



Global Affairs
Canada

Affaires mondiales
Canada

Annex Fit-up of CSDP Space, Design Brief Mexico City, Mexico

Embassy of Canada to Mexico



Project number: L-MXICO-134

May 2018

Canada 

Mexico: Annex Fit-up CSDP Space	Performance Specification
Project No. L-MXICO-134	Table of content

1. PERFORMANCE SPECIFICATION

Part 1 General Project Requirements

Part 2 Architectural and Interior Design

Part 3 Structural Engineering

Part 4 Mechanical Engineering

Part 5 Electrical Engineering

Part 6 Information Technologies Systems

Part 7 Commissioning Requirements

2. APPENDICES

Appendix "A" Proposed IT Cable Tray layout

Appendix "B" Proposed Workstation layout

Annex Fit-up Mexico City, Mexico

Performance Specification Part 1

General Project Requirements

PART 1 – GENERAL PROJECT REQUIREMENTS

A) GENERAL INFORMATION

1. Project Summary

The performance criteria describes the requirements for the design development, working drawings and specifications, construction supervision and all other control and administrative services, as described in this request for proposal (RFP), and associated with the implementation of this project for the Embassy of Canada in Mexico City @ Blvd. Miguel de Cervantes Saavedra 193 Granada 11520 Ciudad de México, CDMX Mexico

The Government of Canada, through Global Affairs Canada (GAC), wishes to fit up a section of office space with (24) new workstations. GAC is seeking proposals from design/build contractor who will be responsible to work with the project team in Canada as well as the Embassy staff to create a set of construction drawings based on GAC's requirements, and then complete the work based on the approved construction drawings.

- 1.1 A brief description of the projects scope is: complete repairs to the floor slab (from removed mobile shelving units), preparation of the slab to accept new carpet tile c/w wall base, patching and painting of the walls, possible HVAC work, installation of EMT conduit for the installation of new electrical cables to power 24 work stations and associated office equipment, wiring of the 24 workstations to the electrical system, modification of the ceiling grid for the relocation and installation of light fixtures, installation of cable tray extensions. And provide 3rd party commissioning experts to assist GAC as per part 7 "Commissioning".
- 1.2 The work area is to be developed based upon the GAC layout concepts provided as an appendix to this Project Brief. The consultant shall be prepared to assist GAC with at least two (2) additional renditions of the layout during the concept design stage of the project. Design/Build contractor to evaluate the existing light installation and prepare 3 lighting options as per Part 5 article 5.14.2.
- 1.3 The contractor shall be responsible to analyse the information provided and verify the accuracy of the GAC Floor layouts provided. Discrepancies shall be noted and brought to the attention of the Departmental Representative at the design concept stage of the project.
 - 1.3.1 The design/build contractor will be obligated to design the project in accordance with the cost plan and assist in cost monitoring throughout the project.
 - 1.3.2 The purposes of the Project Brief are:
 - a) To allow Proponents (Design/Build Contractor) to prepare and submit detailed proposals;
 - b) To provide sufficient information to allow the design/build contractor to prepare complete tender drawing documents including: schematic design, concept design, design development, construction documents, cost and bills of quantities; and
 - c) To serve as a quality assurance document for the departmental representative during the design and construction.

1.3.3 The project brief describes the minimum acceptable quality standards required for the fire alarm system design. It may be necessary from time to time during the design stage to amend or supplement the information provided.

2. National Security

2.1 This project involves National Security issues. The design/build contractor is obliged to:

- a) Keep all project documentation secure;
- b) Ensure that project staff do not communicate project related information to any third parties, unless required for completion of the work;
- c) Maintain site security during construction and comply with the exchange square tenant obligations; and
- d) Return all materials and documentation at the end of the project;
- e) All media enquiries are to be directed to the department representative.
- f) Sign a voluntary confidentiality agreement, agreeing not to discuss or distribute any general or specific information pertaining to the project to persons not directly involved in the Works.

3. Codes, Regulations, By-Laws

2.1 At minimum, the design and construction shall conform to all current and applicable laws, codes, regulations and ordinances of local authorities and the most recent edition of Canadian Codes and standards including, but not limited to:

2.2 Canada Labour Code, Occupational Safety & Health Regulations;

- 2.2.1 GAC Fire Commissioner Requirements;
- 2.2.2 National Building Code of Canada, (NBC);
- 2.2.3 NFPA 72 - National Fire Alarm and Signalling Code
- 2.2.4 Barrier-Free Design, Standard CAN/CSA-B651;
- 2.2.5 National Fire Protection Association Standards (NFPA);
- 2.2.6 NFPA 70 – National Electrical Code, and
- 2.2.7 Any applicable local requirements.

3.4 Any other relevant, codes, regulations by-laws and standards as stipulated in the project brief

3.5 Contact with authorities is to be coordinated with the departmental representative.

3.6 Construction safety regulations of Mexico will be applied on site.

3. Supplied Furniture Equipment and Allowances

3.1 The following items will be supplied by GAC:

- 4.1.2 Teknion branded workstation componentry, (installed by Canadian contractor)
- 4.1.3 Monitor Arms (installed by Canadian contractor)
- 4.1.4 Office chairs, (installed by Canadian contractor)
- 4.1.5 Task lighting for workstations, (installed by Canadian contractor)
- 4.1.6 Waste bins (installed by Canadian contractor)
- 4.1.7 Filing cabinets, (installed by Canadian contractor)
- 4.1.8 Lounge furniture (installed by Canadian contractor)
- 4.1.9 Lounge area lighting (table lamps) (installed by Canadian contractor)

4.2 Any item that is required to be supplied by GAC will be shipped to site at the expense of GAC.

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Part 1</p> <p style="text-align: center;">General Project Requirements</p>
--	--

The design/build contractor will be responsible to receive the goods supplied by GAC at the site, store them as may be necessary until ready for installation. Installation instructions for items supplied by GAC will be provided by the GAC departmental representative.

5. GAC Project Management

A GAC Project team, coordinated by the departmental representative, will manage the project from Ottawa. The departmental representative will be the single point of contact between the design/build contractor and the department. The design/build contractor will be the single point of contact between its consultants, sub-contractors and the department. The departmental representative will be the final authority in the decision making process related to this Project and will act as the official point of contact between the design/build contractor and the Embassy on matters concerning this project

5.1 The departmental representative is:

**Mr Stephen Haas
Deputy Project Manager
Minor Capital Projects (AWPM)
Physical Resources Bureau
Global Affairs Canada
125 Sussex Drive, Ottawa, Ontario K1A 0G2, Canada**

**Tel: 343-203-8309
Cell: 613-404-6969
Fax: 819-934-2242
Email: Stephen.Haas@international.gc.ca**

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	Project Brief Part 1 General Project Requirements
--	--

6. Specialist Consultants

The design/build contractor shall provide for the cost of professionally qualified specialists in their fee including: cost planning, scheduling, fire protection engineer, engineer responsible for all licensing requirements necessitated by the works and activities of this project brief including any local requirements for health and safety, commissioning, construction review, inspection, and other professional approvals. Others may be designated by the departmental representative during the course of the project.

B) PRE- CONSTRUCTION SERVICES

1. Submissions and Reviews

- 1.1 The design/build contractor shall provide drawings and supporting specifications and reports in English only for review and approval by the GAC Project Team.
- 1.2 The complete design will be based on the requirements of this project brief. The construction documents shall be submitted at the design concept, 66% and 100% (Final) stages.
- 1.3 Review and acceptance of designs and other documents will proceed as follows:
 - 1.3.1 GAC project team will review all submissions and provide written comments.
 - 1.3.2 The departmental representative will return one marked-up set of documents or a written review to the design/build contractor. The design/build contractor shall provide written response to all comments.
 - 1.3.3 Reviews and detailed checks of the documents in no way relieve the design/build contractor of their professional responsibility for the work and the work of sub-consultants.
 - 1.3.4 During each review period, the design/build contractor shall, maintain full production on the project and revise documents as necessary when review comments are received.
- 1.4 No acceptance or approval by GAC whether expressed or implied shall be deemed to relieve the design/build contractor of professional responsibility for correctness of design, details, dimensions, adherence to all codes and by-laws. Neither does acceptance of an estimate by GAC in any way abrogate the consultant's responsibility to deliver the project for the fixed price. If cost overruns occur during design development, the design/build contractor will be required to make revisions or participate in value engineering exercises in order to reduce the construction cost. Additional fees for any variations to the contract will not be considered for these services.
- 1.5 All plans, specifications and commissioning documents submitted must be in English.
- 1.6 The design/build contractor must use the same calendar date on all construction documents, drawings and specification. This is the date corresponding to the completion of document submission.

- 1.7 The actual list of drawings to be submitted will be determined by the departmental representative after discussions with the design/build contractor.
- 1.8 As-built drawings will be submitted at the end of the project. All As-Built submissions must bear the seal of the appropriate professional.
- 1.9 Upon final acceptance of construction documents, provide a hard copy of all reports, design criteria and calculations for mechanical, electrical, fire, civil and structural design to the departmental representative in the formats detailed below. Some of this information may be requested earlier during the design stages or working documents.

2. Submission Format (also applicable to submission of Record Drawings)

Drawings:

1. **Hard Copy:** four (4) bound sets.
2. **PDF Format:** latest version.
3. **AutoCAD Format:** Release 2011 (.DWG) file format.
4. **AutoCAD support files:** including but not limited to drawing files (DWG), external reference (x-ref), shape files (SHX) and font files (SHX, TTF) and color table file (CTB);
5. **Plotting & Layering instructions:** in hard copy (printed instructions) and electronic format (PDF, RTF or TXT);
6. **Media & Quantity:** two (2) complete sets of files copied on CD=s or DVD=s.

Text documents and Spreadsheets:

7. **Hard Copy:** four (4) bound sets.
8. **PDF Format:** latest version.
9. **Microsoft Word,** latest version.
10. **Microsoft Excel,** latest version.

