



Architectural & Engineering Services

TERMS OF REFERENCE

Activity Based Workplace Fit-up

For:

Public Services and Procurement
Canada

Victory Building

Winnipeg, Manitoba

Project No. R.067379

April 2017



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1 PROJECT DESCRIPTION

1.1 GENERAL

1.1.1 PURPOSE OF TERMS OF REFERENCE (TOR)

- .1 Public Works & Government Services Canada (PSPC) requires the services of an architectural firm, acting as Prime Consultant together with a multi-disciplinary team of sub-consultants for the provision of service required for this project.

1.1.2 THE PSPC GENERAL PROCEDURES AND STANDARDS DOCUMENT (GP&S)

- .1 The TOR describes project-specific requirements, services and deliverables while the GP&S document outlines with minimum standards and procedures common to all projects.
- .2 The TOR document must be used in conjunction with the GP&S, as the two documents are complementary.
- .3 In the case of a conflict between the two documents, the requirements of the TOR override the GP&S Document.

1.1.3 PROJECT INFORMATION

| Project Information | |
|---------------------------------------|---------------------------------------|
| Project Title: | PSPC Fit-up, Activity Based Workplace |
| Project Address (potential location): | 269 Main Street, Winnipeg, Manitoba |
| PSPC Project Number: | R.067379. |
| PSPC Contracting Officer: | TBD |

1.2 BACKGROUND INFORMATION

1.2.1 USER DEPARTMENTS NEED

- .1 The Public Services and Procurement Canada (PSPC) and Shared Services Canada (SSC) have a need to relocate their staff to a consolidated workplace that is designed to support a variety of activity-based functions to better meet the Departments' mandates.
 - .1 The goal of the project is to assess work activities of their staff, identify functional and operational requirements, combine them into Activity Based Workplace (ABW) Functional Program and design a diverse workplace.

1.2.2 USER DEPARTMENT

- .1 The User Department referred to throughout the TOR is a group of two departments, Public Services and Procurement Canada (PSPC) and Shared Services Canada (SSC).
 - .1 PSPC Mission:
 - .1 To deliver high-quality services and programs that meet the needs of federal organizations and ensure sound stewardship on behalf of Canadians.
 - .2 SSC Mission:
 - .1 To fundamentally transform how the Government manages its information technology (IT) infrastructure by maintaining and improving the delivery of IT-infrastructure services while renewing the Government's aging IT



infrastructure.

1.2.3 EXISTING CONDITIONS OF POTENTIAL LOCATION

- .1 A potential location identified for this activity-based workplace project is in the Victory Building, located at 269 Main Street in Winnipeg.
 - .1 The building was constructed under the Canada's Public Works Construction Act during the Depression era in 1935-1936.
 - .1 Refer to Section 1.4.5, Heritage, of TOR for details.
 - .2 The office building is a Crown asset occupied by the Federal Government departments.
 - .3 Usable area of 1793m² is available for the project on the 5th, partial 3rd and basement floors in the building.
- .2 The main characteristics of the building and site are:
 - .1 The building is of the concrete construction with character stone-finished exterior and interior. (For more information refer to the Victory Building, Heritage Character Statement, Section 1.8.1.3 of the TOR).
 - .2 The 3rd and 5th floors ceilings are comprised of a suspended 2 x 4 grid system with acoustic tiles.
 - .3 The building is deemed compliant with PSPC Real Property Accessibility Standard CAN/CSA-B651-04.

1.2.4 CONSTRAINTS AND CHALLENGES OF POTENTIAL LOCATION

- .1 The Consultant is required to obtain security clearances for all personnel and sub-consultants.
- .2 The Consultant to provide an efficient and functional solution while ensuring the heritage intervention meets with FHBRO requirements.
- .3 Environmental conditions must be kept under control during all phases of the work as adjacent areas of the building will be occupied during the construction.
 - .1 When the work needs to be done from the adjacent areas that are occupied and operational and the work involves equipment and systems that produce sound and vibration.
- .4 Electrical:
 - .1 Some of the power distribution panelboards (FPE) are in excess of 40 years old and may cause concern for the new installation.
 - .2 The emergency power system may not have sufficient capacity for additional requirements.
 - .3 The lighting control system (Lutron) needs evaluation for parts and reliability.
 - .4 The emergency lighting system (Manco Control System) needs evaluation for parts and reliability.
- .5 Telecommunications:
 - .1 The existing telecommunications closets are not necessarily available for all tenant equipment and may require additional closets. Access and coordination must be accomplished between new and existing tenants.
- .6 The acoustic impact of the open office spaces design must consider the operations and support a productive work environment.
- .7 Consultant's key personnel must be available to respond to emergencies within 24



hours.

