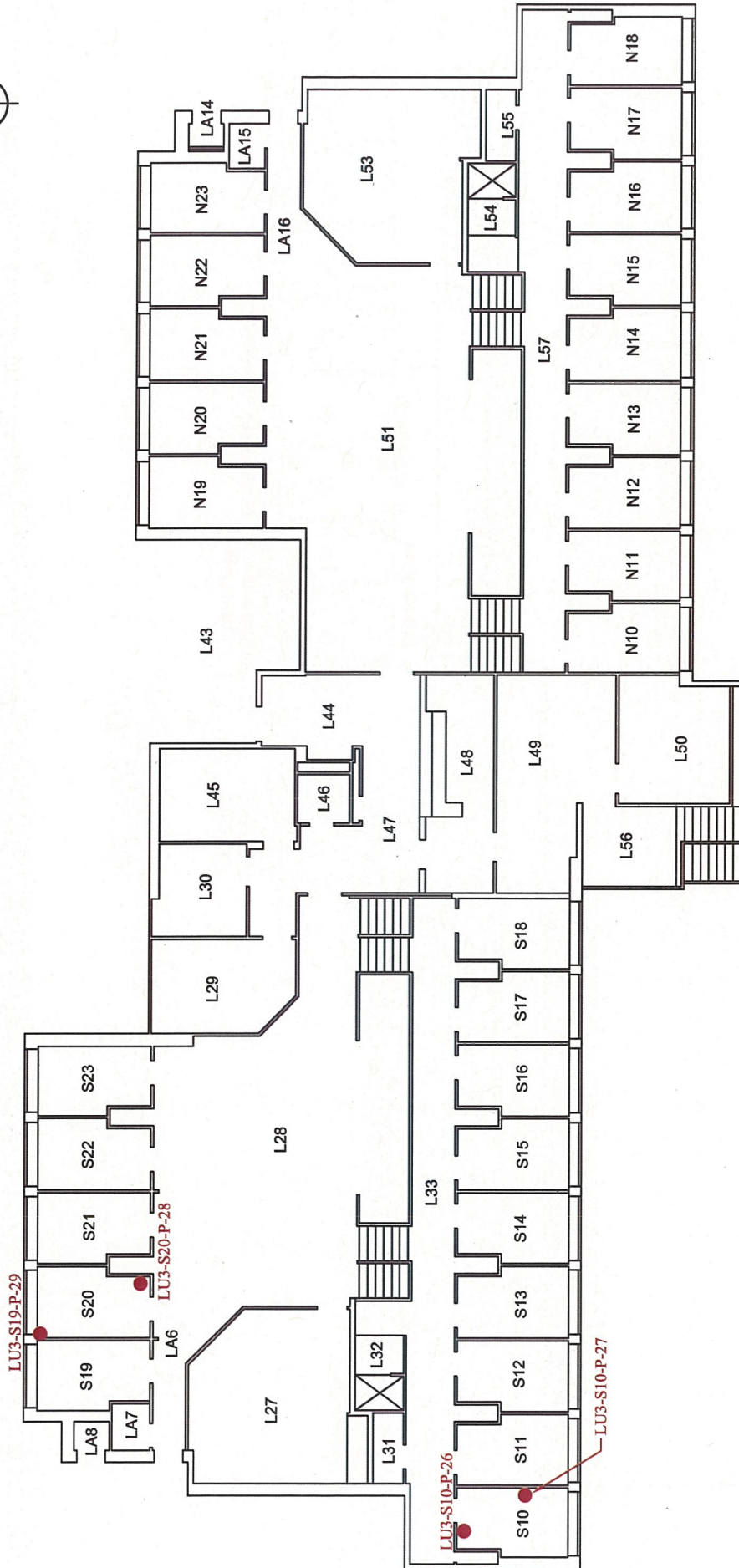
**FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS  
AND BULK SAMPLE LOCATIONS**

CSC MISSION MEDIUM INSTITUTION  
8751 STAVE LAKE STREET, MISSION, BC

PUBLIC SERVICES AND PROCUREMENT CANADA

Client:





**MAIN FLOOR  
BUILDING LU3**

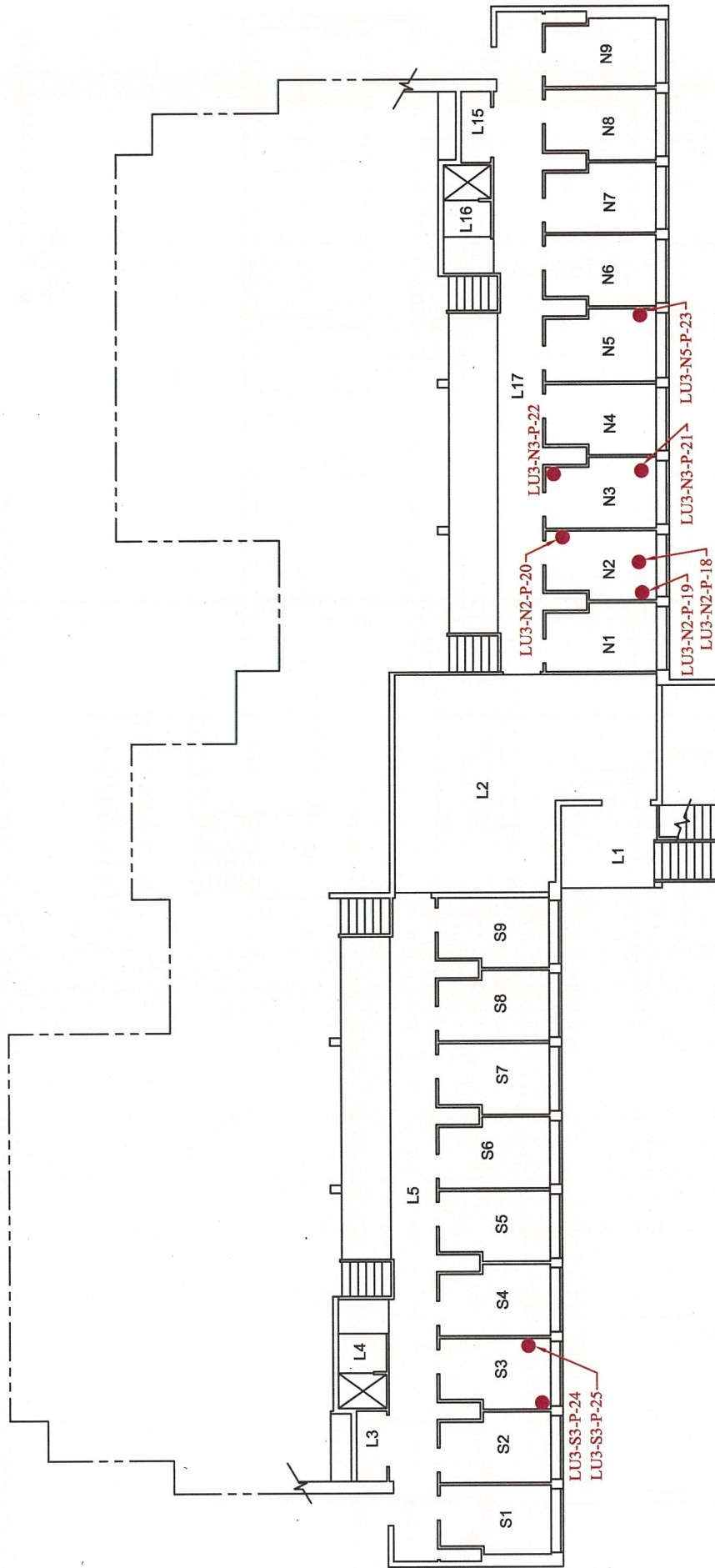
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● PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

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<b>FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS AND BULK SAMPLE LOCATIONS</b> CSC MISSION MEDIUM INSTITUTION 8751 STAVE LAKE STREET, MISSION, BC PUBLIC SERVICES AND PROCUREMENT CANADA			
<b>Client:</b>			





**LOWER FLOOR  
BUILDING LU3**

**LEGEND**  
● PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

<b>FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS AND BULK SAMPLE LOCATIONS</b> CSC MISSION MEDIUM INSTITUTION 8751 STAVE LAKE STREET, MISSION, BC		Project No.: 123220823	Dwg. No.: 6	
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		Date: 17/03/22		
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Client:		PUBLIC SERVICES AND PROCUREMENT CANADA		