3. Concept Design Submission

- 3.1 Project schedule including dates for all submissions.
- 3.2 Report on existing conditions and verify floor area measurements.
- 3.3 Mechanical, electrical, structural and fire protection documents and cut sheets.
- 3.4 Material boards and descriptive information (to be retained by GAC).
- 3.5 Recommendations to protect/hoard construction zones from occupied operational work zones and spaces.
- 3.6 Provide the electrical site analysis as per Part 5 Section 5.3 - Building system Analysis c/w the 3 lighting options

4. Design Development Submission (66% Construction Documents)

- 4.1. This submission indicates the intended scope of the construction documentation and illustrates the progress in developing the approved design.
- 4.2. Drawings and document list (at this stage, GAC will provide security input to the hardware schedule if applicable; and identify location of IT/Data outlets).
- 4.3 Provide an updated cost report and a full bill of quantities showing labour and material

- estimates for independent review by GAC quantity surveyors.
- 4.4 Project schedule updated.
- 4.5 Architectural floor plans showing partitions, room numbers, corresponding names, millwork and fire protection components, elevations sections. Security plan identifying wall types. Typical details of security walls to ceiling. Typical fire wall section. Typical security wall section. Furniture plans using typical GAC layouts. Material schedule as required by basic design.
- 4.6. Mechanical
- 4.6.1 Systems Design Document: Identify the existing location of all the system components and identify the new location for the equipment relocation including but not limited to piping and, controls,
- 4.6.2 Identify any new equipment and components.
- 4.6.3 Throughout project development this document will be refined. The description shall include the description of the existing systems that will remain and its proposed modifications. List also the systems that will be completely removed.
- 4.6.4 Describe provisions to maintain acoustic sound levels.
- 4.6.5 Show location of all outdoor air intakes and exhaust.
- 4.7. Electrical
- 4.7.1 Drawings, Symbols and Design: Use standard graphical symbols and provide drawings showing advanced development of the following:
- 4.7.1.1 Electrical plans showing:
- A. Legend of all symbols used;
 - B. New and existing lighting infrastructure c/w control strategy. Provide a fixture schedule and clearly indicating methods of supporting fixtures. Complete lighting layout and fixture schedule clearly indicating methods of supporting fixtures.
 - C. Telephone and electrical conduits system layout for ceiling distribution
 - D. Power distribution c/w circuit numbers at outlets. Provide the following data
 - Total connected load;
 - Maximum demand and diversity factors;
 - All conduit and wire sizes
 - A panel schedule with loadings for each panel;
 - E. Electrical specification for the installation of the electrical infrastructure c/w shop drawings of all new material.
 - F. New and existing life and safety infrastructures.
- 4.7.3 Commissioning submission requirements as outlined in Part 7 “Commissioning Requirements”.
- 4.7.4 All required safety studies as per Mexican legal requirements.
- 4.7.5 Any additional drawings or documents required to complete the basic design and submit an application for the construction license.

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Part 1</p> <p style="text-align: center;">General Project Requirements</p>
--	--

6. 100% Construction Documents Submission

- 6.1. This submission incorporates all revisions required by the 66% review.
- 6.2. The design/build contractor, as well as any licensed sub-consultants shall sign and seal all construction drawings.

7. Construction

7.1. Health and Safety Supervision

- 7.1.1 The design/build contractor will prepare the construction safety study.
- 7.1.2 The employer will review the safety plan and make recommendations for acceptance or revisions.
- 7.1.3 The design/build contractor is responsible and will monitor the health and safety on site and the implementation and adherence to the approved health and safety plan.
- 7.1.4 The design/build contractor will prepare the activity plan considering protocols for security with authorities and GAC and take all steps required to ensure GAC fulfils its health and safety obligations.

C) CONSTRUCTION GENERAL

1. Shop Drawings Review

Provide Shop Drawings, Product Data, and Samples to the Departmental Representative in English, or Spanish where English is not available with translation to English for review and approval. Do not proceed with work until relevant submissions are reviewed and approved by GAC. The design/build contractor's responsibility for errors and omissions in submission is not relieved by GAC's review of submissions. Accompany each submission with a Transmittal Letter.

The design/build contractor, or other authorized representative, shall stamp and sign the submitted materials certifying approval of submissions, verification of field measurements and compliance with Contract Documents.

2. Design/Construction Changes

All changes, whether additions or deletions including those not affecting the construction cost, must be covered by change orders in order to provide a complete record of variations from the original construction documents.

The cost of changes cannot be included in progress claims until the authorized change order has been issued.

3. Design/Build Contractor Progress Claims

GAC will consider progress payments for the approved work as per Draft Design-Build

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Part 1</p> <p style="text-align: center;">General Project Requirements</p>
--	--

Construction Contract, Articles of Agreement – C12. “Retention” & C13. “Invoices”

D) DESIGN/BUILD CONTRACTORS ADMINISTRATIVE SERVICES

1. Construction Progress Meetings

- 1.1 The design/build contractor shall chair and take minutes of weekly construction progress meetings throughout the duration of the contract.
- 1.2 Typical Agenda for the design and construction progress meetings:
 - 1.2.1 Attendance:
 - Design/Build Contractor
 - Sub-Design Build Contractors (as required);
 - Consultants, Sub-Consultants (as required);
 - Site Supervisor;
 - Embassy Staff, and
 - GAC Site Liaison Officers(s)
 - 1.3 Location and Time: Record meeting location, date, time, attendance and absences.
 - 1.4 Previous Minutes: Review previous minutes.
 - 1.5 New Business: Discuss all items of new business and identify parties designated for action.
 - 1.6 Construction Schedule: Evaluate progress of work based on the construction schedule.
 - 1.7 Construction Cost/Cash Flow: Monitor construction cost plan and cash flow.
 - 1.8 Shop Drawings: Monitor the progress of shop drawing review.
 - 1.9 Site Instructions: Record contractor’s acknowledgement of receipt of all site instructions.
 - 1.10 Changes: Monitor and record the progress of contemplated change notices, quotations, reviews and issue dates of change orders.
 - 1.11 Site conditions: The Design Build Contractor is required to record accurately all deviations from the Contract Documents caused by site conditions. The design/build contractor shall review any such cases with departmental representative to determine the effects on project progress and recommend actions.
 - 1.12 Adjournment and Next Meeting: Record adjournment time, and the date and place of next meeting.
 - 1.13 Distribution: After approval by the Departmental Representative, the Design Build Contractor is responsible for distributing minutes to Consultants and Sub-Design Build Contractors, GAC Site Liaison Officer(s) plus one copy to the Departmental Representative.

2. Field Review Services (Logs documenting acceptance or rejects and samples)

- 2.1. Review work in progress and materials on site as appropriate to the progress of the work. Use specialists where required. Ensure that Sub-Consultants regularly inspect their portion of the work and provide additional supervision as appropriate.

- 2.2. Maintain shop drawings logs, including date of submission and date of response.
- 2.3. Inspect materials, prefabricated assemblies and components at their source or on site as agreed with the departmental representative.
- 2.4. Provide written reports and record the dates of site visits and personnel involved.
- 2.5. The design/build contractor and their consultants must act promptly to resolve questions arising from site conditions, work in progress and materials that may affect the progress and cost of the Project.
- 2.6. Monitor design/build contractor adherence to applicable site safety regulations and advise authorities for inspections as required.
- 2.7. Field review services include one full time site supervisor (architectural) and one senior engineer for 2 days per week on site.

3. Progress Reports

- 3.1 The design/build contractor shall prepare a written report bi-weekly for the departmental representative on the progress of the work to date. The report must include:
 - 3.1.1 A description of the progress of construction relative to the schedule (a minimum of ten progress photographs).
 - 3.1.2 Potential delays and the recommended action to reduce the impact of the delay.
 - 3.1.3 Serious problems anticipated or that have occurred. Including:
 - The history of the incident.
 - Action taken to date.
 - Contractor's reaction to the incident.
 - The Consultant's interpretation of the contract requirements relevant to the situation.
 - Recommendations for action which GAC should initiate.
 - 3.1.4 Extra costs in the administration of the construction (actual and anticipated).
 - 3.1.5 Measurement of labour and materials for the processing of payments to the design/build contractor will be completed by the cost planner.

4. Post-Contract Drawings

- 4.1. Prepare additional detail drawings as and when required to properly clarify, interpret or supplement the construction documents.
- 4.2. Review these drawings with the departmental representative and obtain written approval of Post Contract Drawings prior to their release to the design/build contractor.

5. Shop Drawings Review

Review shop drawings promptly. Verify that they are clearly detailed and dimensioned, and are not proposing substitution of unacceptable construction or materials. Accept or reject shop drawings and return promptly to the contractor. Send one copy to the departmental representative. Provide bi-weekly report indicating status of shop drawings (date submitted, date reviewed, date returned, etc.)

6. Testing Laboratory Services

Ensure that materials and assemblies are tested as required by the construction documents. Require tests of any material and construction on site that appears of doubtful quality or performance.

7. Construction Changes

1. All changes, whether additions or deletions including those not affecting the construction cost, must be covered by change orders in order to provide a complete record of variations from the original construction documents.
2. The cost of changes cannot be included in progress claims until the authorized Change Order has been issued.

8. Design/Build Contractor's Progress Claims

- 8.1. Progress Payments will be made monthly to the design/build contractor based on the value of completed work. The value of materials delivered, accepted and adequately protected on the site may be allowed in Progress Payments.
- 8.2. The design/build contractor shall review all claims, make revisions if necessary, and certify value of work done and material delivered, by signing the cost breakdown sheet of the claim. Forward the claim to the departmental representative for approval, as per the DRAFT Design-Build Construction Contract Articles of Agreement, Section C13. Invoices.
- 8.3. Payment requires completion and signing, by the parties concerned, of the following documents.
 - 8.3.1. Cost Breakdown;
 - 8.3.2. Invoice; and
 - 8.3.3. Statutory Declaration.
- 8.4. GAC reserves the right to have any or all claims reviewed by a 3rd party for accuracy and completeness. The design/build contractor shall adjust all claims to meet the requirements of the GAC Departmental Representative.

9. Posted instructions

- 9.1. Prepare operating instructions and diagrams in English, French and Spanish for posting near equipment and systems. Posted instructions will be glass-covered, framed and mounted by the design/build contractor.

- 9.2. Posted operating instructions shall consist of simplified, consolidated equipment, control and power diagrams graphically representing the entire system, including concise written instructions on how to start and stop systems, what settings and conditions are to be observed by the operators, and what control adjustments are to be made or maintained by the operator. Posted instructions shall include control diagrams furnished by the design/build contractor, with added specific operating instructions, controls, interlocks, etc.
- 9.3. Posted operating instructions shall include, but are not limited to:
 - 9.3.1 Heating, Ventilating and Air-Conditioning controls for each system.
 - 9.3.2 One line schematic diagrams of water supply (plumbing).
 - 9.3.3 One line isometric diagrams of sanitary drainage.
 - 9.3.4 One line diagrams of steam distribution, hot water and chilled water systems, including risers, valves, control devices, etc.
- 9.4 Contractor-furnished material: Project specifications shall clearly call for diagrams, instructions, performance data, etc., to be furnished by the Mechanical Design Build Contractors, if required for reports or manuals developed by the Consultant.