- .8 Design assumptions regarding furniture purchases are to be generic and able to support a multitude of options, as furniture procurement may be one or more and/or combination of procurement methods, including:
 - .1 Low Dollar Competitive bid process.
 - .2 Select Invitation to Tender (ITT).
 - .1 Using Federal Government Consolidated Procurement Instruments (CPI) to purchase furniture components and installation (goods and services) listed within the CPIs and procured by a select tender (ITT).
 - .3 Request for Proposals (RFP): Using a conventional open public request for proposals, involving the development of user requirements, competitive matrices, evaluation criteria, performance specifications, drawings and participation on an evaluation board.

1.2.5 HAZARDOUS MATERIALS

- .1 The majority of hazardous materials have been abated in the Victory Building, the project potential location.
 - .1 Refer to Section 1.6 of TOR for relevant documents.

1.2.6 PROJECT DELIVERY APPROACH

- .1 This project will use a traditional design-bid-build approach.
- .2 It is anticipated that two (2) tender packages will be required for this project: Construction Documentation and Furniture.

1.3 SUMMARY OF WORK

1.3.1 FUNCTIONAL PROGRAMMING WORK

- .1 Prepare Functional Program that includes design objectives, site requirements, spatial requirements, building system, infrastructure and telecommunications requirements, operational assumptions, facility and equipment assumptions/requirements and human resources assumptions in support of Activity Base Workplace (ABW).
 - .1 Confirm worker counts and task typology distribution.

1.3.2 BASE BUILDING RENOVATION DESIGN WORK

- .1 If the project location is in the Crown owned building, design to support renovation.
 - .1 Work to comply with the National Performance Standards for Office Buildings.
 - .2 If the location is in the Victory Building:
 - .1 Consider the Building Condition Report (refer to Section 1.8.2) to determine the base building requirements, if in the Victory Building (potential location).
 - .2 Upgrade base building lighting / control system to LED technology.
 - .3 Consider re-used or leave in place the base building ceilings, lighting, window covering and floor finishes, where applicable.

1.3.3 FIT-UP DESIGN WORK

- .1 Design fit-up of the spaces in support of the Functional Program.
 - .1 Currently, the number of employees – 145 Full Time Equivalents (FTEs).
 - .1 PSPC 136 FTEs, including Translation Bureau 7 FTEs, currently located at 167 Lombard Avenue, main & 2nd floors.
 - .2 SSC 9 FTEs currently located at 167 Lombard Avenue, main floor.



1.4 OBJECTIVES

1.4.1 GENERAL GOALS

- .1 Develop a well-organized and highly communicative working relationship with the key stakeholders in the Project.
 - .1 Ensure all disciplines are involved early and throughout project delivery.
- .2 Ensure the design is efficient and cost effective considering both initial cost and operation & maintenance costs over a life cycle of 25 years.
- .3 Gather information to document recommendations of an end state vision, spatial requirements and applicable standards in support of defining an Activity Based Workplace (ABW) that would be:
 - .1 A diverse activity-based workplace providing unassigned and assigned work points based upon task typologies in a variety of solutions, furniture types and configurations.
 - .2 A modern open work environment that respects the employees' need for acoustic and visual privacy, whether they are of an individual nature, collaborative, private or social.
 - .3 Activity based work points leveraging mobility, inspiring engagement, creativity and innovation.
 - .4 A workplace that supports the client's and employees' work culture and environment vision, where information and collaboration is available to employees in any place, at any time, without requirement for paper-based processes or records, to the greatest extent possible.
- .4 Provide clear and comprehensive furniture documents to support implementation of the project specific furniture procurement strategy and installation.

1.4.2 WORKPLACE MODERNIZATION OBJECTIVE

- .1 Maximize space utilization, including definition of work points outside of traditional assigned workspaces, deploy a simplified and sustainable approach to office allocation.
- .2 Provide infrastructure that:
 - .1 Supports mobility requirements to enable employees to work wherever and however in support of productivity.
 - .1 Quick, easy, intuitive access to corporate information through digital tools and technology incorporated in meeting and collaborative spaces and fixed work points.
 - .2 Reduction of reliance on paper, reducing paper storage requirements.
 - .2 Meets minimum requirements from the Workplace 2.0 Fit-up Standards for the Functional Program spaces that aligned with spaces in these Standards.
- .3 Frame Real Property solution to support a culture of results-based performance management.
 - .1 Engage employees at all levels of the organization.
- .4 Design a workplace that meets the functional and operational needs of the User Department, defined in the ABW Functional Program in support of ABW, considering all applicable requirements and site restrictions/implications.
 - .1 Consider specialized and typically available furniture options.
- .5 Provide a workplace that:



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- .1 Be designed for ease of maintenance, with systems that can be accessed and easily repaired and / or replaced during the building's life cycle.
- .2 Will endure and remain serviceable for its unique purpose by:
 - .1 Incorporating suitable high quality materials into the design that are of a quality, durable and are constructed with the best workmanship possible.
 - .2 Employing advanced systems and technologies to support contemporary operating requirements with capacity for growth and change.
 - .3 Fully integrating and optimizing the performance of components and systems.
- .3 Is a healthy and safe working environment.
- .4 Meets or exceeds all codes for fire, health, and life safety that fully supports optimum work productivity.
- .5 Provide physical security for occupants in accordance with the Threat & Risk Assessment report or equivalent security intent document.

1.4.3 STEWARDSHIP EXCELLENCE OBJECTIVES

- .1 Through the implementation of project, the services must consider the following:
 - .1 The appropriateness of the real property solution for its use and place.
 - .2 The technical competence of the project team and their deliverables.
 - .3 The economic viability of the real property solutions considered and/or developed.
 - .4 The successful incorporation of environmentally sustainable solutions.
 - .5 The development and maintenance of effective and efficient facilities.
 - .6 The appropriate incorporation of innovation within the project.
 - .7 The achievement of excellence in the design and delivery of services to Canadians resulting in inspiring and timeless solutions.

1.4.4 HERITAGE

- .1 The Victory Building, identified as a potential location for the project, is a designated "Classified" heritage building, according to the Federal Heritage Building Review Office (FHBRO) Treasury Board Policy, meaning that alterations must be submitted to FHBRO for review.
 - .1 The FHBRO process is defined:
http://www.historicplaces.ca/media/7313/fhbro_manual_parks%20canada.pdf
 - .2 The Design Solution must respect *the Standards and Guidelines for the Conservation of Historic Places in Canada*:
<http://www.historicplaces.ca/en/pages/standards-normes.aspx>
 - .3 Refer to Section 1.8.1 for the Victory Building Heritage Character Statement.
- .2 Consider solutions using a minimum intervention approach, causing the least harm to the heritage character of the building.
 - .1 Every effort must be made during construction to protect the building character elements.

1.4.5 ENVIRONMENTAL/SUSTAINABLE DEVELOPMENT

- .1 Integrate sustainable principles into the Design, such as identified in LEED or Green Globe or similar certification systems.
 - .1 Certification will not be pursued.



1.5 SUMMARY OF SPECIALTIES

1.5.1 GENERAL SERVICES

1. The prime consultant will provide a full consulting team services and specialties, including but not limited to:
 - .1 Professional Architectural Services
 - .1 Conservation Architecture specialist.
 - .2 Professional Interior Design Services
 - .1 Interior designer with NCIDQ/CIDQ and full membership in Provincial Regulatory Association as listed at <http://www.idcanada.org/english/about-us/about-idc/provincial-associations.html>.
 - .3 Professional Engineering Services, including;
 - .1 Mechanical Engineer.
 - .2 Electrical Engineer.
 - .3 Structural Engineer.
 - .4 Commissioning Services
 - .1 Including commissioning agent.
 - .5 Quantity Surveyor
 - .1 Certified by the Canadian Institute of Quantity Surveyors.
 - .6 Audio Visual specialist.
 - .7 Telecommunications specialist.
 - .8 Specification specialist
 - .1 Certified by Construction Specifications Canada (minimum level 1 Registered Specification Writer).
 - .9 Acoustician.

1.6 SCHEDULE

1.6.1 GENERAL

- .1 Deliver the project in accordance with the project milestone list.
- .2 Prepare a Project Schedule in accordance with the milestone list.



1.6.2 ANTICIPATED MILESTONE DATES

| Project Phase | Milestone Completion Date |
|---|---------------------------|
| Consultant Contract Award | June 30, 2017 |
| Pre-Design Service | August 15, 2017 |
| Schematic Design | October 15, 2017 |
| Design Development | December 1, 2017 |
| 66% complete | February 15, 2018 |
| 99% complete | March 30, 2018 |
| Final Construction Documents Accepted | April 25, 2018 |
| Tender Period Completed | July 6, 2018 |
| Construction Start | August 1, 2018 |
| Substantial Completion of Construction | April 15, 2019 |
| Commissioning Completion, Final Inspection and Acceptance | April 5, 2019 |
| In-Service Date | May 1, 2019 |
| Post Construction Warranty Evaluation | March 1, 2020 |

1.7 COST

1.7.1 CONSTRUCTION BUDGET

- .1 The construction estimate does not include Project Management fees, administration costs, Consultant fees, Risk Allowance, Escalation or GST and is in 'Budget-Year (Current)' dollars.