**MAIN FLOOR  
BUILDING LU4**

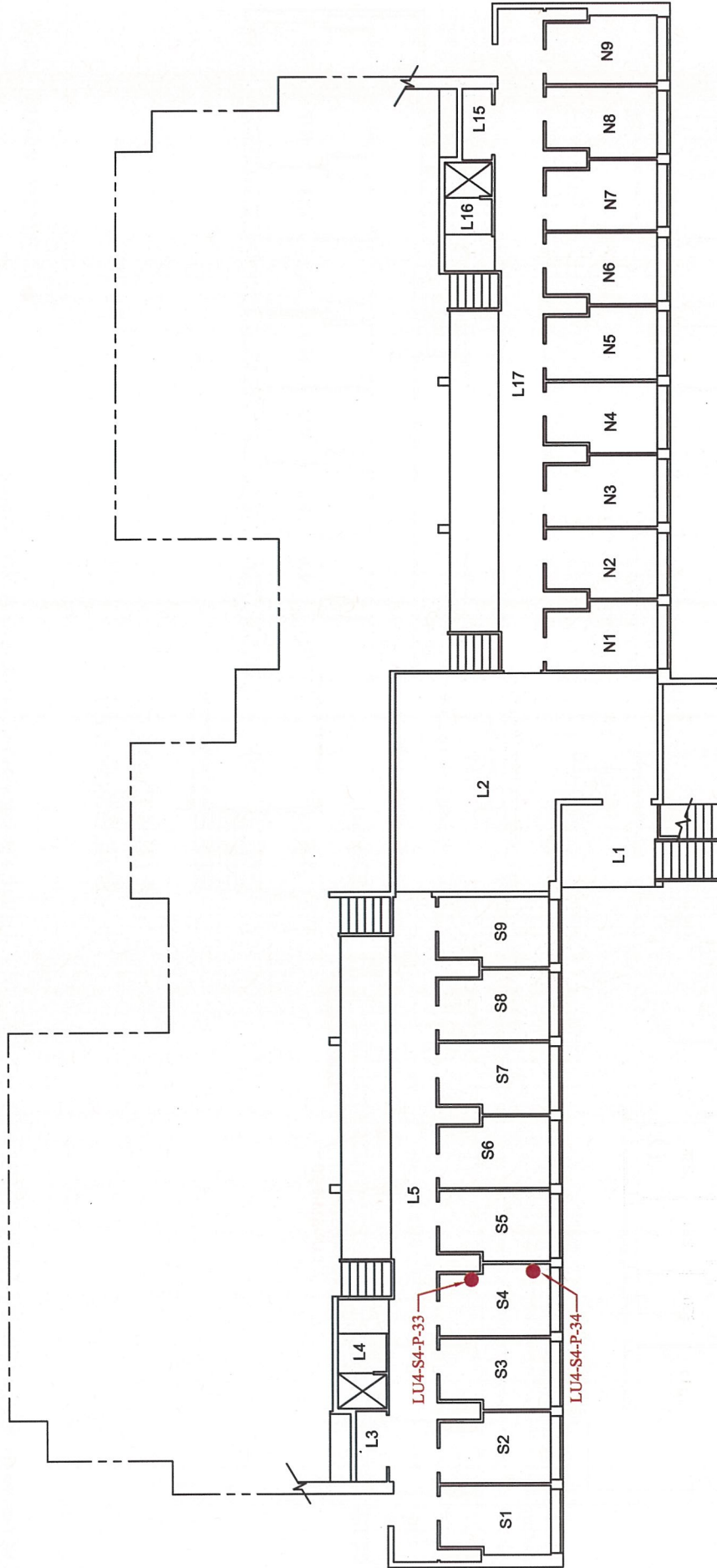
**LEGEND**  
● PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

**FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS  
AND BULK SAMPLE LOCATIONS**  
CSC MISSION MEDIUM INSTITUTION  
8751 STAVE LAKE STREET, MISSION, BC  
PUBLIC SERVICES AND PROCUREMENT CANADA

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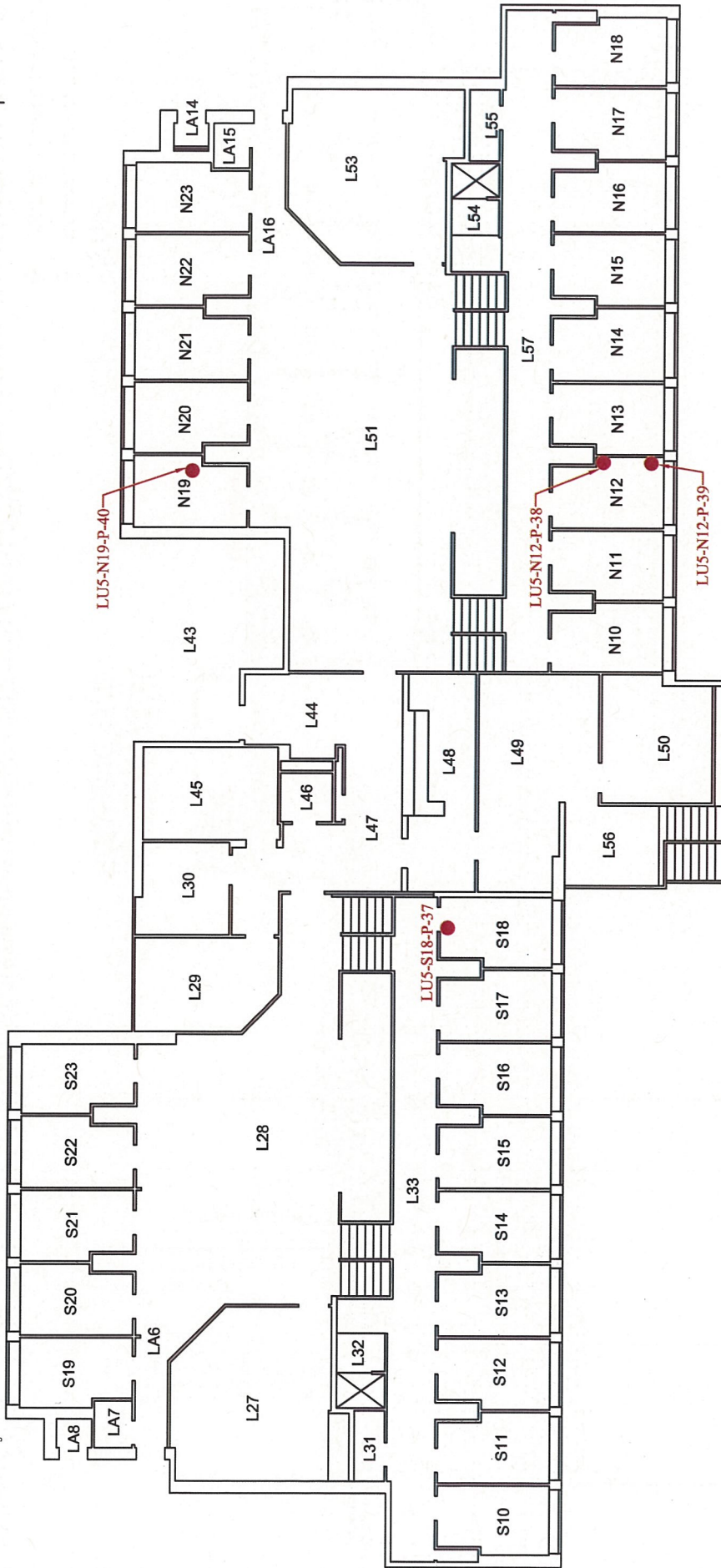
**LOWER FLOOR  
BUILDING LU4**

**LEGEND**

● PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

<b>Project No.:</b> 123220823		<b>Dwg. No.:</b>
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<b>Client:</b> PUBLIC SERVICES AND PROCUREMENT CANADA		



**MAIN FLOOR  
BUILDING LU5**

**LEGEND**

- PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

**FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS  
AND BULK SAMPLE LOCATIONS**

CSC MISSION MEDIUM INSTITUTION  
8751 STAVE LAKE STREET, MISSION, BC  
PUBLIC SERVICES AND PROCUREMENT CANADA

Project No.: 123220823

Scale: N.T.S.