10. Interim Inspection

The Inspection and Acceptance Team will inspect the work and list all deficiencies on the standard Inspection and Acceptance form. A complete list of deficiencies is to be prepared by the design/build contractor. GAC then accepts the project from the design/build contractor subject to correction of the listed deficiencies and issues an Interim Certificate of Completion

11. Interim Certificate

- 11.1 As a result of the Interim Inspection and in place of a regular progress claim, GAC makes payment to the design/build contractor on the basis of the Interim Certificate of Completion.
- 11.2 Payment requires completion and signing, by the parties concerned, of the following documents:
 - 11.2.1 Cost Breakdown;
 - 11.2.2 Inspection and Acceptance;
 - 11.2.3 Interim Certificate of Completion; and
 - 11.2.4 Statutory Declaration.
- 11.3 As a member of the Inspection and Acceptance Team, verify that all deficiencies are correctly recorded, and ensure that Project Record Documents, maintenance manuals, and keys have been submitted by the Contractor, and reviewed and accepted by the design/build contractor and the Departmental Representative.
- 11.4 Estimate the cost of correcting deficiencies and completing the work, including postponed climate dependent work; enter these costs on the Inspection and Acceptance Certificate.
- 11.5 After issue of the Interim Certificate of Completion, the design/build contractor may cancel the Contract Insurance, and GAC assumes responsibility for:

- 11.5.1 Security of the site.
 - 11.5.2 Fuel and utility charges.
 - 11.5.3 Proper operation and use of equipment installed in the Project.
 - 11.5.4 General maintenance and cleaning of the building(s).
 - 11.5.5 Maintenance of equipment (except equipment covered by maintenance contracts provided by the Design Build Contractor or landlord, such as elevators).
- 11.6 The design/build contractor shall verify the proper execution of all operation and maintenance agreements by the design/build contractor, landlord or any specialist Contractors (for fire protection system testing)
- 12. Record Drawings & Manuals**
- 12.1 The design/build contractor shall provide GAC with a full set of Record Drawings, in English, together with the same information on CD=s.
- 12.2 The design/build contractor will record, on one set of white prints, all changes, alterations and additions as covered by authorized "Change Orders". This shall also include rerouted lines, relocated ducts, valves and equipment.
- 12.3 Following take-over, obtain marked-up As-Built documents from the design/build contractor, showing all changes in construction from the original Construction Documents. Combine this information with all post-contract drawings, change orders, and other modifications, to produce a full set of record drawings on CD=s.
- 12.4 Provide a copy of the specification, marked-up to show actual manufactured products and model numbers employed. Any schedule on the drawings should reflect actual equipment installed.
- 12.5 All Record and As-Built drawings shall be marked "**REVISED AS BUILT - MONTH/YEAR**" and sealed, format:
- 12.5.1 **Hard Copy: one (1) bound set.**
 - 12.5.2 **PDF Format: latest version**
 - 12.5.3 **AutoCAD Format:** Release 2011 (.DWG) file format.
 - 12.5.4 **AutoCAD support files:** including but not limited to drawing files (DWG), external reference (x-ref), shape files (SHX) and font files (SHX, TTF) and colour table files (CTB).
 - 12.5.5 **Plotting & Layering instructions:** in hard copy (printed instructions) and electronic format.
 - 12.5.6 **Media & Quantity: two (2) complete sets of files copied on CD=s or DVD=s.**
- 12.6 Four (4) sets of Operation & Maintenance (O & M) manuals covering all project systems (electrical, mechanical, etc...) shall be submitted by the design/build contractor in English. The design/build contractor shall review and approve the O & M manuals before recommending to the departmental representative their acceptance.

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Part 1</p> <p style="text-align: center;">General Project Requirements</p>
--	--

13. Final Inspection

- 13.1 Inform the departmental representative when satisfied that all work under the construction contract has been completed, including the correction of deficiencies listed on the inspection and acceptance as a result of the Interim Inspection. The departmental representative will make a final inspection of the project.
- 13.2 Accompany and assist the departmental representative with the final inspection of the project.

14. Performance Certificate

- 14.1. As a result of the Final Inspection, GAC makes a final payment to the design/build contractor on the basis of the performance certificate of completion.
- 14.2. For payment to be made, all parties must complete and sign the following documents:
 - 14.2.1 Cost Breakdown;
 - 14.2.2 Inspection and Acceptance;
 - 14.2.3 Final Certificate of Completion; and
 - 14.2.4 Statutory Declaration.

Assemble completed documents and any required supporting documents and submit to the Departmental Representative for processing.

- 14.3 Submit to the Departmental Representative a DVD with all the design/build contractors correspondence, minutes of meetings, correspondence with authorities, etc.

E) POST CONSTRUCTION SERVICES

1. Warranty Period

1.1 24 Month Warranty

- 1.1.1 All work under the Construction Contract carries a twenty-four (24) month warranty commencing on the effective date of the Interim Certificate of Completion. Certain parts of the work may have extended warranties as specified.
- 1.1.2 The design/build contractor is responsible for correcting all defects in the work during the warranty period, except for damage caused by misuse, abuse or neglect by others including the building occupants.
- 1.1.3 Investigate all defects and alleged defects in the work promptly and issue appropriate instructions to the design build contractor sub-contractors.

1.2 Twelve-Month Warranty Inspection

- 1.2.1 Twelve months after take over make arrangements with the departmental representative for a twelve-month warranty review of the project.
- 1.2.2 Prepare deficiency lists for the design/build contractor's correction.
- 1.2.3 Inform GAC in writing when all items listed on the twelve-month Warranty Inspection Certificate have been completed satisfactorily. GAC then convenes a final inspection of the Project by appropriate personnel.

1.3 Final Warranty Review

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	Project Brief Part 1 General Project Requirements
--	--

- 1.3.1 Conduct a final warranty review at the request of the departmental representative, prior to the expiry of the warranty period. Prepare deficiency lists for the Contractor's correction.
- 1.3.2 Inform the departmental representative in writing when all deficiencies listed on the final warranty review, deficiency list has been corrected.

END of Part 1

Annex Fit-up Mexico City, Mexico

Performance Specification Part 2

Architectural and Interior Design

PART 2 – ARCHITECTURAL AND INTERIOR DESIGN

A. CODES, REGULATIONS, BY-LAWS

See **Section ONE** PROJECT CONDITIONS, I. General Information, D., Codes, Regulation, By-Laws

B. PLANNING

1. APPEARANCE AND CHARACTER

- 1.1 The appearance and character of the chancery space shall be representative of the Embassy of Canada in terms of quality. The work shall seamlessly integrate into the existing fabric, look and feel of the Embassy.
- 1.2 Appearance and quality of finished spaces shall respond to 3 categories: Enhanced Areas, Office Standard Areas and Service Standard Areas

Enhanced Areas: for public and representational areas, specifically waiting rooms, are to be finished of the highest quality materials and durable for heavy use similar to one would expect in a luxury hotel. These areas are intended to showcase Canada.

Office Standard Areas: for the general office functions of the chancery, specifically workspaces and common office areas. These areas shall be finished in a manner consistent with class “A” office space in Mexico City and equal to the quality of the original fit-out of the Chancery.

Service Standard Areas: for areas in the chancery devoted to the operations of building and security systems specifically electrical and mechanical spaces as well as technical rooms related to chancery security and communications. These areas are to be finished in a durable utilitarian manner.

C. BUILDING SYSTEMS

1. General

- 1.1. Standards and materials stipulated indicate the minimum acceptable.
- 1.2. All security related material and components must be approved by GAC.
- 1.3. All building systems are to be designed utilizing a conservative interpretation of relevant codes, particularly where considering the potential of natural forces such as earthquakes, floods, tornadoes, typhoons.
- 1.4. All systems are to be designed on the basis of providing: safety to personnel during operation and maintenance; ease of maintenance of equipment and operational economy.
- 1.5. Existing building systems to be re-used shall be protected during construction specifically

raised floor systems, ceiling suspension systems, interior door and glazing systems and fixtures and fittings.

2. General Architectural Interior

- 2.1. The quality of the chancery interior is to be equivalent to that found in the existing building and be designed in a manner that incorporates a cohesive interior scheme throughout. The interior scheme of individual spaces shall align with one of the three categories of spaces listed in **Part 2 Architectural & Interior Design, B 1.2 Appearance and Character**
- 2.2. A GAC interior designer is responsible for the selection, procurement and installation of all movable furniture and furnishings.
- 2.3. A finish and colour scheme will be prepared by the design/build contractor as part of the construction documents subject to GAC approval, and implemented by the design/build contractor. The finish and colour selection will encompass all interior surfaces including the ceiling system, walls, floors, baseboards, millwork, doors, hardware, lighting. The GAC Interior Designer and Architect will work closely with the design/build contractor on the coordination of all materials and colours.
- 2.4. All built-in millwork is the responsibility of the design/build contractor and finishes shall include laminate counter tops with pass through trays, to be coordinated with GAC interior designer and agreed upon interior scheme.

3. Interior Doors

- 3.1. It is desirable to re-use the existing doors. Where new doors may be required they must match existing.
- 3.2. Door frames: N/A
- 3.3. Characteristics (fire ratings and finishes) of GAC supplied doors and contractor supplied doors require co-ordination with local codes, base building fit-up standards and interior schemes.

4. Floors

- 4.1. Existing floor cavities shall be adjusted as required to accommodate routing and relocation of under floor services
- 4.2. All floors shall be finished in consideration of room category and type.

Enhanced Areas: Areas forming part of the Enhanced Areas shall be provided with high quality durable hard finish material such as wood or stone.

Standard Office Areas: Carpet to match existing building carpet – GAC Spaces. Floors shall be finished with high quality commercial carpet tile from 100% solution died nylon with min. gauge of 50.4 rows/10cm, min. stitch 38.6 pu/10cm, max. pile height of 4.7mm.

All carpet tile shall be peel and stick adhesive backed conforming to flame spread requirements as per fire safety requirements. Carpet Selection to be reviewed and approved by GAC Interior Designer

Service Standard Areas: shall be polished, sealed concrete, vinyl or static-dissipating vinyl.

- 4.3. Where required the location of floor panels having voice / data / power boxes or pedestals shall be coordinated with furniture systems. Ensure not obstructed by furniture, panels, chairs etc.

5. Ceilings

- 5.1. All ceilings shall be finished in accordance with category of room

Enhanced Areas: Areas forming part of the Enhanced Areas may be a mix of fixed hard surface ceiling finishes and coordinated accessible panels or ceiling tiles.

Standard Office Areas: The general office space should have a uniform drop ceiling height to provide flexibility for future floor plan changes. Enclosed spaces should have the same drop ceiling height as adjacent open office spaces.

Service Standard Areas: Service Standard areas shall be exposed ceiling or accessible drop ceiling.

- 5.2. An integrated drop ceiling incorporating luminaries, ceiling tiles, secondary suspended ceiling suspension, sprinkler heads and smoke detection devices shall be installed. Wherever possible re-use existing ceiling systems and bulkheads.
- 5.3. All interfacing system: ceiling suspension, air handling, luminaries, in fill safety devices and walls are to be coordinated for ease of relocation, visual consistency, range of relocation and operational compatibility. Special ceiling in-fill conditions at cores, perimeter walls, partitions, columns, etc. are to be minimized.
- 5.4. All ceiling areas used for horizontal system distribution should be accessible without requiring repair to interior finishes.