1.7.2 ESTIMATED CONSTRUCTION COST

- .1 The estimated construction cost (excluding GST), is anticipated at this time to be as follows:

| Estimated Construction Cost | Budget-Year \$ |
|---------------------------------------|----------------|
| Construction Cost (Maximum) | \$ 3,250,000 |
| Construction Contingency (Maximum) | \$ 325,000 |
| Furniture (Maximum) | \$ 450,000 |
| Construction Budget at time of tender | \$ 4,025,000 |

1.8 EXISTING DOCUMENTATION

1.8.1 AVAILABLE FOR THE CONSULTANT

- .1 General Procedures and Standards (GP&S).
- .2 National Performance Standards for Office Buildings (August 28, 2016).



.3 Government of Canada Workplace 2.0 Fit-up Standards.

.4 Victory Building, Heritage Character Statement:

http://www.pc.gc.ca/apps/dfhd/page_fhbros_eng.aspx?id=3812

1.8.2 AVAILABLE FOR THE CONSULTANT UPON CONTRACT AWARD

.1 User Departments' organizational charts.

.2 Limited as-built drawings and O&M Manuals of the Victory Building.

.1 The Consultant will be provided with PDF and AutoCAD scaled drawings.

.2 The drawings will require verification and modifications by the Consultant.

.3 Asset Performance Report Victory Site, Winnipeg, P600011A, dated June 20, 2014. (Updated Asset Performance Report is expected by March 2017).

.4 Victory Building Asbestos Management Plan, dated January 29, 2008.

.5 Accessibility Audit Victory Building 269 Main Street, Winnipeg, dated May 8, 2014.

.6 Threat Risk and Assessment security document.

1.8.3 DISCLAIMER

.1 Reference information will be available in the language in which it is written.

.2 The documentation may be unreliable and is offered, "as is" for the information of the Consultant.

1.9 CODES, ACTS, STANDARDS, REGULATIONS

1.9.1 GENERAL

.1 A listing of Acts, Codes, Standards and Guidelines potentially applicable to this project are contained in the GP&S Document.

.1 The applicability of various Codes, Acts, Standards and Guidelines listed in the GP&S document arise out of direct and indirect references in documents which apply to Federal buildings.

.2 The consultant team must be fully versed with the legislation and requirements that are unique to Federal Government buildings in Canada.

.3 The consultant team must be fully versed with the legislation and requirements that are unique to Federal Government projects tendered through Public Works & Government Services Canada.

.2 The Authorities Having Jurisdiction (AHJ) on this project are:

.1 The local AHJs.

.2 Treasury Board of Canada Secretariat, accessed through the Departmental Representative.



2 REQUIRED SERVICES

2.1 GENERAL REQUIREMENTS

2.1.1 SERVICES

- .1 Pre-Design Service.
- .2 Schematic Design Service.
- .3 Design Development Service.
- .4 Construction Documents Service.
- .5 Tender Services.
- .6 Construction Support Service.
- .7 Post Construction Service.

2.1.2 COORDINATION

- .1 Coordinate with work and services provided by other consultants and contractors hired by Departmental Representative, such as:
 - .1 Shared Services Canada (SSC) responsible for the telecommunications design and/or installation.
 - .2 Hazardous material abatement consultants and/or contractors working on site.
 - .1 Advise the Departmental Representative of any suspected hazardous materials observed during design / construction investigations.
 - .3 Other
- .2 Throughout project delivery, Support the Departmental Representative in the preparation of the Change Management Plan, providing information and preparing graphical material.

2.2 PROJECT REVIEW AND ACCEPTANCE

2.2.1 GENERAL

- .1 Comply with all applicable laws and regulatory requirements as required by the General Conditions of the Contract.

2.2.2 PSPC REVIEWS AND ACCEPTANCE

- .1 Project delivery team includes Departmental Representative and User Department's review and acceptance.
 - .1 Submissions will be reviewed.
 - .2 The purpose of each review is assurance that submissions meet the objectives and requirements of this project.
 - .1 Work that does not meet the objectives of the project will be rejected and will require further design/re-design, coordination and documentation at the Consultant's expense.
 - .3 Expected turnaround time for each review is 2 weeks.
 - .4 For each review, provide one submission plus any follow-up submissions.

2.2.3 PROVINCIAL, TERRITORIAL AND LOCAL AUTHORITIES HAVING JURISDICTION

- .1 The Federal Government generally defers to provincial and local authorities for specific regulations, standards and inspections, but in areas of conflict, the more stringent authority prevails.