Date: 17/03/22

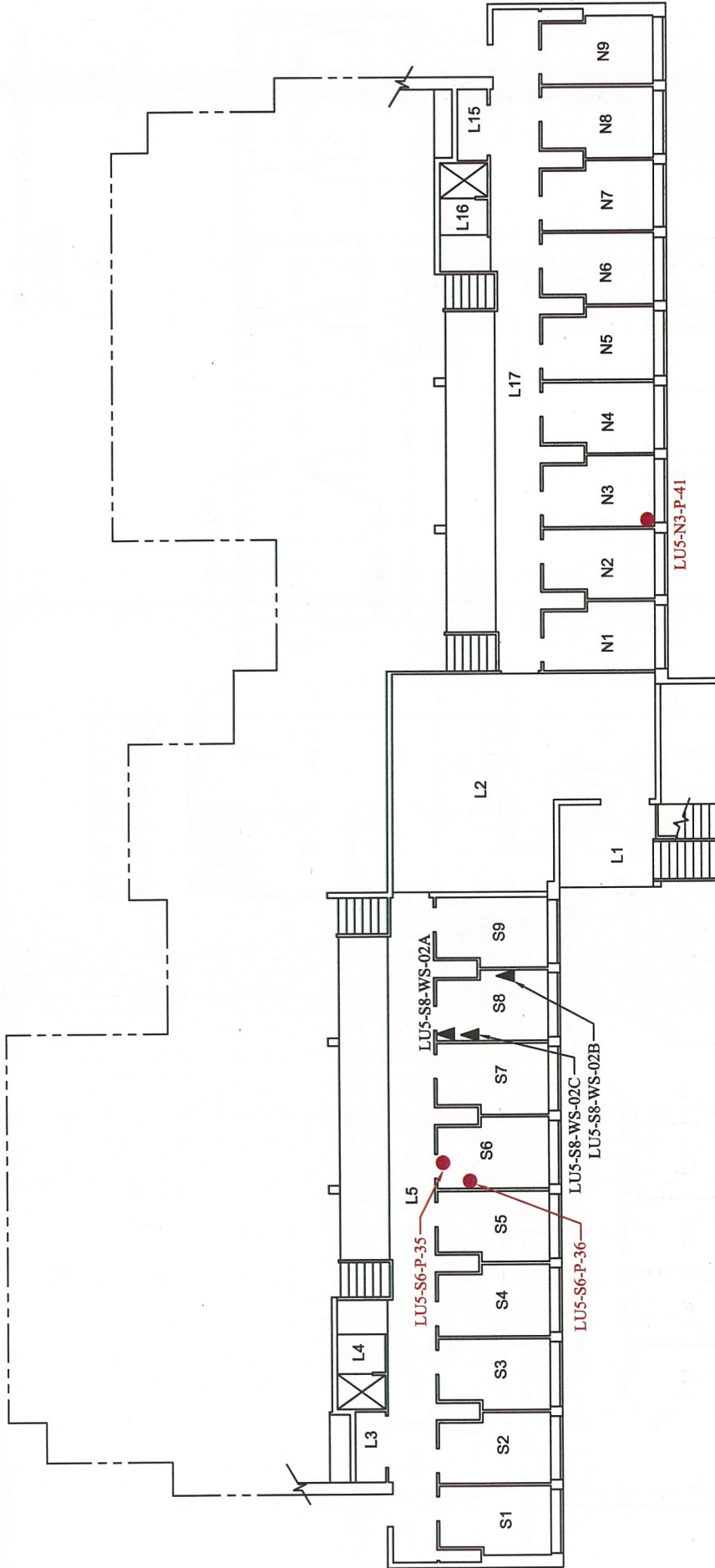
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App'd By: TW

Dwg. No.:

**9**





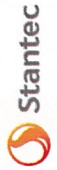
**LOWER FLOOR  
BUILDING LU5**

- LEGEND**
- ▲ BULK SAMPLE LOCATION
  - PAINT CHIP SAMPLE LOCATION

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC CONSULTING LTD. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

**FLOOR PLAN SHOWING HAZARDOUS BUILDING MATERIALS  
AND BULK SAMPLE LOCATIONS**  
 CSC MISSION MEDIUM INSTITUTION  
 8751 STAVE LAKE STREET, MISSION, BC  
 PUBLIC SERVICES AND PROCUREMENT CANADA

Project No.: 123220823	Dwg. No.: 10
Scale: N.T.S.	
Date: 17/03/22	
Dwn. By: CD DM	
App'd By: TW	





# EMSL Canada Inc.

2756 Slough Street Mississauga, ON L9T 5N4  
Phone/Fax: 289-997-4602 / (289) 997-4607  
<http://www.EMSL.com> / [torontolab@emsl.com](mailto:torontolab@emsl.com)

EMSL Canada Order 551702390  
Customer ID: 55JACQ30L  
Customer PO: 123220823  
Project ID:

**Attn:** Steve Chou  
Stantec Consulting, Ltd.  
500 - 4730 Kingsway  
Burnaby, BC V5H 0C6

**Phone:** (604) 412-3004  
**Fax:**  
**Collected:**  
**Received:** 3/07/2017  
**Analyzed:** 3/14/2017

**Proj:** CSC MED. FURN. UPG./123220823

## Test Report: Asbestos Analysis in Bulk Material for Occupational Health and Safety British Columbia Regulation 188/2011 via EPA 600/R-93/116 Method

**Client Sample ID:** LU1-S15-WS-01A **Lab Sample ID:** 551702390-0001  
**Sample Description:** LIVING UNIT #1- CELL S15

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM Grav. Reduction	3/14/2017	Gray	0.0%	100%	None Detected	

**Client Sample ID:** LU1-S15-WS-01B **Lab Sample ID:** 551702390-0002  
**Sample Description:** LIVING UNIT #1- CELL S15

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	3/14/2017	Gray	0%	100%	None Detected	

**Client Sample ID:** LU1-S15-WS-01C **Lab Sample ID:** 551702390-0003  
**Sample Description:** LIVING UNIT #1- CELL S15

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	3/14/2017	Gray	0%	100%	None Detected	

**Client Sample ID:** LU5-S8-WS-02A **Lab Sample ID:** 551702390-0004  
**Sample Description:** LIVING UNIT #5- CELL S8

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM Grav. Reduction	3/14/2017	Gray	0.0%	100%	None Detected	

**Client Sample ID:** LU5-S8-WS-02B **Lab Sample ID:** 551702390-0005  
**Sample Description:** LIVING UNIT #5- CELL S8

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	3/14/2017	Gray	0%	100%	None Detected	

**Client Sample ID:** LU5-S8-WS-02C **Lab Sample ID:** 551702390-0006  
**Sample Description:** LIVING UNIT #5- CELL S8

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM Grav. Reduction	3/14/2017	Gray	0.0%	100%	None Detected	



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EMSL Canada Order 551702390  
Customer ID: 55JACQ30L  
Customer PO: 123220823  
Project ID:

### Test Report: Asbestos Analysis in Bulk Material for Occupational Health and Safety British Columbia Regulation 188/2011 via EPA 600/R-93/116 Method

---

#### Analyst(s):

---

Natalie D'Amico	PLM (2) PLM Grav. Reduction (2)
Shorthri Kalikutty	PLM (1) PLM Grav. Reduction (1)

#### Reviewed and approved by:

Matthew Davis  
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP of any agency of the U.S. Government.

Samples analyzed by EMSL Canada Inc. Mississauga, ON NVLAP Lab Code 200877-0

Initial report from: 03/14/2017 16:39:40





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EMSL Canada Or 551702285  
CustomerID: 55JACQ30L  
CustomerPO: 123220823  
ProjectID:

Attn: **Steve Chou**  
**Stantec Consulting, Ltd.**  
**500 - 4730 Kingsway**  
**Burnaby, BC V5H 0C6**

Phone: (604) 412-3004  
Fax:  
Received: 03/07/17 10:38 AM  
Collected:

Project: **CSC MED. FUM UPQ./123220823**

**Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LU1-N13-P-01 Site: LIVING UNIT#1 - CELL N13 Desc: GREY ON METAL SHELF	551702285-0001		3/10/2017	<90 ppm
LU1-N18-P-02 Site: LIVING UNIT#1 - CELL N18 Desc: LIGHT BLUE ON METAL BED FRAME Insufficient sample to reach reporting limit.	551702285-0002		3/10/2017	<130 ppm
LU1-N18-P-03 Site: LIVING UNIT#1 - CELL N18 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0003		3/10/2017	<90 ppm
LU1-N18-P-04 Site: LIVING UNIT#1 - CELL N18 Desc: CREAM ON METAL CABINETS	551702285-0004		3/10/2017	9200 ppm
LU1-N8-P-05 Site: LIVING UNIT#1 - CELL N8 Desc: CREAM ON CONCRETE WALLS AND METAL DOOR	551702285-0005		3/10/2017	2100 ppm
LU1-S7-P-06 Site: LIVING UNIT#1 - CELL S8 Desc: CREAM ON METAL CABINET	551702285-0006		3/10/2017	<90 ppm
LU1-S7-P-07 Site: LIVING UNIT#1 - CELL S7 Desc: BURGUNDY ON CONCRETE WALLS	551702285-0007		3/10/2017	<90 ppm
LU1-S12-P-08 Site: LIVING UNIT#1 - CELL S12 Desc: DARK BLUE ON CONCRETE WALLS Insufficient sample to reach reporting limit.	551702285-0008		3/10/2017	<170 ppm
LU1-S12-P-09 Site: LIVING UNIT#1 - CELL S12 Desc: CREAM ON METAL BED FRAME Insufficient sample to reach reporting limit.	551702285-0009		3/10/2017	<99 ppm
LU1-S15-P-10 Site: LIVING UNIT#1 - CELL S15 Desc: BEIGE ON ALL METAL FURNITURE Insufficient sample to reach reporting limit.	551702285-0010		3/10/2017	<190 ppm