6. Walls, Full Height Partitions (reference GAC Preliminary Floor Plan)

- 6.1. All interior partitions shall be finished in consideration of room category and type. .
- 6.2. Secure partitions shall be consistent with the wall types indicated in Security Guidelines (ref. appendix).
- 6.3. Standard Interior partitions not required to be security walls may be glazed (tempered glass) or 90mm metal stud and 12mm gypsum board both sides assembly.
- 6.4. Movable partitions may be reused and/or match existing.

7. Window Coverings

7.1. Design build contractor shall protect existing window coverings during construction, and ensure that they are cleaned upon completion of work.

8. Signage

8.1. All required statutory, illuminated exit signs and others, shall be provided by the design build contractors to meet code requirements.

8.2. All non-statutory signage consisting of exterior and interior signs shall be provided / relocated under an allowance by the contractor and designed, fabricated and installed following the GAC Embassy Signage Guideline.

8.3. All new interior signage shall be consistent with existing.

9. Light Reflectance

General light reflectance on finished surfaces and materials shall be as listed below:

Ceilings	80%
Walls	40% to 60%
Floors	30%
Windows	40% to 60%

END of Part 2

Annex Fit-up Mexico City, Mexico

Performance Specification Part 3

Structural Engineering

PART 3 - STRUCTURAL ENGINEERING

A. APPLICABLE CODES AND STANDARDS

1 BUILDING CODE COMPLIANCE REQUIREMENTS

- 1.1 All new structural systems designed and installed shall meet all applicable codes, standards and regulations of the authority having jurisdiction or the National Building Code of Canada 2015 (NBCC 2015), whichever is more stringent.
- 1.2 Refer to *Part 1: General Project Requirements - 1.3 Applicable Codes and Standards*, for a complete description of the code compliance requirements.

2. DESIGN, EVALUATION AND PERFORMANCE OF STRUCTURE

2.1 STRUCTURAL LOADS

2.1.1 General Considerations

- 2.1.1.1 Determine the capacity of structural members to withstand, within acceptable deflection limitations, all current and planned occupancy loads. Provide the most efficient and cost effective solutions for any structural reinforcing, if required.
- 2.1.1.2 Verify that floor slabs, horizontal framing members, and beams or girders have the required capacity to carry the loads resulting from the proposed layout. Uniformly distributed live load shall not be modified by reduction factors. In the calculation of live loads on columns or structural walls, no reduction factor for tributary area shall be applied to the uniformly distributed live load.
- 2.1.1.3 All verified general design load capacities shall be clearly specified within the "General Notes" on the drawings. Any locations where design load capacity exceeds that of the general load capacity shall be clearly identified on the drawings.

2.1.2 Office Space – Floor loading Review

- 2.1.2.1 Structural verification of the structural framing is required for all floor areas supporting storage and filing rooms, mobile shelving units, and computer rooms. Minimum superimposed live load capacity shall be:
- a) Office area 2.40 kPa;
 - b) Storage Areas and Server Rooms: live load 4.8 kPa

2.2 FLOOR PENETRATIONS

- 2.2.1 Floor penetrations, if required, shall be designed so as to **NOT** decrease the capacity of the Lateral Force Resistance System (LFRS).

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	Project Brief Part 3 Structural Engineering
--	--

2.2.2 All new openings for installation of mechanical, electrical, communication systems, etc. must be reviewed by the structural engineer, and approved in writing. Cutting or coring of openings must **NOT** decrease the live load capacity of the slab or any other structural element

3. SUBMISSIONS

CONSTRUCTION DOCUMENT PHASE

3.1. Deliverables

- Construction drawings and specifications as required for any modification to the existing structure to accommodate any new floor openings and local higher loads;
- Written confirmation by a professional structural engineer that the existing floor slab can safely carry the required loading as specified above;
- Slab reinforcing details (if required for increased load capacity).
- Review & written acceptance of floor penetrations for new mechanical, electrical and communication systems, or recommendation of alternate locations.

END of Part 3

Annex Fit-up Mexico City, Mexico

Performance Specification Part 4

Mechanical Engineering

4. MECHANICAL REQUIREMENTS

4.1. Introduction

- 4.1.1. This section identifies the technical criteria for the calculation and design of the mechanical systems which will form part of the Space Optimization of the existing lockable storage room at the Canadian Embassy - CIC Annex in Mexico City – Mexico.
- 4.1.2. Mechanical systems and equipment shall be commercial/high end grade quality consistent with anticipated minimum life expectancy of 25 years. The mechanical systems must be responsive to each functional requirement of each area. They shall be designed, constructed to and commissioned to ensure the following:
 - 4.1.2.1. Occupant safety
 - 4.1.2.2. Reliability;
 - 4.1.2.3. Maintenance and operation simplicity;
 - 4.1.2.4. Energy conservation;
 - 4.1.2.5. Cost effectiveness;
 - 4.1.2.6. Economy of installation; and
 - 4.1.2.7. Availability of spare parts.
- 4.1.3. The work shall include but not limited to the following:
 - 4.1.3.1. Heating, Ventilation and Air-Conditioning (HVAC);
 - 4.1.3.2. Building management system;
 - 4.1.3.3. Fire Suppression system;
 - 4.1.3.4. Systems start-up;
 - 4.1.3.5. Administration (construction drawings, shop drawings, record drawings, etc.);
 - 4.1.3.6. Operation & Maintenance (O&M) manuals;
 - 4.1.3.7. Testing, Adjustment, Balancing and Commissioning; and
 - 4.1.3.8. Training (as required).

4.2. Scope of work

- 4.2.1. The space is approx. 160 sq m and is currently conditioned from AHU-4 and VFP-07. The occupancy will be modified from file storage area to an office area for 24 office workers with associated office equipment.
- 4.2.2. Ventilation and cooling load will have to be adjusted to meet the new requirement based on the design criteria. Additional extraction might be necessary to printing area to meet ASHRAE 62.1.
- 4.2.3. Design the required HVAC modifications needed to provide acceptable indoor air quality to the occupants in the new installation.

- 4.2.4. The completed design shall meet the most current standards within the constraints of existing structure. Understanding the exact requirements of the user and building performance is essential to effectively implement this project.
- 4.2.5. Adjustment to the building management system by adding new equipment if required.
- 4.2.6. Confirmation that modification to the existing fire sprinkler system is not required.
- 4.2.7. The Design Builder consultant will also be present during the start-up, testing, and balancing of all mechanical systems and will actively participate with the verification and commissioning.

4.3. Building system analysis

- 4.3.1. The contractor will have to prepare a report providing the information on the assessment of the existing installation and to present solutions if the ventilation system need adjustment based on our design criteria. The report shall provide details such as but not limited to:
 - 4.3.1.1. Confirmation that the air distribution in this room is as per the original design.
 - 4.3.1.2. Confirm the amount of outdoor air to the space and confirm if the amount of air is sufficient to maintain acceptable indoor air quality.
 - 4.3.1.3. Provide the heat load calculation for the new requirement.
 - 4.3.1.4. Demonstrate the comparison between the existing cooling capacity with the new required capacity.
 - 4.3.1.5. Taking into consideration that the air handler condition the entire level, confirm if AHU4 has spare capacity to condition the space to the new occupancy level.
 - 4.3.1.6. If additional cooling is required, provide possible options and complete with the control portion and the building management system modification.
 - 4.3.1.7. Confirmation that modification to the existing fire sprinkler system is not required.

4.4. Performance Requirement

- 4.4.1. Mechanical systems and equipment shall be compatible and coordinated with electrical, architectural, structural and other building systems such as but not limited to security and communications. All mechanical systems shall become integral part of the architectural design, well incorporated into building functional design and shall be aesthetically pleasing.
- 4.4.2. All mechanical components installed shall be compatible with the remainder of the building mechanical system.
- 4.4.3. New work and alterations shall meet current codes, unless combining new and old systems creates a special hazard. Such conflicts should be resolved with the Departmental Representative.
- 4.4.4. Mechanical equipment should be located such that sound will not readily transmit to other parts of the building.
- 4.4.5. Provide suitable maintenance access and openings for all new and existing mechanical systems and equipment.
- 4.4.6. Provide sufficient clearances from building structure or other equipment to allow for removal and replacement for all mechanical systems and equipment.
- 4.4.7. All systems shall provide pollutant-free operation. Systems shall be designed to use a minimum amount of energy consistent with required performance standards.
- 4.4.8. Mechanical systems (materials and equipment) shall be fail-safe and meet design requirements of a quality consistent with top tier equipment. Installation of equipment is to have a design life consistent with an anticipated minimum building life expectancy. This includes service life of individual elements as follows (for example):
 - 4.4.8.1. Water cooled packaged unit: 15 - 20 years;
 - 4.4.8.2. Variable air volume box: 15 - 20 years; and
 - 4.4.8.3. Controls: 15 - 20 years.

4.5. Sustainable Design

- 4.5.1. Conservation of energy consumed by mechanical systems shall be maximized.

4.6. Codes, Standards and Regulations

- 4.6.1. Refer to Part 1: General Project Requirements – Codes, Standards and Regulations, for a complete list of applicable codes and standards.
- 4.6.2. HVAC systems designed and installed shall meet all applicable codes, standards and regulations.
- 4.6.3. All mechanical systems existing or new shall meet or exceed the requirements of the following codes and standards:
 - 4.6.3.1. ASHRAE Standard 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings;
 - 4.6.3.2. NFPA 72;
 - 4.6.3.3. ASHRAE Standard 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings;
 - 4.6.3.4. ASHRAE 62.1;
 - 4.6.3.5. National Plumbing Code of Canada (2010);
 - 4.6.3.6. SMACNA (Sheet Metal and Air-Conditioning Contractors' National Association) for HVAC Duct Construction Standards;
 - 4.6.3.7. NFPA 70;
 - 4.6.3.8. CAN/CSA B52-05: Mechanical Refrigeration Code of Canada;
 - 4.6.3.9. Treasury Board of Canada Secretariat (TBS) Standards; and
 - 4.6.3.10. Canada Labour Code Part IV.

4.7. Seismic Protection

- 4.7.1. All mechanical equipment is to be laterally and vertically restrained for seismic load requirement.
- 4.7.2. Provide seismic restraints on equipment to protect personnel and the facility from falling objects during an earthquake.
- 4.7.3. All primary equipment shall remain fully operational during and after earthquakes.
- 4.7.4. All primary equipment is to be restrained for seismic load requirements accordingly. This shall include shock mounts for all pad mounted equipment or equipment suspended from the floor slab. Provide seismic restraints on water mains and drain lines, etc., as necessary, to protect personnel from falling objects during an earthquake.
- 4.7.5. The retainers shall by no means compromise the effect of the equipment's anti-vibration dampers. The equipment and its retainers shall satisfy the more stringent quality and design requirements of the local and the Canadian codes and standards for protection from seismic loads.