- .2 For the Authority Having Jurisdiction (AHJ) review:
 - .1 Documentation will be reviewed for building permit.
 - .2 Submit documents in formats as required by the AHJ.

2.2.4 FHBRO REVIEWS AND ACCEPTANCE (IF VICTORY BUILDING LOCATION)

- .1 Throughout project delivery, submit design documentation for review and acceptance.
 - .1 Submit for review a Schematic Design option and Construction Documents.
 - .2 Expected turnaround time for each review is 3-4 weeks.
 - .3 Address the FHBRO concerns in the design and reflect in the next submission.

2.3 PRE-DESIGN SERVICE

2.3.1 GENERAL

- .1 The Consultant Team will gather, review and analyze project information, consult with the Departmental Representative, deliver a Functional Program in support of ABW, and prepare a comprehensive Pre-Design Report with Test Plan to determine, if the User Department can fit into the space.

2.3.2 SCOPE AND ACTIVITIES

- .1 Chair bi-weekly project meetings plus separate furniture focused meetings and information gathering sessions.
 - .1 Prepare agenda and minutes complete with issue, action and decision logs.
 - .2 Present updates and supporting analysis within project meetings.
 - .3 Anticipate three (3) furniture focused full-day meetings.
 - .4 Anticipate minimum nine (9) information-gathering sessions: one (1) for Executives and one (1) for each branch.
- .2 Gather the information to support the analysis and documentation of Users' functional and operational requirements.
 - .1 Conduct existing space audit to confirm and further support information gathering process.
 - .2 Review and Analyze:
 - .1 All available information related to the project.
 - .2 Security documentation including Threat and Risk Assessment.
 - .3 User department Organizational Charts, other staffing explanatory information.
 - .3 Develop information gathering tools to ensure clear understanding of:
 - .1 User Department vision.
 - .1 How the vision is to be applied.
 - .2 How the existing environment meets or does not meet the vision.
 - .3 How the environment needs to change in order to meet the vision.
 - .2 User accommodation requirements.
 - .1 Employee task typologies and breakdown of time conducting various tasks.
 - .2 Proportion of focused individual work versus collaborative/team based work.
 - .3 Proportion of collaboration with members out of office.



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- .4 Functional Relationships between units within User organization.
- .5 Spatial criteria to support functions.
- .6 Proportion of time employees are within the office versus off site.
- .3 Sustainable design objectives.
 - .4 Acoustic objectives.
 - .5 Separation and/or adjacency requirements that affect space planning/design.
 - .6 Mobility objectives.
 - .7 Aesthetic objectives.
 - .8 Security objectives.
 - .9 Equipment requirements to support operations.
 - .10 Special Purpose Space functions, including associated spatial criteria and infrastructure requirements.
- .4 Facilitate information gathering sessions to confirm and build on responses to information gathering questionnaires.
- .3 Prepare a Functional Program to consolidate all information, document Users' activity based work requirements to support appropriate and modern design solutions.
 - .1 Include into the Report:
 - .1 User Department vision.
 - .2 Project Objectives.
 - .3 Owner Project Requirements (OPR) - as defined by CSA Z320-11.
 - .4 Applicable Regulation, Codes, Standards and Guidelines.
 - .5 Operational analysis.
 - .1 User's accommodation requirements.
 - .2 Adjacency diagrams.
 - .3 Stacking diagrams.
 - .4 Circulation diagrams.
 - .6 Space requirements upon project:
 - .1 Provide quantitative requirements for all space typologies, including but not limited to:
 - .1 Breakdown of individual rooms, spaces typologies and areas.
 - .2 Mobility requirements.
 - .3 Acoustic requirements.
 - .4 Furniture, equipment, audio visual and telecommunications requirements.
 - .5 Interdisciplinary requirements to support future designs.
 - .6 Workspace requirements/tools/infrastructure assumptions.
 - .2 Illustrate ABW task typology requirements.
 - .3 Assess and identify employee breakdown dedicated to:
 - .1 Each ABW task typology.
 - .2 Assigned/unassigned workplace.
 - .3 Associated flow patterns.
 - .4 Consider employee's choice in variety of options provided, including



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flexibility in temperature, lighting levels/sources, acoustic and spatial considerations.