Rowena Fanto, Lead Supervisor  
or other approved signatory

\*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON A2LA Accredited Environmental Testing Cert #2845.08

Report Amended: 03/21/2017 13:39:44 Replaces the Initial Report 03/14/2017 08:25:21. Reason Code: Client-Change to Appearance

**EMSL Canada Inc.**

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EMSL Canada Or 551702285

CustomerID: 55JACQ30L

CustomerPO: 123220823

ProjectID:

Attn: **Steve Chou**  
**Stantec Consulting, Ltd.**  
**500 - 4730 Kingsway**  
**Burnaby, BC V5H 0C6**

Phone: (604) 412-3004  
 Fax:  
 Received: 03/07/17 10:38 AM  
 Collected:

Project: CSC MED. FUM UPQ./123220823

**Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
LU2-S9-P-11 Site: LIVING UNIT#2 - CELL S9 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0011		3/10/2017	<90 ppm
LU2-S9-P-12 Site: LIVING UNIT#2 - CELL S9 Desc: LIGHT BLUE ON METAL BED FRAME	551702285-0012		3/10/2017	<90 ppm
LU2-S2-P-13 Site: LIVING UNIT#2 - CELL S2 Desc: GREY ON METAL CABINET	551702285-0013		3/10/2017	2700 ppm
LU2-S2-P-14 Site: LIVING UNIT#2 - CELL S2 Desc: LIGHT BLUE ON METAL BED FRAME	551702285-0014		3/10/2017	840 ppm
LU2-N4-P-15 Site: LIVING UNIT#2 - CELL N4 Desc: LIGHT BLUE ON METAL BED FRAME	551702285-0015		3/10/2017	140 ppm
LU2-N3-P-16 Site: LIVING UNIT#2 - CELL N3 Desc: GREY ON CONCRETE WALLS	551702285-0016		3/10/2017	<90 ppm
LU2-N13-P-17 Site: LIVING UNIT#2 - CELL N13 Desc: GREY ON METAL CABINET	551702285-0017		3/10/2017	3800 ppm
LU3-N2-P-18 Site: LIVING UNIT#3 - CELL N2 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0018		3/10/2017	<90 ppm
LU3-N2-P-19 Site: LIVING UNIT#3 - CELL N2 Desc: LIGHT BLUE ON METAL BED FRAME	551702285-0019		3/10/2017	<90 ppm
LU3-N2-P-20 Site: LIVING UNIT#3 - CELL N2 Desc: GREY ON METAL CABINET	551702285-0020		3/13/2017	3900 ppm
LU3-N3-P-21 Site: LIVING UNIT#3 - CELL N3 Desc: GREEN ON CONCRETE WALL	551702285-0021		3/13/2017	<90 ppm

Rowena Fanto, Lead Supervisor  
 or other approved signatory

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Samples analyzed by EMSL Canada Inc. Mississauga, ON A2LA Accredited Environmental Testing Cert #2845.08

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EMSL Canada Or	551702285
CustomerID:	55JACQ30L
CustomerPO:	123220823
ProjectID:	

Attn: **Steve Chou**  
**Stantec Consulting, Ltd.**  
**500 - 4730 Kingsway**  
**Burnaby, BC V5H 0C6**

Phone: (604) 412-3004  
 Fax:  
 Received: 03/07/17 10:38 AM  
 Collected:

Project: CSC MED. FUM UPQ./123220823

**Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
LU3-N3-P-22	551702285-0022		3/13/2017	<90 ppm
	Site: LIVING UNIT#3 - CELL N3 Desc: GREY ON METAL CABINET			
LU3-N5-P-23	551702285-0023		3/13/2017	<90 ppm
	Site: LIVING UNIT#3 - CELL N5 Desc: LIGHT BLUE ON CONCRETE WALLS			
LU3-S3-P-24	551702285-0024		3/13/2017	<90 ppm
	Site: LIVING UNIT#3 - CELL S3 Desc: LIGHT BLUE ON CONCRETE WALLS			
LU3-S3-P-25	551702285-0025		3/13/2017	<120 ppm
	Site: LIVING UNIT#3 - CELL S3 Desc: BEIGE ON METAL SHELF Insufficient sample to reach reporting limit.			
LU3-S10-P-26	551702285-0026		3/13/2017	<140 ppm
	Site: LIVING UNIT#3 - CELL S10 Desc: LIGHT BLUE ON CONCRETE WALLS Insufficient sample to reach reporting limit.			
LU3-S10-P-27	551702285-0027		3/13/2017	<90 ppm
	Site: LIVING UNIT#3 - CELL S10 Desc: GREY ON METAL CABINET			
LU3-S20-P-28	551702285-0028		3/13/2017	270 ppm
	Site: LIVING UNIT#3 - CELL S20 Desc: WHITE ON CONCRETE WALLS			
LU3-S20-P-29	551702285-0029		3/13/2017	<250 ppm
	Site: LIVING UNIT#3 - CELL S20 Desc: BLACK ON METAL BED FRAME Insufficient sample to reach reporting limit.			
LU4-S15-P-30	551702285-0030		3/13/2017	<90 ppm
	Site: LIVING UNIT#4 - CELL S15 Desc: LIGHT BLUE ON CONCRETE WALLS			
LU4-S15-P-31	551702285-0031		3/13/2017	<210 ppm
	Site: LIVING UNIT#4 - CELL S15 Desc: BEIGE ON METAL SHELF Insufficient sample to reach reporting limit.			

Rowena Fanto, Lead Supervisor  
 or other approved signatory

\*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON A2LA Accredited Environmental Testing Cert #284508

Report Amended: 03/21/2017 13:39:44 Replaces the Initial Report 03/14/2017 08:25:21. Reason Code: Client-Change to Appearance

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EMSL Canada Or 551702285

CustomerID: 55JACQ30L

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ProjectID:

Attn: **Steve Chou**  
**Stantec Consulting, Ltd.**  
**500 - 4730 Kingsway**  
**Burnaby, BC V5H 0C6**

Phone: (604) 412-3004  
 Fax:  
 Received: 03/07/17 10:38 AM  
 Collected:

Project: **CSC MED. FUM UPQ./123220823****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
LU4-S18-P-32 Site: LIVING UNIT#4 - CELL S18 Desc: DARK GREY ON CONCRETE WALL	551702285-0032		3/13/2017	<90 ppm
LU4-S4-P-33 Site: LIVING UNIT#4 - CELL S4 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0033		3/13/2017	<90 ppm
LU4-S4-P-34 Site: LIVING UNIT#4 - CELL S4 Desc: LIGHT BLUE ON METAL BED FRAME	551702285-0034		3/13/2017	1600 ppm
LU5-S6-P-35 Site: LIVING UNIT#5 - CELL S6 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0035		3/13/2017	<90 ppm
LU5-S6-P-36 Site: LIVING UNIT#5 - CELL S6 Desc: GREY ON METAL CABINET	551702285-0036		3/13/2017	310 ppm
LU5-S18-P-37 Site: LIVING UNIT#5 - CELL S18 Desc: WHITE ON CONCRETE CEILING	551702285-0037		3/13/2017	<90 ppm
LU5-N12-P-38 Site: LIVING UNIT#5 - CELL N12 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0038		3/13/2017	<90 ppm
LU5-N12-P-39 Site: LIVING UNIT#5 - CELL N12 Desc: BLACK ON BED FRAME	551702285-0039		3/8/2017	2500 ppm
LU5-N19-P-40 Site: LIVING UNIT#5 - CELL N19 Desc: CREAM ON CONCRETE WALL	551702285-0040		3/8/2017	180 ppm
LU5-N3-P-41 Site: LIVING UNIT#5 - CELL N3 Desc: LIGHT BLUE ON CONCRETE WALLS	551702285-0041		3/8/2017	<90 ppm