4.8. Drawings and Specifications

- 4.8.1. Layout drawings and calculation shall be certified by Engineer (Consultant) and be responsible for all co-ordination with those of the HVAC, plumbing, electrical and all other disciplines. Details of installation are required.
- 4.8.2. Engineering specifications for the construction of all mechanical systems are to include written descriptions of materials, performances, characteristics and installation.

Building Load Design Criteria.

4.9. Modification to the existing mechanical systems

- 4.9.1. Space cooling loads shall be established and supported by calculations.
- 4.9.2. The cooling loads shall take the following into consideration: solar heat gains through windows, internal heat gains from lighting and equipment, outside air loads (sensible and latent) from ventilation and infiltration, and heat gains or losses through fenestration, walls, floors, people, equipment (computers, printers, etc.), etc.
- 4.9.3. The minimum occupancy is rated at 24 persons with office equipment. Sensible and latent loads per person should be based on the latest edition of the ASHRAE "Handbook of Fundamentals.
- 4.9.4. Outdoor Design Criteria: use the data as published in ASHRAE Handbook for outdoor design wet bulb and dry bulb temperatures in Mexico City. Outdoor design criteria shall be based on weather data tabulated in the latest edition of the ASHRAE Handbook of Fundamentals.

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Performance Specification - Part 4 Mechanical Engineering</p>
--	--

- 4.9.5. Indoor Temperature: 24°C (cooling mode), 21°C (heating mode).
- 4.9.6. Relative Humidity: 50% ± 5% (summer), 25% ± 5% (winter).
- 4.9.7. Ventilation Rates: provide minimum outdoor air for the space and occupancy. Refer to ASHRAE 62.1- 2010.
- 4.9.8. Ventilation is defined as the supply of clean, odour-free and contaminant-free air to a space in sufficient quantities to dilute and remove space generated air contaminants and odours and to maintain the occupant oxygen requirements. Provide adequate ventilation to maintain proper indoor air quality. The ventilation rates of ASHRAE Standard 62 are the minimum acceptable for this project.
- 4.9.9. Carbon Dioxide: shall be less than 800 ppm.

4.10. Thermal Comfort

- 4.10.1. Systems shall be capable of automatically maintaining space comfort conditions for all building load variations during the heating and cooling seasons. Areas with unique load variations shall have individual temperature controls.
- 4.10.2. The following HVAC system shall be considered to meet Performance Brief requirements:
 - 4.10.2.1. Office spaces shall be conditioned by either the existing AHU and VAV (if feasible and depending on capacity) or additional viable method of mechanical cooling system to meet load conditions and minimum air circulation rates.
 - 4.10.2.2. The operation of the heating, ventilation and air conditioning (HVAC) systems shall be extended beyond the business hours by a lead time sufficient to meet the defined ventilation and thermal comfort standards by the start of the business hours.
 - 4.10.2.3. Controls systems shall employ occupancy override for after hour operation.
 - 4.10.2.4. Provide new thermostats to match existing if required.

4.11. Start-up, testing, adjusting and balancing

- 4.11.1. The manufacturer representative shall be present for start-up of all major equipment.
- 4.11.2. Control functions shall be proven fully operational and read out design flow rates before testing and balancing starts

4.12. Reference

- 4.12.1. Refer to the following drawings for the mechanical systems information:
 - 4.12.1.1. Room checksums
 - 4.12.1.2. AA.01 BRAUN Duct Work
 - 4.12.1.3. AA-11CE210810.dwg Data Sheet
 - 4.12.1.4. CAA.01 BRAU Controls
 - 4.12.1.5. HVAC system Screen Shoot
 - 4.12.1.6. BMS
 - 4.12.1.7. AHU Operation
 - 4.12.1.8. PCI-04 Level 1 Proteccion Contra Incendio
 - 4.12.1.9. office layout

END of Part 4

**Annex Fit-up
Mexico City, Mexico
Performance Specification
Part 5
Electrical Engineering**

5. ELECTRICAL REQUIREMENTS

5.1 Introduction

- 5.1.1 This section identifies the technical criteria for the engineering calculations and design of the electrical distribution, lighting, fire alarm and life safety systems which will form part of the Space Optimization of the room 107 at the Canadian Embassy - CIC Annex in Mexico City - Mexico
- 5.1.2 Electrical systems and equipment shall be fail-safe and of a commercial/high end grade quality consistent with anticipated minimum life expectancy of 25 years. The electrical systems must be responsive to each functional requirement of each area. They shall be designed, constructed to and commissioned to ensure the following:
 - 5.1.2.1 Occupant safety
 - 5.1.2.2 Reliability;
 - 5.1.2.3 Maintenance and operation simplicity;
 - 5.1.2.4 Energy conservation;
 - 5.1.2.5 Cost effectiveness;
 - 5.1.2.6 Economy of installation; and
 - 5.1.2.7 Availability of spare parts.

5.2 Scope of Work

- 5.2.1 Design an electrical and lighting infrastructure as specified herein to meet the general and the specific needs for the space optimization of room 107.
- 5.2.2 The completed design shall meet the most current standards within the constraints of existing structure. Understanding the exact requirements of the user and building performance is essential to effectively implement this project.
- 5.2.3 The Design Builder consultant will also be present during the start-up, testing, and balancing of all electrical systems and will actively participate with the verification (if required) of the fire alarm system modification(s) in room 107. The work in room 107 include but is not limited to the following:
 - 5.2.3.1 Building system analysis of the existing electrical distribution, lighting, lighting control, fire detection/ signaling system and life safety systems;
 - 5.2.3.2 Wiring and raceways;
 - 5.2.3.3 Exit signs;
 - 5.2.3.4 Security lighting;
 - 5.2.3.5 Administration for components such as but not limited to shop drawings, record drawings, samples, codes verification, attendance at meetings and assisting with the commissioning process;
 - 5.2.3.6 Assist with the commissioning of the fire protection and life safety if required;

5.2.3.7 Manage all co-ordination for the electrical work as specified herein and all of the other electrical work performed by the other divisions.

5.3 Building System Analysis

- 5.3.1 At the start of the mandate the consultant shall provide a report resulting from a building systems analysis of the electrical infrastructure. The report shall provide details such as but not limited to:
 - 5.3.1.1 Assessment of panel U1, C1 and A1 for both spare power capacity and the space available to provide power to both the Clean and Normal power outlets & lighting infrastructure;
 - 5.3.1.2 Assessment of the Fire Alarm sound devices. Consultant shall measure the sound pressure in room 107 and determine if additional sound devices are required.
 - 5.3.1.3 Assessment of the existing lighting fixtures to determine their condition and performance for reutilization.
 - 5.3.1.4 Identify challenges and issues that may arise with the proposed layout considering our requirements. For the purpose of this report, electrical systems are considered to be comprise of but not limited to : Power distribution, lighting and lighting control and fire detection systems;
 - 5.3.1.5 Determine which part of the existing building and its systems should be retained, upgraded or relocated.

5.4 Performance Requirement

- 5.4.1 Electrical systems and equipment shall be compatible and coordinated with mechanical, architectural and other disciplines including interior design, fire protection, security and communications. All electrical systems shall become integral part of the architectural design, well incorporated into building functional design and shall be aesthetically pleasing.
- 5.4.2 The new design should meet the current NFPA and NEC standards within the constraints of the existing structure. In case of conflict the most stringent code shall apply.
- 5.4.3 Complete the design of the electrical systems based on the requirements contained in this project brief. These requirements are intended to set minimum criteria and provide guidance to the consultant who is to complete the electrical design
- 5.4.4 Provide suitable maintenance access panels and openings for all electrical systems and equipment particularly where drywall ceiling are located. Distribution junction boxes shall be accessible at all time without removing any part of the permanent building structure. Provide sufficient clearances from building structure or other equipment to allow for removal and replacement for all electrical systems and equipment.

- 5.4.5 Provide update to both the electrical panel legends and as built drawings.
- 5.4.6 All systems shall provide pollutants-free operation. Systems shall be designed to use a minimum amount of energy consistent with required performance standards.

5.5 Sustainable Design

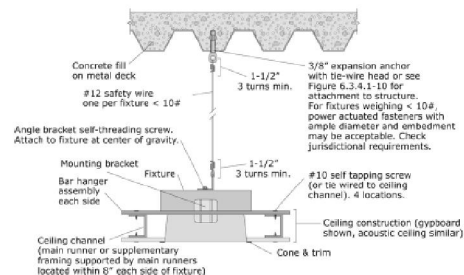
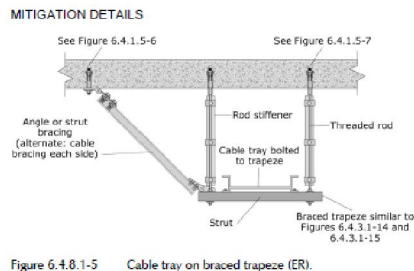
- 5.5.1 Conservation of energy consumed by electrical systems is dealt with in the area of lighting control.

5.6 Codes, Standards and Regulations

- 5.6.1 Refer to Part 1: General Project Requirements – Codes, Standards and Regulations, for a complete list of applicable codes and standards.
- 5.6.2 Electrical systems shall meet or exceed the requirements of the following codes, standards and Guidelines. In case of conflict the most stringent code shall apply:
- 5.6.2.1 NFPA 70 (NEC) latest edition;
 - 5.6.2.2 NFPA 72 National Fire alarm code latest edition
 - 5.6.2.3 Canadian Standards Association (CSA) certification mark or equivalent certification marks such as but not limited to (UL, ULM, ULC);
 - 5.6.2.4 ASHRAE 90.1 – Energy Standard for Buildings;
 - 5.6.2.5 Illuminating Engineering Society of North America (IESNA)
 - 5.6.2.6 Canada Labour Code Part IV;

5.7 Seismic Protection

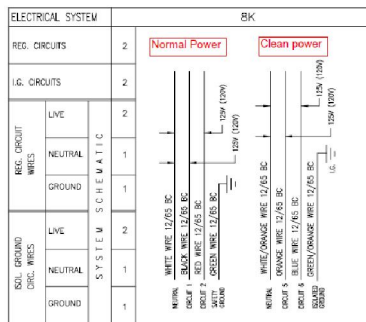
- 5.7.1 Provide seismic restraints for all cable trays. Cable trays shall be laterally and vertically restrained for seismic load requirement. Refer to Structural Engineering and all applicable codes and standards for seismic design criteria.
- 5.7.2 Independent chain anchors OR stainless steel cables support for all light fixtures shall be required to reduce the effect of a collapsed ceiling.