- .4 Prepare a Presentation of Functional Program findings and analysis to confirm interpretations in advance of submitting Functional Program for acceptance.
 - .1 Provide presentation information, as reference, a minimum of 3 business days in advance of meeting.
 - .2 Document discussion with meeting minutes.
 - .3 Revise and update the details of the Functional Program, based on the User Department input, as required.
- .5 Prepare a Pre-Design Report to document the following:
 - .1 Review all existing documents and material related to the project.
 - .1 Identify any impact to the base building, based on the requirements of the National Performance Standards for Office Buildings and Functional Program.
 - .2 Identify heritage requirements and impact on the project.
 - .3 Confirm that the information is adequate to proceed with the Design.
 - .4 Identify any additional information that will be required to deliver the project.
 - .2 Visit the project site, analyze site conditions and document any conditions that will impact project delivery & design.
 - .3 Test the Functional Program in plan within the project site.
 - .1 Include floor and furniture blocking plan in support of Functional Program.
 - .2 Confirm if the Functional Program fit into the space.
 - .3 Identify any code non-compliance concerns.
 - .4 Identify all Authorities Having Jurisdiction (AHJ) over the project.
 - .5 Outline commissioning requirements and benchmarks, and prepare Cx Plan design document, based on the Owner Project Requirements (OPR).
 - .6 Provide Risk Analysis.
 - .1 Report on any risks that may affect cost or schedule.
 - .2 Recommend corrective measures.
 - .7 Prepare Project Schedule, include allowances for reviews.
 - .8 Discuss with Departmental Representative furniture quality, scope, costs, furniture assessment, cost benefit analysis, furniture inventory, furniture procurement strategy and schedule, and confirm:
 - .1 Roles and Responsibilities within the PSPC furniture procurement models.
 - .2 Lines of Communication.
 - .9 Review Federal Government furniture and equipment procurement tools with Departmental Representative to understand the methodologies that will be used to procure furniture:
 - .1 Identify aspects requiring further clarification.
 - .2 Document potential impact on furniture layouts.
 - .3 Review and confirm a preliminary furniture list.
 - .4 Collaborate with the Departmental Representative to assist in the



formulation of the Preliminary Furniture Procurement Strategy.

- .10 Prepare a Furniture Assessment.
 - .1 Take into consideration:
 - .1 Manufacture, type series, model, type.
 - .2 Age of existing furniture, warranties.
 - .3 Location of existing furniture.
 - .4 The technical nature, condition, aesthetic, ability to procure additional parts and services for the existing furniture and ease of facility management as it pertains to the health, safety, welfare of the end-users.
 - .2 Provide justification, recommendations and percentage of existing furniture for re-use in “as-is” condition, refurbished for re-used, slated for surplus through Crown Assets, slated for recycling/landfill or a combination thereof.
- .11 Prepare furniture Cost Benefit Analysis.
 - .1 Reflect the consultant’s furniture assessment recommendations.
 - .2 Provide justifications and recommendations for best furniture re-use strategy based on best value to the Crown.
- .12 Append the Functional Program to the Report.

2.3.3 DELIVERABLES

- .1 Agenda and Minutes.
- .2 Information Gathering Tools.
- .3 Presentation and Minutes for the Functional Program presentation meeting.
- .4 Functional Program.
- .5 Pre-Design Report.
- .6 Input into the Change Management Plan.

2.4 SCHEMATIC DESIGN SERVICE

2.4.1 GENERAL

- .1 Based on the project location, confirmed by Departmental Representative, the Consultant Team will prepare distinct viable options in support of the ABW Functional Program and deliver a comprehensive Schematic Design Report and Presentation.
- .2 Out of this process, one option will be selected as the basis to proceed to Design Development:
 - .1 The Departmental Representative, in concert with others, shall select the preferred option to be further developed.
 - .2 Although the Consultant is required to identify a preferred option, the Departmental Representative reserves the right to select another option.

2.4.2 SCOPE & ACTIVITIES

- .1 Chair project bi-weekly meetings plus separate furniture focused meeting.
 - .1 Prepare agenda and minutes complete with issue, action and decision logs.
 - .2 Anticipate one (1) furniture focused full-day meeting.
- .2 Prepare a Schematic Design Report to document the following:
 - .1 Prepare a minimum of three (3) distinct viable options to meet the functional and