Rowena Fanto, Lead Supervisor  
 or other approved signatory

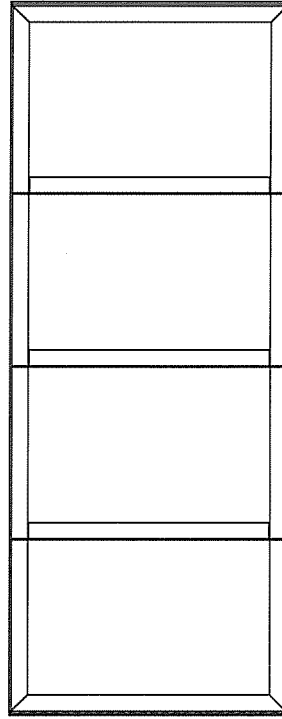
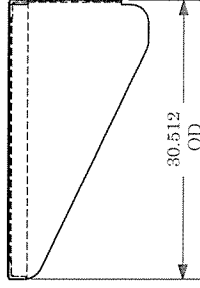
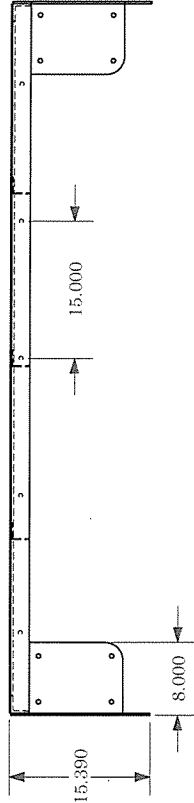
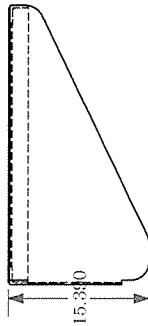
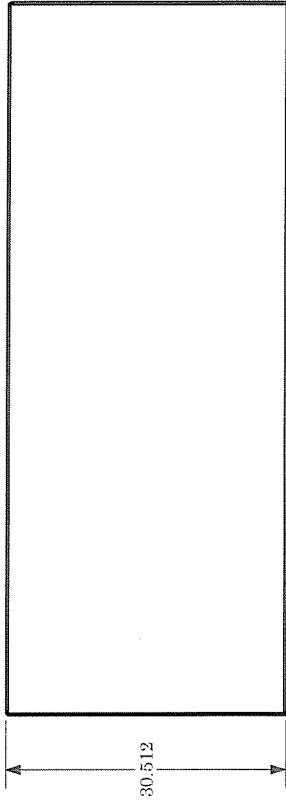
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Samples analyzed by EMSL Canada Inc. Mississauga, ON A2LA Accredited Environmental Testing Cert #2845.08

Report Amended: 03/21/2017 13:39:44 Replaces the Initial Report 03/14/2017 08:25:21. Reason Code: Client-Change to Appearance

**APPENDIX B**  
**PRE-PURCHASED FURNITURE SHOP DRAWINGS**

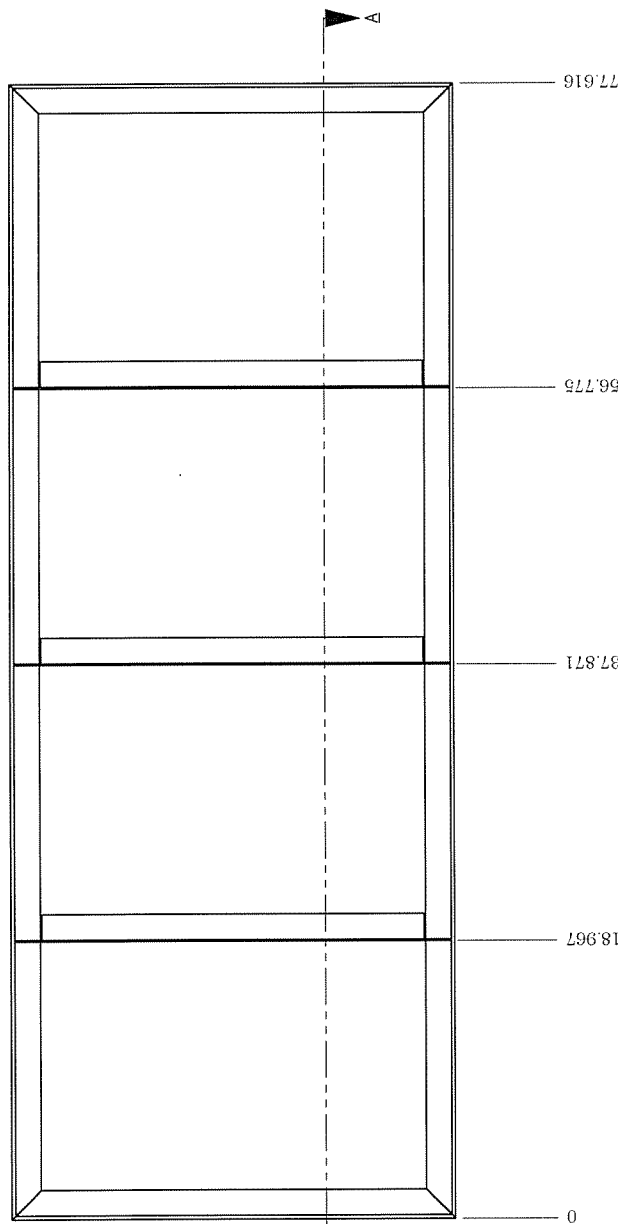




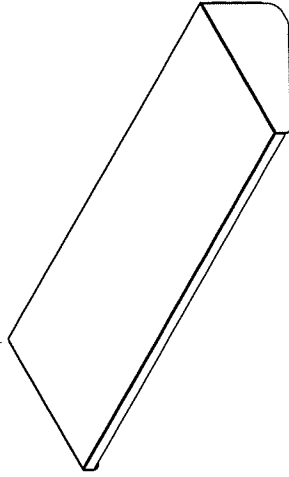
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DECIMALS TO THREE ANGLES TO 1°</p> <p>DO NOT SCALE DRAWING</p> <p>Scale: <b>1:16</b></p> <p>Drawing Printed: <b>9/26/2016</b></p>		<p>PRODUCT NAME: <b>LOWER BED FRAME BACK WALL MOUNT</b></p> <p>DRAWING NUMBER # <b>MCB-001-1</b></p> <p>SUB COMPONENT OF:</p>		<p>APPROVED BY: ???</p> <p>CUT SIZE:</p>	<p>DATE: ???</p>	<p>REVISION #</p>	<p>REVISION DESCRIPTION</p>	<p>ORDERED BY</p>
<p><b>CORCAN JOYCEVILLE</b> SOLIDWORKS EQUIPMENT INSTITUTION</p> <p>THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF CORCAN JOYCEVILLE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF CORCAN JOYCEVILLE IS PROHIBITED.</p>		<p>FILE: M:\Solid Works\SOLIDWORKS DRAWINGS, PARTS, &amp; ASSEMBLIES\PROTOTYPES AND CUSTOM PRODUCTS\CSO\Hision\818 FRAME ASSEMBLY</p>		<p>MATERIAL:</p>		<p>REVISION:</p>		<p>DATE STARTED: ???</p>

BED SKIN, FACE PLATE & END PLATES HIDDEN

BOTTOM VIEW

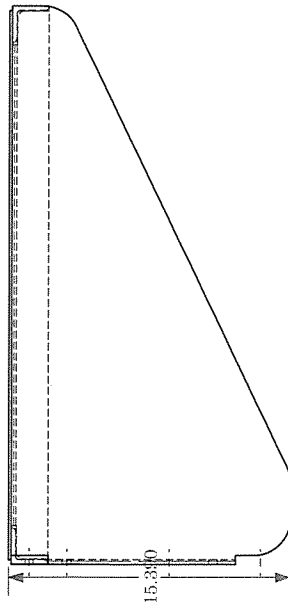
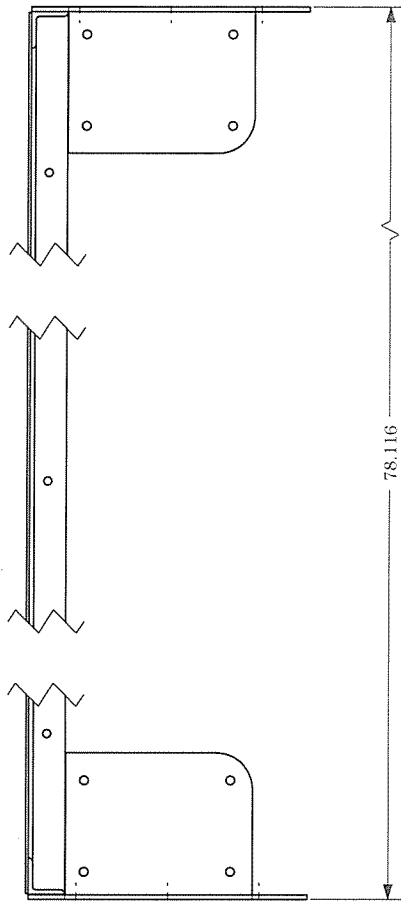
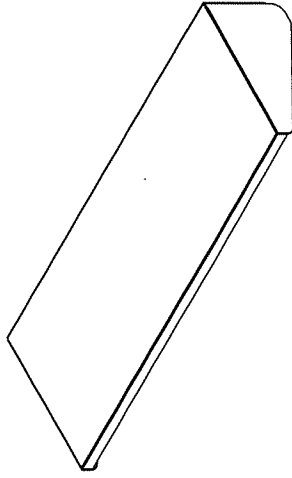