ELECTRICAL SERVICE AND DISTRIBUTION.

5.8 Modification to the existing Panel boards

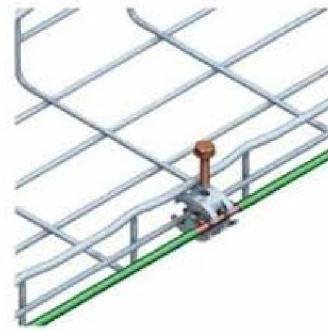
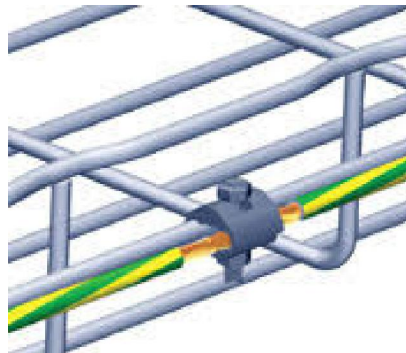
- 5.8.1 All new branch circuit shall be from either panel U1for Clean power, C1 for Normal power and A1 for Lighting. Provide new breaker matching existent as required.
- 5.8.2 Design Builder shall design and install a Clean and Normal power distribution infrastructures for the new workstation base on a maximum of 4 Work Stations/Clean and Normal power circuits.
- 5.8.3 Provide a minimum of 2 dedicated Clean power circuits to the new business centre. Provide either EMT conduits for power and ICT or a 2 channels trunking system surface mounted up to the ceiling.
- 5.8.4 Rewire the 4 receptacles along the south wall from Circuit U1-1 to normal power.
- 5.8.5 All Teknion workstation or pod of workstations will be provided with an 8K power cable. Each workstation shall be provided with both Clean and Normal power under the following topology: Circuit 2 for Normal power and Circuit 5 for Clean power. Contractor shall make the connection between the 8K Teknion power connector and base building conductor at the junction box at the top of the Teknion furniture power pole. All unused conductors from the Teknion whip shall be properly protected within the junction box with solderless wire connectors.



- 5.8.6 Refer to the following drawings for the existing power system as-built information:
 - 5.8.6.1 IE-FZ-P01-25 For the mechanical system
 - 5.8.6.2 IE-CN- P01-07 For the normal power
 - 5.8.6.3 IE-CU-P01-12 & 12a For clean power
 - 5.8.6.4 IE-DU-IP-29
 - 5.8.6.5 IE-CC-CN-37 & 38

5.9 Conduits & Raceway

- 5.9.1 The Power & Lighting power infrastructures shall be in the form of a raceway system consisting of Electrical Metallic Tubing (EMT) complete with manufactured couplings and connectors, Flexible armoured cable and/or flexible conduits can also be used as long as the installation methods are done according to Article 300 of the National Electrical Code. In area where the ceiling is exposed it will be strictly forbidden to have flexible armoured cable or flexible conduit. In those area consultant shall take extra precaution to have the electrical services (conduits and boxes) square to the building lines.
- 5.9.2 Independent raceways are required for Normal and Clean power all the way to the Teknion junction box and for the lighting, lighting control, fire alarm, emergency lighting, exit lights and mechanical systems. Install raceways in the ceiling parallel or perpendicular to building lines.
- 5.9.3 Provide a communication cable tray (CCT) as per Part 6.
- 5.9.4 CCT shall have adequate clearance from the electrical lines to reduce the potential for interference by electromagnetic fields.
- 5.9.5 The Contractor shall coordinate the installation of CCT with existing installations so that a minimum clearance of 200 mm is provided on each side of the CCT.
- 5.9.6 Provide manufacturer's standard hardware as required: flanges, hangers, brackets, splice and shrink plates, barriers, connectors, and grounding straps.
- 5.9.7 Any raceways (conduit and CCT) shall be equipped with a separate grounding / ground conductor having a minimum ampacity of current similar to that of phase conductors. Metallic raceway systems are not accepted for grounding purpose.



5.10 Identification

- 5.10.1 Identify all equipment, wiring, raceways and control operating devices by function. All equipment identification shall be with permanent nameplates in English and Spanish.
- 5.10.2 All distribution panels shall have a permanently attached identification nameplate. All distribution panels shall have a complete and typewritten "Circuit Directory", in English and Spanish and permanently installed on the distribution panel.
- 5.10.3 All electrical circuits and conductors shall be identified at the distribution panel. Circuit directories affixed to distribution panels shall be comprehensive in nature and typewritten or computer printed. Each switch control and outlet face plate shall have the circuit and distribution panel number identification neatly installed on it using some form of self-adhesive labelling or identification system.
- 5.10.4 The Teknion junction box shall be provided with a label in English and Spanish clearly indicating that the junction box has power circuits from two different sources. Label shall also indicate the circuit numbers.
- 5.10.5 Provide identification at each starter; disconnect switch and /or controls.
- 5.10.6 For electrical systems components installed above ceiling, provide proper labelling at ceiling level indicating the type of device and its associated circuit number.
- 5.10.7 Posted operating instructions in English and Spanish are required for manually operated electrical systems. Instructions shall be framed and posted adjacent to the major equipment of the system.
- 5.10.8 All conduit or raceway systems are to be color coded on the exterior with color bands indicating system type as follows:

5.10.9

<u>System</u>	<u>Primary color // Secondary colour</u>
Fire Alarm	Red
Normal Power	Yellow
UPS (Clean) Power	Yellow / Blue
Ground	Green
Information Technology	Orange

5.11 Conductors and Cables

- 5.11.1 Voltage drop in an installation shall be based upon the calculated demand load of the feeder or branch circuit. Voltage drop shall not exceed 3% for a branch circuit.
- 5.11.2 All conductors shall be copper.
- 5.11.3 Conductors in the ceiling plenum shall be installed in conduit or flex. Apparent conductors are strictly forbidden.
- 5.11.4 All fire alarm system wiring shall be certified for that use and shall be solid copper, installed in conduit or fire rated cable with sheath having a combined 1 hour fire protection. Stranded wiring shall not be used.
- 5.11.5 All branch circuit conductors shall be copper, minimum #12 AWG, rated at 90°C with approved 600 Volt insulation.
- 5.11.6 All circuit to be provided with a separate neutral conductor. Common neutral conductor is not acceptable for branch circuits.

Conductors to be colour coded according to the phases, as per NFPA 70.

5.12 Wiring Devices

- 5.12.1 All electrical outlets shall be specification grade NEMA 5-15R configuration. Offices and workstation electrical outlets will be a combination of outlet provided by the workstation manufacturer and outlets mounted on drywall and/or part of a manufactured trunking system.
- 5.12.2 Receptacles shall be located within 600mm of the voice data outlet.
- 5.12.3 All receptacles location shall be coordinated by the consultant's with departmental representative. Furniture and equipment locations shall be integral into the design process.
- 5.12.4 All receptacles location shall be coordinated by the consultant's with departmental representative. Furniture and equipment locations shall be integral into the design process.
- 5.12.5 Provide convenience/housekeeping receptacles in corridor arranged in a manner that no point in a hallway shall be more than 5m from a duplex receptacle as measured by the shortest path that the supply cord of an appliance connected to the receptacle would follow. Convenience or housekeeping outlets should be on their own dedicated circuit. Business centres location (printer, photocopier and faxes) will have 2 duplex receptacles; each connected on dedicated clean power 15 amps circuits.
- 5.12.6 All receptacles shall be polarized properly.
- 5.12.7 Colour for all receptacles shall be determined in conjunction with the Architect and the departmental representative.
- 5.12.8 All mechanical equipment shall be provided with an electrical / isolation disconnect within view of the equipment.
- 5.12.9 All mechanical equipment shall be provided with an electrical / isolation disconnect within view of the equipment.

5.13 Lighting

- 5.13.1 It is the intent to reutilise existing light fixtures when possible. Lighting shall be designed to assist in defining the overall building architecture, address organizational safety and security requirement and address the multiple task requirements of individuals in different type of spaces within the building.
- 5.13.2 Special lighting for artwork location to be identified by GAC Interior Designer.
- 5.13.3 The arrangement and orientation of lighting fixtures shall remain the same throughout the space, provide an illumination with uniformity of 0.8 (minimum / average = 0.8) over the work area. Lighting designs should take into account the anticipated light obstruction and absorption of the partitions and systems furniture screens.

- 5.13.4 Luminaire Dirt Depreciation (LDD): LDD takes into account the dirt accumulation on the lens or other components of the luminaire that may reduce light output. Because most of the environments in which luminaires are placed are clean (interior rooms) and are assumed to be well-maintained LDD will be establish at .98
- 5.13.5 Lamp Lumen Depreciation (LLD): for LEDs assumes a point in time that approximates the mean life of familiar sources that have traditionally been defined as 40% of their rated life. Conservatively, LEDs at a comparable time have lost about 12-13% of their light output. Therefore LLD is establish at .87

$$LLF = LDD \times LLD = .98 \times .87 = .85$$

- 5.13.6 All new luminaires shall be rearranged to match the interior maintained illumination levels for the office area as per the table below;

Description of task / interior space	Illumination (lx)
entrance lobby	325 lx
waiting area	325 lx
in circulation spaces	220 lx
at workstations (work surface)	500 lx

- 5.13.7 Refer to the following drawings for as-built information of the existing lighting and lighting control system:

- 5.13.7.1 IL-A04.01 2307 10 IL +Z
- 5.13.7.2 IE-IL- P01-02
- 5.13.7.3 IE-CC-CN-36

5.14 Modifications to the existing lighting infrastructure

- 5.14.1 Existing luminaire shall be cleaned thoroughly and re-lamped. If new luminaires are required they shall be either be identical or similar in shape and lamp type to the existing one.
- 5.14.2 Design builder shall offer 3 different lighting options
- 5.14.2.1 Option 1: Location of light fixtures type T1 remain the same while the light fixtures type TFA are relocated along the new egress path. Consultant to provide a photometric study to clearly demonstrate the anticipated light levels of such an installation.

- 5.14.2.2 Option 2: The existing linear light fixtures types T1 are relocated to fit exactly over the spine of the work stations. Orientation of the light fixture shall remain the same throughout the installation. Light fixtures types TFA are relocated along the new egress path. Consultant to provide a photometric study to clearly demonstrate the anticipated light levels of such an installation.
- 5.14.2.3 Option 3: Completely new lighting infrastructure is provided to meet the lighting levels, uniformity factor and glare requirement. Consultant to provide a photometric study to clearly demonstrate the anticipated light levels of such an installation.