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- technical requirements identified in the ABW Functional Program for the project:
- .1 Challenge the Functional Program to provide at least one compliant appropriate low-tech design option.
 - .2 Analyse and develop each design option with regard to the project goals, including cost and schedule.
 - .1 Develop each design option in sufficient detail to clearly indicate all key elements in the design.
 - .2 Demonstrate how each option meets the requirements of the ABW Functional Program.
 - .3 Assess each option with pros and cons and prepare recommendations.
 - .3 Prepare a Class 'D' cost estimate for base building and fit-up including cost for commissioning for each option.
 - .4 Assess the design options against all applicable Acts, Regulations, Codes and Standards.
 - .1 Demonstrate compliance.
 - .5 Develop a preliminary BOD narrative for each option to demonstrate how the option meet the Functional Program.
 - .6 Identify potential impact to furniture procurement with each option.
 - .2 Update the details of the Functional Program requirements.
 - .1 Identify modifications to the Functional Program that may be required to support implementation within space.
 - .2 Update the sustainable design strategy and targets.
 - .3 Develop Commissioning Plan.
 - .4 Update Risk Analysis.
 - .5 Update Project Schedule.
 - .6 Prepare a preliminary furniture list.
 - .7 Prepare furniture Inventory and Tagging in accordance with the consultant's justifications and recommendations made in the Furniture Assessment and Cost Benefit Analysis.
 - .8 Research furniture and equipment options based upon the Functional Program requirements.
 - .9 Develop furniture plans to support each Schematic Design option, include:
 - .1 Systems furniture components, loose furniture commodities, accessories and equipment (for both existing to be re-used and new) to support the design.
 - .2 Coordinate and identify all power, telecommunications and any other infrastructure connection locations with future fit-up improvements.
 - .10 Develop outline Furniture Schedule in accordance with Furniture Procurement Strategy.
 - .3 Facilitate a Schematic Design options Presentation involving all stakeholders.
 - .1 Prepare the meeting Agenda and the Presentation material (PowerPoint format).
 - .1 Provide presentation information a minimum of 3 business days in advance of the meeting.
 - .2 Document discussion with meeting Minutes.



2.4.3 DELIVERABLES

- .1 Agenda and Minutes.
- .2 Schematic Design Presentation and Minutes.
- .3 Schematic Design Report.
- .4 Input into the Change Management Plan.

2.5 DESIGN DEVELOPMENT SERVICE

2.5.1 GENERAL

- .1 Develop the selected Schematic Design option and expand the intent for each design discipline to describe the scope, quality and cost to complete the Design.

2.5.2 SCOPE AND ACTIVITIES

- .1 Chair project bi-weekly meetings.
 - .1 Prepare agenda and minutes complete with issue, action and decision logs.
- .2 Prepare a Design Development Report to document the following:
 - .1 Demonstrate how the Design Development documents meet the requirements of the ABW Functional Program.
 - .2 Prepare multi-disciplinary drawings including floor plans, reflected ceiling plans, sections, meeting room furniture layouts, and larger scale details.
 - .1 Show fire separation and ratings, acoustic and security requirements on plans.
 - .3 Develop outline specifications that describes the proposed materials and construction systems in general terms and provides basic information on appearance, texture, operating and performance criteria.
 - .4 Prepare a cost estimate: Class 'C' cost estimate for base building and fit-up and Class 'B' cost estimate for furniture in accordance with Furniture Procurement Strategy.
 - .1 Include cost for commissioning breakout by disciplines.
 - .2 Further breakdown cost by Funding Accountabilities as per Government of Canada Workplace 2.0 Fit-up Standards.
 - .5 Prepare formal code analysis against all applicable Codes, Standards and Regulations.
 - .1 Demonstrate compliance.
 - .2 If there are non-compliance issues:
 - .1 Develop Alternative Solutions to support design.
 - .1 Present/submit to appropriate authorities for review.
 - .6 Analyse the constructability of the project and advise on the construction duration.
 - .7 Update the sustainable design strategy and report on sustainability targets.
 - .8 Update Risk Analysis.
 - .9 Update Project Schedule.
 - .10 Update the Basis of Design (BOD).
 - .11 Develop the commissioning documents:
 - .1 System components list including equipment, components, systems and



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- different levels of integration between systems to be commissioned.
- .1 List of components which delineate and make up the respective system.
- .2 List of systems which delineate and make up the respective integrates system.
- .3 List of all integrated systems.
- .2 Updated Cx Plan and OPRs design documentation.
- .3 Cx forms and verification check sheets specific to pre-functional and functional performance verification test for all components, systems and integrated systems.
- .4 Cx Issues/Resolution log.
- .3 Prepare Furniture Procurement Documents.
 - .1 Update furniture plans and schedule as per selected Schematic Design option.
 - .1 Coordinate with required disciplines to ensure that all required services are incorporated into office furniture plans to support the design and program requirements.
 - .2 Include critical installation dimensions.
 - .3 Identify all accessories and lighting components to be supported from the panels.
 - .1 Identify these components on interior elevations or on isometric views of typical workstation types.
 - .2 Provide, as per the Furniture Procurement Strategy:
 - .1 Research and develop furniture commodity specifications and drawings to suit project requirements, to ensure open competitive public tenders and best value to PSPC.
 - .1 Document the research.
 - .2 Prepare office furniture and accessories finish schedule.
 - .2 Prepare tender package for furniture procured through Consolidated Procurement Instrument (CPI).
 - .1 Include for each CPI furniture commodity:
 - .1 Commodity descriptors, as per the Client Search Tools.
 - .2 Commodity schedules, including:
 - .1 Quantity
 - .2 Location(s)
 - .3 Dimensions
 - .4 Description
 - .5 Tagging Identification
 - .6 Notes.
 - .3 Prepare tender package for furniture procured through open public RFP.
 - .1 Provide electronic book specification using Master Format 2010.
 - .2 Format Sections in accordance with the CSI/CSC three part Section Format(TM) and Page Format(TM) to support furniture procurement.
 - .1 Three part Construction Specifications Canada Master Format.
 - .2 Including Operations and Maintenance training requirements.