SECTION A-A



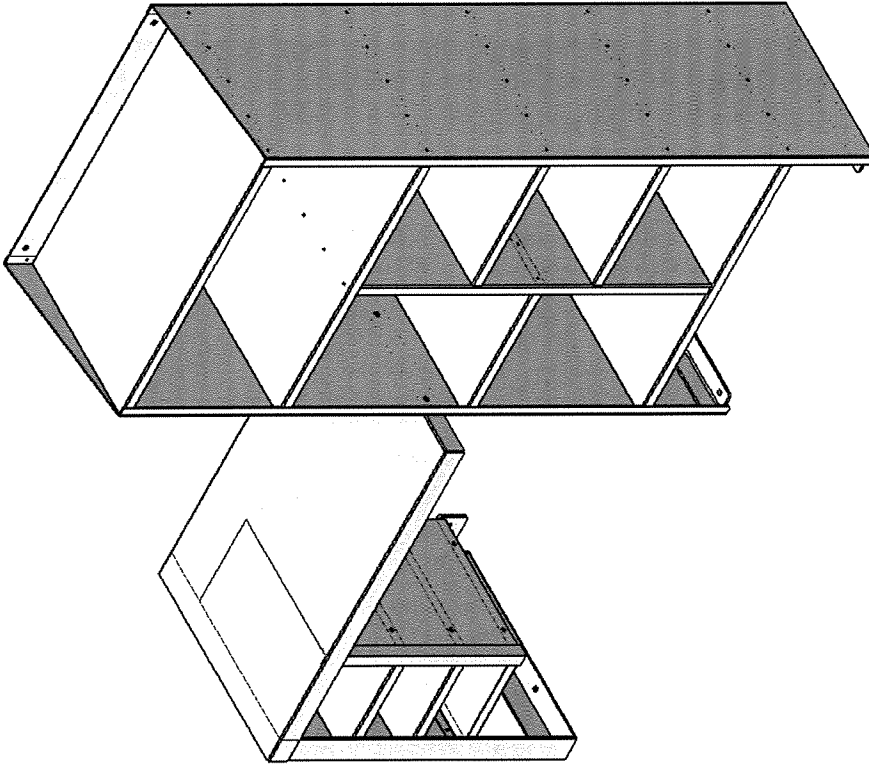
<p><b>CORCAN JOYCEVILLE</b> SOLIDWORKS EQUIPMENT DIVISION</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CORCAN JOYCEVILLE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF CORCAN JOYCEVILLE IS PROHIBITED.</p>		<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ±1/64 ±0.016 ±1</p> <p>DO NOT SCALE DRAWING</p>		<p>PRODUCT NAME: <b>LOWER BED FRAME BACK WALL MOUNT</b></p> <p>DRAWING NUMBER # <b>MCB-001-1</b></p>		<p>APPROVED BY: ???</p> <p>DATE: ???</p>		<p>Revision #</p> <p>Revision Description</p>		<p>Ordered By</p>	
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<p>Drawing Number: <b>9/26/2016</b></p>		<p>DO NOT SCALE DRAWING</p>		<p>MATERIAL:</p>		<p>MATERIAL:</p>		<p>Date Started: ???</p>		<p>Revision: ???</p>	
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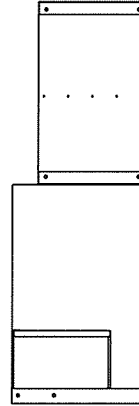
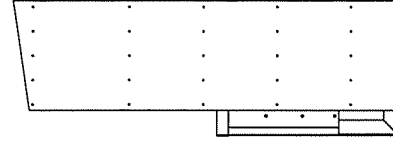
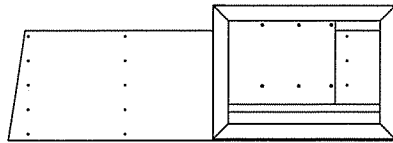
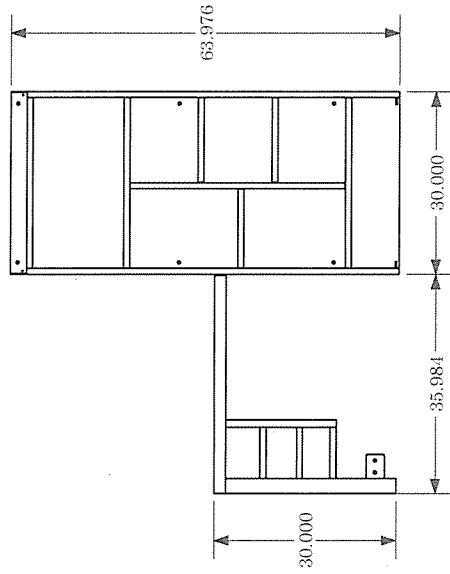
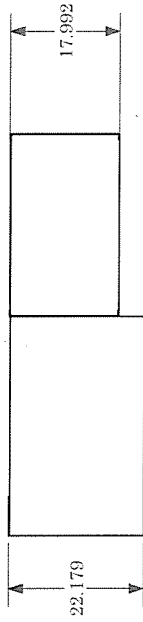
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. FRACTIONS DECIMALS ANGLES <math>\pm 1/64</math> <math>\pm 0.016</math> <math>\pm 1^\circ</math></p> <p>DO NOT SCALE DRAWING</p> <p>Scale: 1:8</p> <p>Drawing Printed: 9/26/2016</p>	<p>PRODUCT NAME: <b>LOWER BED FRAME BACK WALL MOUNT</b></p>	<p>APPROVED BY: ???</p>	<p>DATE: ???</p>	<p>REVISION #</p>	<p>REVISION DESCRIPTION</p>	<p>ORDERED BY</p>
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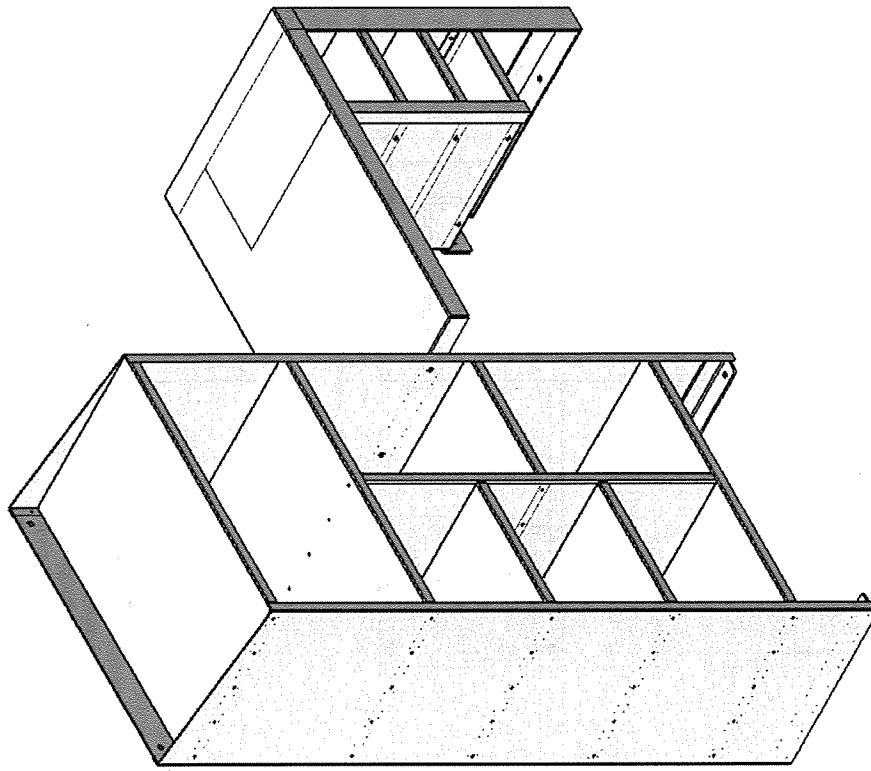
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DECIMALS AND ANGLES SHALL BE TO 0.016 ±1°	PRODUCT NAME:	MISSION CELL FURNITURE [LEFT DESK]	APPROVED BY:	DATE:	Revision #	Revision Description	Ordered By
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Scale: 1:24	Sub Component Of:		MATERIAL:				
Drawing Printed: 9/26/2016			SHEET SIZE:				
CORCAN JOYCEVILLE INSTITUTION			DRAWN BY: J.Dressler	Date Shown: ???			Revision:
SOLIDWORKS EQUIPMENT DEPARTMENT							
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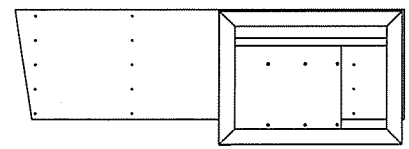
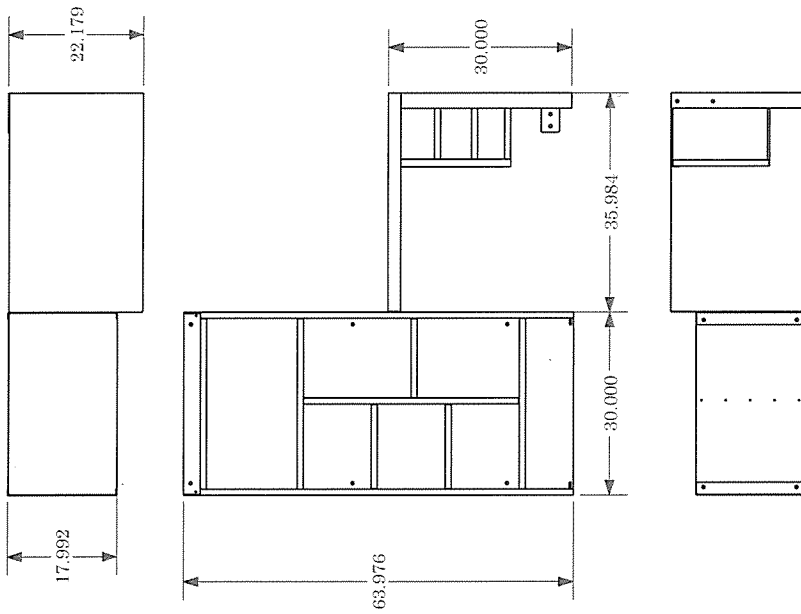