- 5.14.3 For all option if the lighting level over the workstation is less than 400 Lux, the consultant shall enter in contact with the department representative before looking at other more intrusive solution(s).
- 5.14.4 For all options if required provide new light fixture type TFA to provide adequate illumination along the access to egress pathway
- 5.14.5 All fixtures installed shall be independently supported from the ceiling structure by means of two (2) stainless braided steel cable 1.5mm diameter minimum, secured to the underneath of the concrete slab.
- 5.14.6 Existing Emergency light fixtures type T1(E) shall be relocated to provide an average illumination level of not less than 10 lux along access to exit. Provide additional type (E) if required.

5.15 Modifications to the existing Lighting Control

- 5.15.1 Reorganize existing ceiling mounted dual technology ultrasonic/passive infrared motion control to ensure a manual-on/off and automatic off feature in either a vacancy or occupancy mode. Automatic off setting to be between 30 sec to 30 minutes of the person leaving the space. **Preset all sensors to 30 minutes on completion of installation, while ensuring the Passive Infrared relay does not provide false detection which will activate the sensor.**
- 5.15.2 The main lighting control medium for the open area shall be centrally located by the main entrance of the floor area, preferably within the reception booth.
- 5.15.3 Circuit breakers shall not be used as manual lighting control and the use of contactors shall be limited to allow zone segregation for possible system maintenance requirement.

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	Project Brief Part 5 Electrical Engineering
--	--

5.16 Modifications to the existing Emergency and Exit lighting

- 5.16.1 Provide and install emergency light unit on the ceiling or walls of room 107. Emergency light unit shall be complete with remote heads, consisting of self-contained rechargeable battery, battery charger, status indicator, test switch and pilot lamp. Safety lighting battery packs shall provide for a minimum of 2 hour duration service. Battery packs to be provided with a self-diagnostic circuitry card (auto-test). Equipment in public spaces to be of the highest elegance and quality.
- 5.16.2 Relocated existing exit sign light fixture to clearly demonstrate egress and direction to egress.
- 5.16.3 Provide a minimum of 2 security lights. Security lighting is lighting that remain on during unoccupied hours.

5.17 Modifications to the existing Fire Detection and Alarm System

- 5.17.1 The Canadian Embassy - CIC Annex is presently provided with a fire detection and signaling system. Fire alarm detection system was design and installed in accordance to NFPA 72 and has been tested in accordance to the same standard prior to occupation in 2011.
- 5.17.2 Consultant to review the installation and provide recommendation for either deletion or addition for both initiating devices which consist of photoelectric smoke detectors and signaling appliances devices which consist of combination strobes and horns.
- 5.17.3 **Signaling appliances shall provide a sound pressure of not less than 10dBA above the ambient noise level without being less than 65dBA at all times.**

END of Part 5

Annex Fit-up Mexico City, Mexico

Performance Specification Part 6

Information Technologies Systems

PART 6 – INFORMATION TECHNOLOGIES SYSTEMS

Performance Requirements

1. Infrastructure and equipment shall be fail-safe and meet design requirements of a quality consistent with anticipated minimum life expectancy of 25 years.
2. Infrastructure and equipment selection shall be justified in accordance with the project requirements. The selection shall consider performance, service and maintenance, as well as reliability, durability, sustainability, flexibility, accessibility and ease of operation and maintenance by non-specialized personnel, availability of parts, total cost of ownership, and operational economy.
3. Data cabling distribution systems shall be laid out to minimize the effects of external or internal electrical disturbances. This means disturbances from building equipment such as large motors, air conditioning, etc., shall not impact on operation of sensitive equipment.
4. Seismic considerations listed in Section 5.7 shall be followed for all cable trays.
5. In order to achieve flexibility and thorough integration between building architecture and engineering systems, a concept for IM/IT infrastructure that supports the distribution of the selected systems, the locations of vertical/horizontal pathways, closets, equipment rooms, telecommunications distribution equipment is to be established before the architectural concept is finalized.
6. The design/build contractor is to provide a complete CAD equivalent drawing that identifies all IM/IT rooms, conduits/cable trays and individual IM-IT receptacles.
7. All IM/IT systems and equipment shall be located to be readily and safely accessible for operation and maintenance, as well as, for removal and replacement of components including cabling. It will not be necessary to interrupt occupants' activities or enter security areas to access equipment.
8. All IM/IT systems will adhere to current standards and practises issued and promoted by the BICSI community. (Building Industry Consulting Service International)
9. Note that unless otherwise specified, existing ICT cabling within the scope of work area is not to be disturbed, moved, or damaged in any way.
10. For further details, refer to GAC Guidelines for IM/IT Systems.

Raceways

1. The contractor shall supply, deliver, and install all ICT raceways detailed in **Figure 1**. ICT raceways shall be installed in ceiling plenum, above finished ceiling, and shall be designed to provide continuous support to any cables installed upon them.
2. ICT raceways supporting data cabling shall carry ICT services from technical rooms to points of service (computers, telephones, WiFi access points, or any IP-based Government of Canada nodes). The contractor must ensure that:

Mexico: Annex Fit-up CSDP Space Project No. L-MXICO-134	<p style="text-align: right;">Project Brief Part 6</p> <p style="text-align: center;">Information Technologies Systems</p>
--	--

- a. Raceway components shall be supported by threaded rod suspension brackets, overhead hangers, or trapeze-style hangers.
- b. Raceway shall be a minimum of 200mm (8 inches) wide and 50mm (2 inches) tall.
- c. Raceway shall match the existing cable tray as detailed in **Figure 1**, and be a “mesh-type” or “wire basket” style cable tray (example: Legrand Cablofil, Eaton Flextray, Thomas & Betts Express Tray or similar).
- d. Raceway runs requiring connection of two or more components, such as long runs, or a change in direction and/or width and/or an intersection between two straight cable tray runs shall be joined using factory-fabricated fittings/couplings (bends, tees, risers).
- e. The inside corner on any intersection and/or bend of raceway shall be a smooth, gradual transition.
- f. The cable path for raceway shall be free of burrs, sharp edges or protrusions.
- g. Raceways which are electrically conductive shall have adequate electrical continuity to ensure bonding and connections to earth.
- h. Exit fittings known as “waterfall” or “drop-outs” shall be used to support planned cabling exiting sides or ends of the cable tray at each planned drop location.

END of Part 6

Annex Fit-up Mexico City, Mexico

Performance Specification

Part 7

Commissioning Requirements

Commissioning (Cx)

1. General

- 1.1 Commissioning is a process that takes place at all stage of the project. At concept & design stages, the Cx activities serve to assure that the Owner's Project Requirements for items such as energy efficiency, sustainability, indoor environmental quality, fire protection & life safety, etc. are sufficiently defined and adequately & accurately reflected in the construction documents (drawings and specifications). It will provide the opportunity to assure that building systems and assemblies as designed will function according to user expectations.
- 1.2 The design builder (DB) consultants will be responsible to prepare the documentation for the commissioning process to be followed. The process includes construction checklists develop with the intent to convey pertinent information to the installers regarding concerns on installation and long-term operation of the facility and systems. The approach to the structure of the checklists is to keep it short and simple by focusing on key elements. Checklists span the duration from when equipment is delivered to the job site until the point that the system/component is started and operational. Construction checklists are tools for transferring the information contained in the construction documents to the workers in the field. This includes testing, adjusting and balancing and control system tuning.
- 1.3 At the construction stage, the DB consultants will supervise the installation of the equipment, material and systems, and witness the commissioning performed by the contractor and by an independent certification firm. The two overarching goals of the construction phase are to assure the level of quality desired and to assure the requirements of the contracts are met.

2. Fire protection and life safety systems SOW

- 2.1 For the fire protection and life safety systems, the certification shall be performed by a specialized Audit and Certification firm independent of both by contract and employment from the DB professional team. The cost to hire this firm will be the DB responsibility.
- 2.2 Once the DB Fire protection and life safety contractor verification and testing is completed, the certification and audit firm will proceed with their audit and certification of all fire protection and life safety systems. The audit firm must prepare a written report detailing the steps of all the verifications performed and a brief description of the process and instrumentation used and the result of the certification.
- 2.3 The completed Cx plan and certification, including all appendices must form part of the Cx record turned over at the end of the construction phase.

3. Electrical infrastructure

3.1 The Electrical infrastructure certification shall be performed by a specialized Audit and Certification firm independent of both by contract and employment from the DB professional team. The cost to hire this firm will be the DB responsibility.

3.2 Once the DB electrical contractor verification and testing is completed, the certification and audit firm will proceed with their audit and certification of all electrical installation. The audit firm must prepare a written report detailing the step of all the verifications performed and a brief description of the process and instrumentation used and the results of certification.

3.3 The completed Cx plan and certification, including all appendices must form part of the Cx records turned over at the end of the construction phase.

4. Mechanical system

4.1. The Cx Process for all mechanical systems will consist of complete testing, adjustment and verifications of both the existing and new (if any) mechanical installations.

4.2. The completed Cx plan and certification, including all appendices must form part of the Cx records turned over at the end of the construction phase.

5. As Built Drawings & O&M manuals

5.1 As-built drawings shall be provided at completion of the project and shall reflect all changes made in the working drawings during the construction process. They shall show the exact dimensions geometry and location of all elements of the work completed under this contract.

5.2 The O&M manual shall include: as-built drawings, equipment data, model numbers for the equipment, parts lists, sequence of operation, testing &balancing reports c/w certifications, maintenance schedules, and warranty schedules. The manual must be reviewed and certified by the GAC subject matter expert before submission to the project and facilities managers. Manuals are to be provided in English and Spanish in electronic format.

6. Spare parts

6.1 For each system installed and in addition to the final operating set, provide spare parts that are routinely changed as part of the maintenance program that may cause an interruption in the operation if not readily available. The DB shall include a list of spare parts that his contractors are responsible to provide at the end of the project.