<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ±.004 ±.0016 ±.1</p> <p>DO NOT SCALE DRAWING</p>	<p>PRODUCT NAME: <b>WARDROBE WITH RIGHT DESK</b></p> <p>DRAWING NUMBER: #</p>	<p>APPROVED BY: ???</p> <p>CUT SIZE:</p>	<p>DATE: ???</p>	<p>Revision #</p> <p>Revision Description</p>	<p>Ordered By</p>
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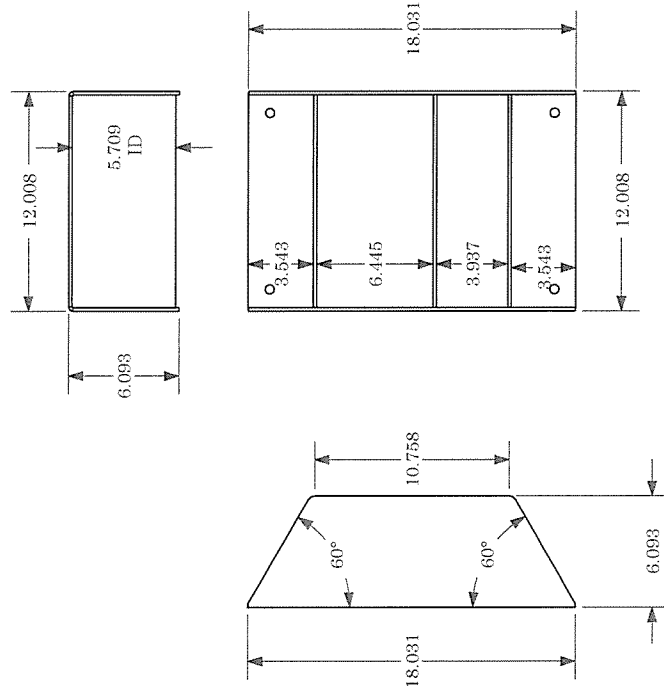
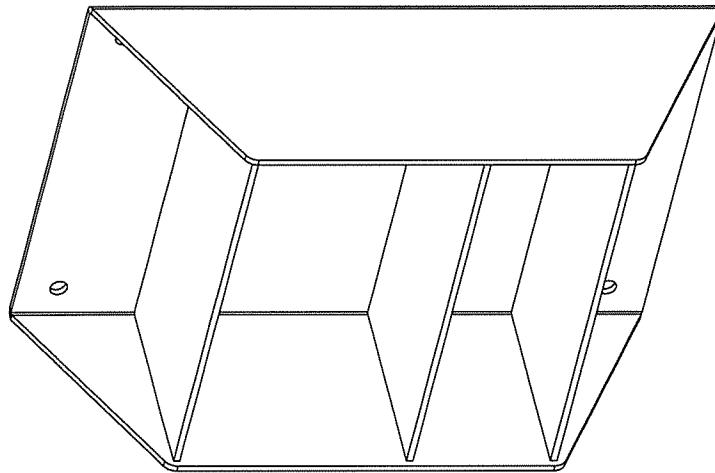
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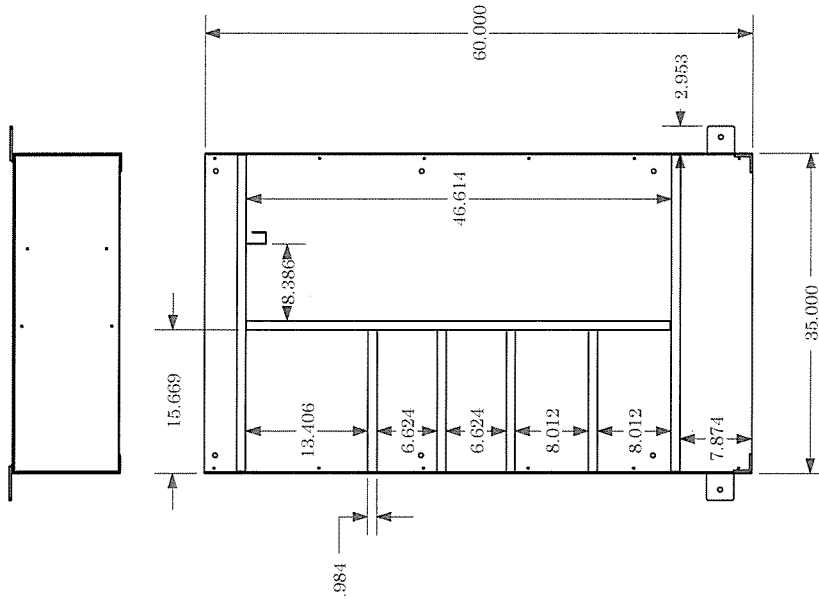
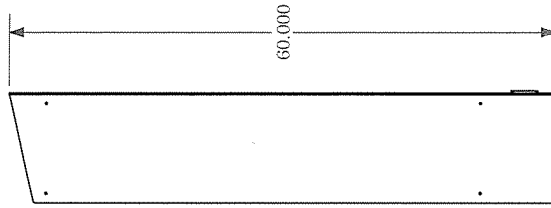
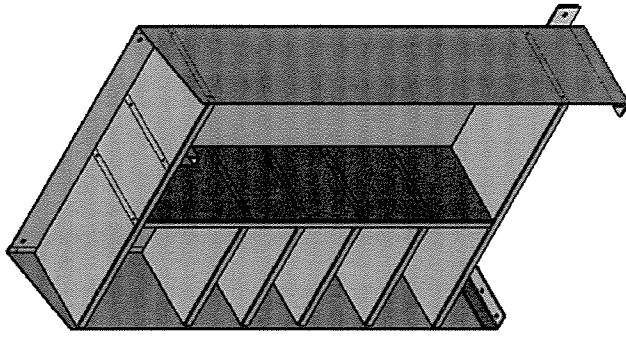


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. FRACTIONS DECIMALS ANGLES $\pm 1/64$ $\pm 0.016$ $\pm 1'$ DO NOT SCALE DRAWING	PRODUCT NAME: <b>MISSION CELL FURNITURE [RIGHT DESK]</b>	DRAWING NUMBER: #	DATE: ???	REVISION #	REVISION DESCRIPTION	ORDERED BY
	APPROVED BY: ???	CUT SIZE:	MATERIAL:	SHEET SIZE:	FILE: M:\Solid Works\SOLIDWORKS DRAWINGS, PARTS, & ASSEMBLIES\PROTOTYPES AND MISION CELL FURNITURE	REVISION:
SUB COMPONENT OF:	DRAWING PRINTED:	SCALE:	DRAWN BY:	DATE SHIPPED:	DRAWN BY:	DATE SHIPPED:
1:24	9/26/2016	1:24	J.Dressler	???	J.Dressler	???


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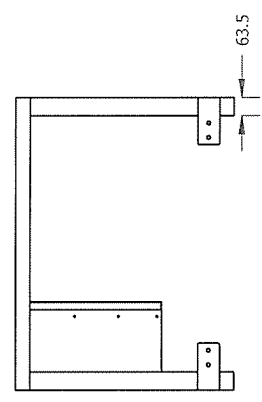
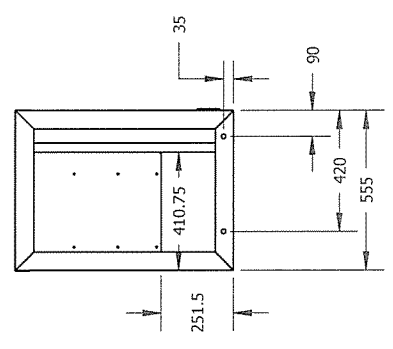
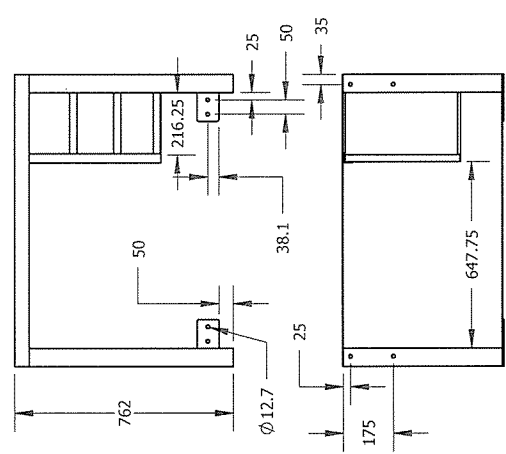
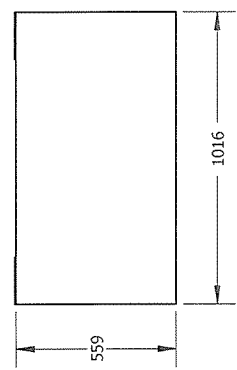
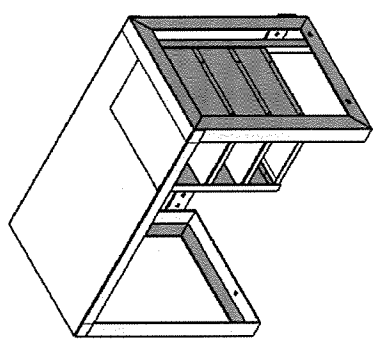
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ±1/64 ±0.016 ±1°	FINISHED PRODUCT:	CORCAN JOYCEVILLE INST. Barrier Free Cell Wardrobe	
	SHEET SIZE:	DATE	777
MATERIAL:	DRAWN BY:	J. Dresler	777
CUT SIZE:	APPROVED BY:	777	10/4/2016
DO NOT SCALE DRAWING	DRAWING PRINTED	SCALE:	1:16
MFG. #: N/A	Revision:		MSQ-016-1

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Revision	Description	Ordered By



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	CUT SIZE:	APPROVED BY: ???	10/17/2016
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	MFG. #: N/A		MSQ-031-1

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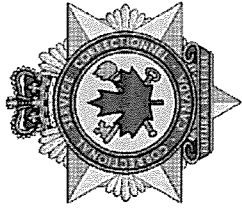
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**APPENDIX C  
MATSQUI INSTITUTION SITE MAP**





Real Property  
Line Drawings

Region:

Pacific

Institution:

Matsqui  
Institution

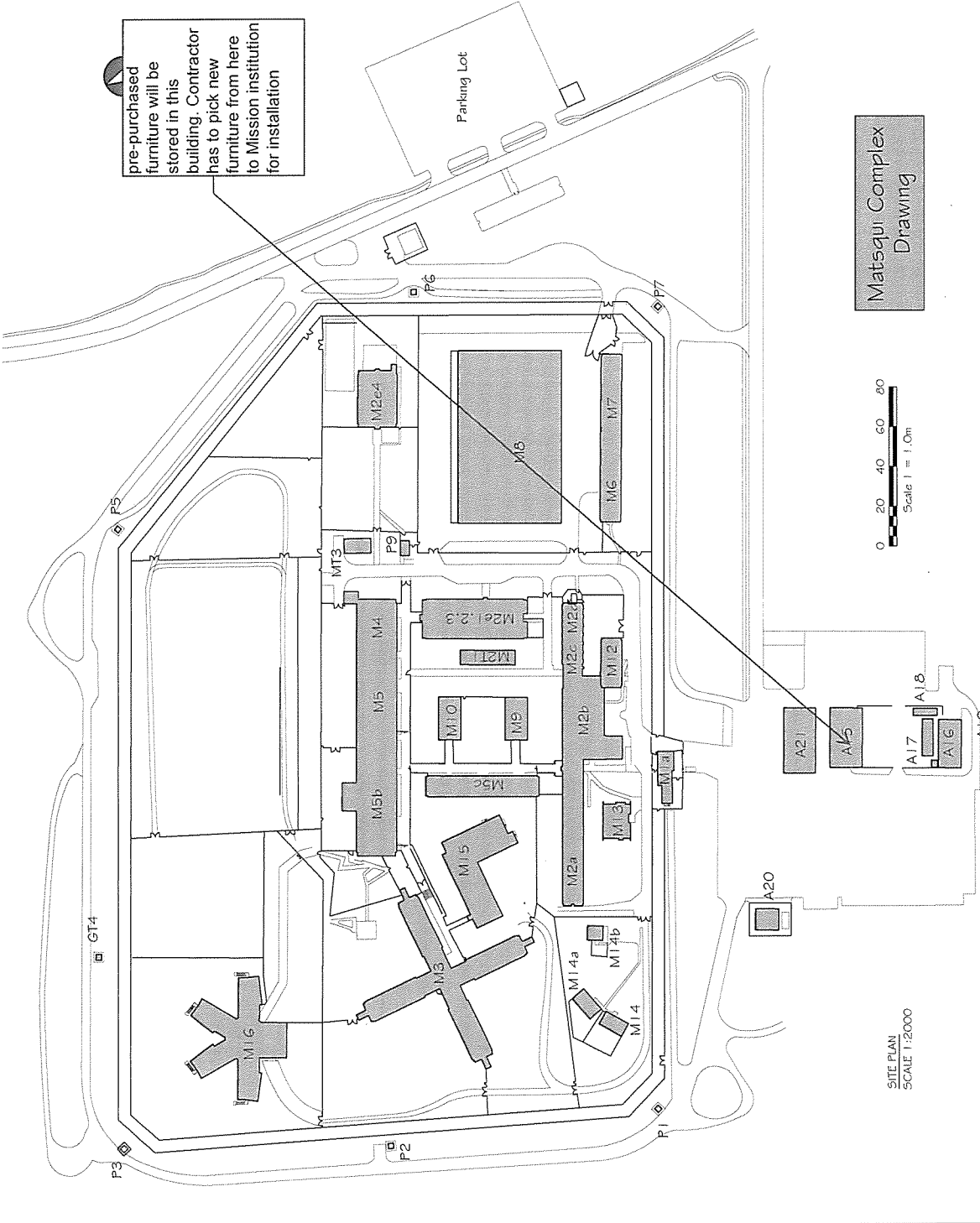
BUILDING INDEX

#	Name	Area, m <sup>2</sup>
A15	CORCAN / FVI S15 STOR	4300.4
A16	GROUNDS EQUIP. STOR	294.8
A17	OUTSIDE EQUIP. CARPORT	102.1
A18	FVI S15 OFFICE TRAILER	44.0
A19	VOLATILE STORAGE	29.7
A20	GENERATOR BUILDING	126.2
A21	MULTI PURPOSE BUILDING	525.1
G14	GUARD TOWER	8.4
M13	GUARDHOUSE	143.7
M23	ADMINISTRATIVE OFFICES	2167.3
M26	WC UNIT	
M27	DISASSOCIATION	
M28/29	SICK BAY	1048.3
M284	ACADEMIC CENTRE	339.9
M211	JVC PROGRAMS TRAILER	204.2
M3	HOUSING	1840.2
M4	DINING & KITCHEN	2769.1
M5	AUDITORIUM	
M5b	PROGRAMS	
M5c	SOCIALIZATION	600.3
M6	MAINTENANCE & ENGINEERING	490.1
M7	SHOPS	
M8	INDUSTRIES	4533.1
M9	SOCIAL DEVELOPMENT	246.9
M10	CHAPEL	247.2
M12	ADMISSIONS & DISCHARGE	362.6
M13	SENIC MANAGEMENT	246.8
M14	FAMILY VISITING	95.4
M14a	FAMILY VISITING	105.0
M15	OPERATIONS	57.9
M16	96 BED LIVING UNIT	1017.0
M17	STAFF LOUNGE TRAILER	99.4
FLP7	GUARD TOWERS	44.1
P9	CONTROL POST	35.6
	Total Area	2001.7

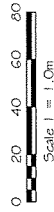
Scale: 1:2000

Issue Date: 2016-01-22

pre-purchased furniture will be stored in this building. Contractor has to pick new furniture from here to Mission institution for installation



Matsqui Complex  
Drawing



SITE PLAN  
SCALE 1:2000