7. Systems to be commissioned

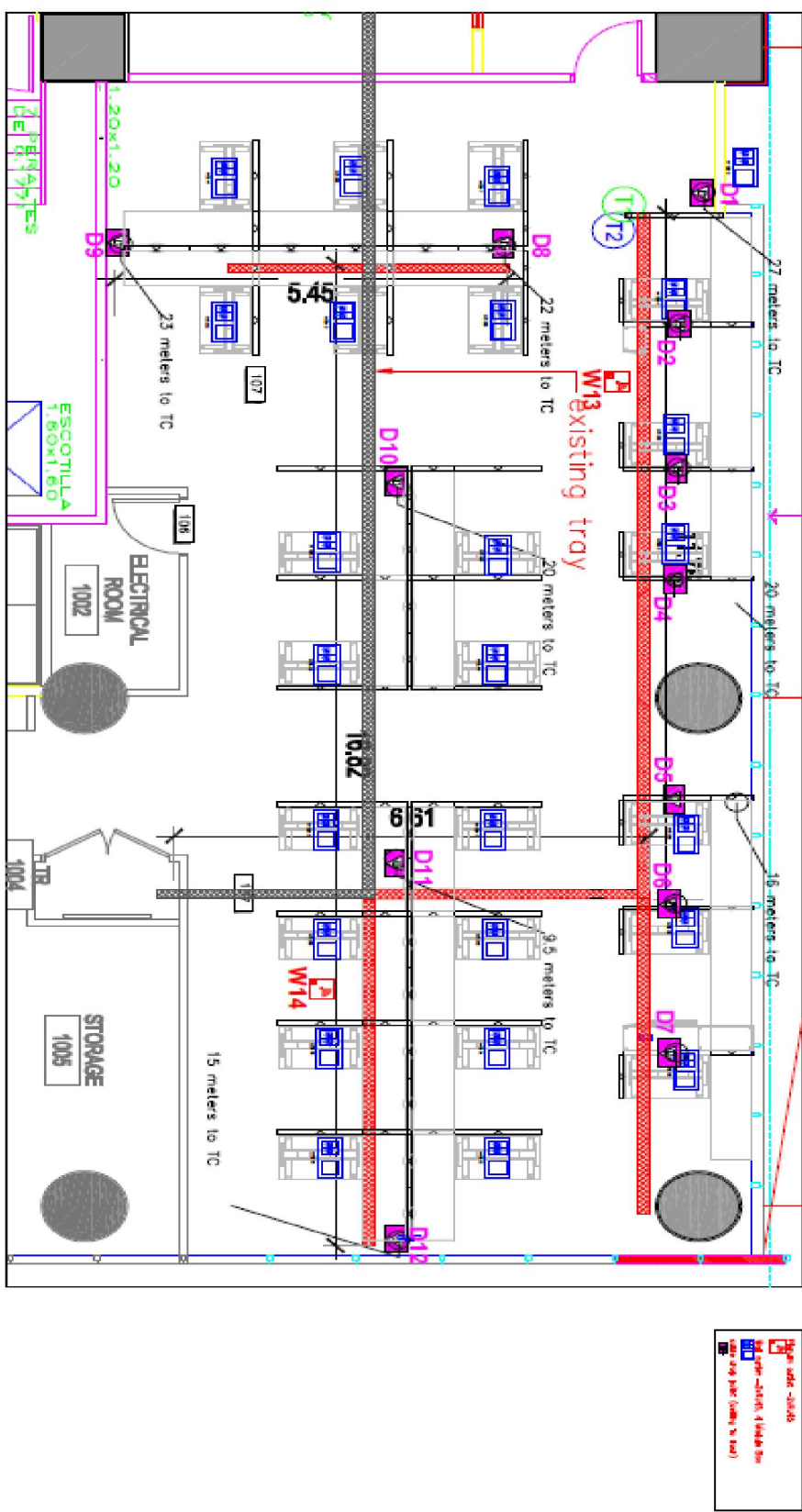
7.1 The systems to be commissioned shall include but no limited to the following:

System / Equipment / Process Description	Description of Cx activities (provided by Contractor)
MECHANICAL	
Ductwork- (connection to existing works, diffusers, grilles)	
HVAC Controls – field device calibration / programming – sequence of operations verification	
Exhaust Air Fans	
Room Transfer Fans	
Cooling equip installed- -Variable Refrigerant Flow (VRF) systems: Outdoor unit and individual indoor units. -Variable air volume box, -Water cooled packaged unit	
ELECTRICAL	
Grounding and Bonding	
Cables, Low Voltage 1kv Max	
Outlets	
Lighting Control system	
General Light Fixtures	
LIFE SAFETY SYSTEMS	
Exit Lights	
Emergency Lights	
Fire Alarm/detection System	
Modifications to Fire Sprinkler System (if required)	

End of Commissioning project brief

Appendix “A”

MXICO CSDP Section in Annex – ICT Work Plan



- ⑩ OC shall install ~30 meters of 8"x2" mesh cable tray (red crosshatch) above finished ceiling, matching existing mesh cable tray (black crosshatch). Waterfall splitters to be installed at data drop locations.
- ⑪ Canadian cabling contractor shall install blue plenum-rated CAT5e cabling in planned cable tray between TR1004 and data drop locations in the following quantities and with the following labels:
 - D1 – 2x CAT5e labelled WS030C/WS030D to TR1004
 - D2 – 2x CAT5e labelled WS031C/WS031D to TR1004
 - D3 – 2x CAT5e labelled WS032C/WS032D to TR1004
 - D4 – 2x CAT5e labelled WS033C/WS033D to TR1004
 - D5 – 2x CAT5e labelled WS034C/WS034D to TR1004
 - D6 – 2x CAT5e labelled WS035C/WS035D to TR1004
 - D7 – 2x CAT5e labelled WS036C/WS036D to TR1004
 - D8 – 6x CAT5e labelled WS037C/D–WS039C/D to TR1004
 - D9 – 6x CAT5e labelled WS040C/D–WS042C/D to TR1004
 - D10 – 6x CAT5e labelled WS043C/D–WS046C/D to TR1004
 - D11 – 6x CAT5e labelled WS047C/D–WS050C/D to TR1004

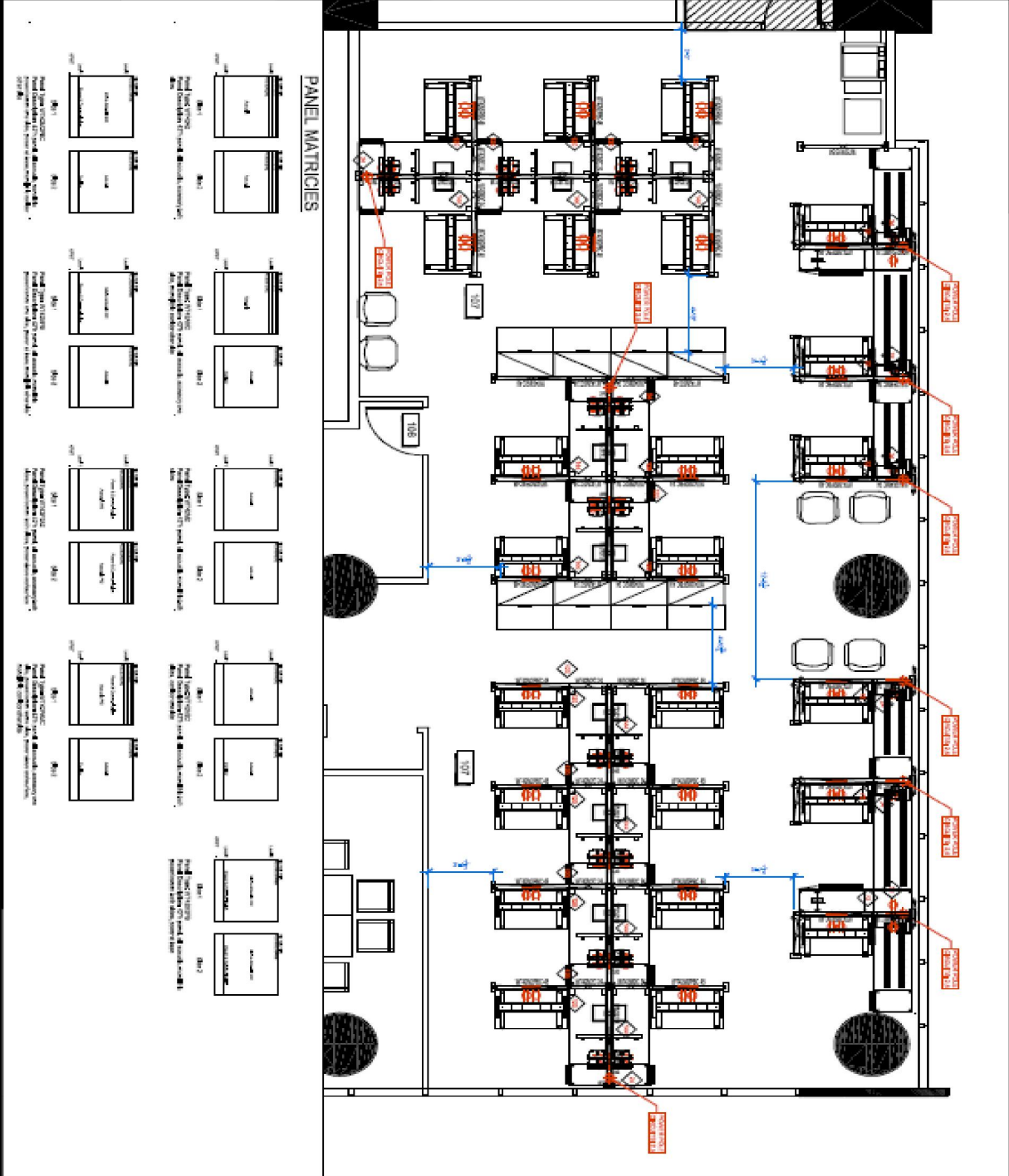
- D12 – 6x CAT5e labelled WS051C/D–WS054C/D to TR1004
- W13 – 2x CAT5e labelled AP01A and AP01B to TR1004 (plenum-installed, surface mounted box)
- W14 – 2x CAT5e labelled AP02A and AP02B to TR1004 (plenum-installed, surface mounted box)
- ⑫ ITFSO to install and test SIONET switch, set of 48x ports, 2x 8x100A mounts and drill 4" backboard holes
- ⑬ ITFSO to coordinate with SSC the migration of E-mail, H., I. client data for move weekend. Phone updates if required.
- ⑭ ITFSO and FSITP to install workstations, MININET phones, test.

ITFSO: SISC/Guller
 Date: FEB-07-2018
 Project: I-MXICO-10X
 Project Manager: Stephen Haas

Appendix “B”

GENERAL NOTES:
 1. All PARTS are shown in their original color and finish. The color and finish of all items are shown on the drawing. The drawing is for informational purposes only and does not constitute a contract. The drawing is for informational purposes only and does not constitute a contract.
 2. All furniture must be installed as per the attached furniture drawings, unless otherwise approved by a Totem representative.
 3. Actual building dimensions may vary from those shown on the drawing. All dimensions are based on the dimensions shown on the drawing.

ATTENTION: This drawing remains the property of Totem Offsource. No reproduction or alteration should be made without the prior written authorization of Totem. All dimensions are for furniture clearance and furniture requirements only and are to be solely referred to by installer representatives of Totem.



Drawn	Barb Collette	2017-12-18	8		
Checked			5		
Rev			4		
Scale	Not to Scale		3		
Sheet			2		
			1		
Sheet	F1				

NEW SYSTEMS FURNITURE
 Global Affairs Canada
 FB-17-226
 Annex Swing Space
 Mexico City