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- .3 Comprise a Commodity Competitive Matrix (for Furniture only) of two sections:
 - .1 Mandatory Criteria.
 - .2 Point-rated Criteria.
- .3 Tag and track furniture and equipment items to be reused or as surpluses.
- .4 Develop and update the itemized Furniture Procurement Schedules coordinated with the design submissions, the approved design option and the PSPC Furniture Procurement Strategy.
 - .1 Include three (3) Office Furniture and Accessory finish sample boards to coordinate with the design finish selections for approval by the Departmental Representative and User Departments.
- .4 Assist the Departmental Representative in the furniture procurement process.
 - .1 Provide advice and timely responses/clarifications to manufacturers' queries during the furniture procurement periods, as requested by the Departmental Representative.
 - .2 Participate on evaluation board for furniture manufacturers' bid submissions for CPI furniture commodity packages and/or RFP submissions.

2.5.3 DELIVERABLES

- .1 Agenda and Minutes.
- .2 Design Development Report.
- .3 Furniture Procurement Documents.
- .4 Change Management Plan input updates.

2.6 CONSTRUCTION DOCUMENTS SERVICES

2.6.1 GENERAL

- .1 The objective of this service is to translate the preliminary Design into Construction Documents for the purpose of tendering.
- .2 The Consultant must obtain written authorization from the Departmental Representative before proceeding with Construction Documents.

2.6.2 SCOPE AND ACTIVITIES

- .1 Chair project bi-weekly meetings.
 - .1 Prepare agenda and minutes complete with issue, action and decision logs.
- .2 Present design to Authority Having Jurisdiction to support approvals as appropriate to design.
 - .1 Advise the Departmental Representative of all issues raised by other officials and all Consultants' responses.
- .3 Provide progressively developed Construction Documents.
 - .1 Integrate the sustainable design strategy into the Design and report on achieved targets.
 - .2 Provide all plans, elevations, details, sections and schedules, fully coordinated, ready for tender.
 - .3 Prepare Specifications with all applicable sections completed to NMS Master Format.
 - .1 Division 01 to include Commissioning Sections.



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- .1 Update and incorporate Cx Plan design documentation, Cx forms/check sheets and training requirements.
- .2 Develop Cx Forms and Verification Check Sheets ready for commissioning specific to components, equipment, systems and integrated system, project specific:
 - .1 Component verification (Static verification).
 - .2 Installation verification.
 - .3 Start up.
 - .4 Systems verification test.
 - .5 Integrated system functional performance verification for dynamic operation.
 - .6 Develop and incorporate Cx issue log.
 - .7 Expected design performance parameters.
 - .1 Observed performance including indication of whether or not this performance is acceptable.
 - .2 Design Engineer of Record date and signature slot along with for those performing and witnessing the test.
- .4 Update Cost estimates for base building and fit-up. Prepare Class-B estimate at 66%, Class-A estimate at 99% and update at 100% complete.
 - .1 Include cost for commissioning breakout by disciplines.
 - .2 Further breakdown cost by Funding Accountabilities as per Government of Canada Workplace 2.0 Fit-up Standards.
 - .3 Use 100% measured quantities.
 - .4 Provide a cost breakdown by unit rate and/or trade for review of bids and comparison with the successful Contractor's cost breakdown.
- .5 Update Project Schedule.
 - .1 Confirm allowances for phasing, staging, temporary storage and installation for furniture interim and final moves based on elevator size / load capacity / availability.
- .4 In consultation with Departmental Representative, finalize construction materials, finishes & colors, processes and specifications.
 - .1 Coordinate the selection of furniture types and components, colours and finishes with Manufacturers, Departmental Representative and User Departments.
 - .1 Prepare furniture types and components schedule.
 - .2 Prepare colours and finishes schedule.
 - .2 Ensure the furniture colours and finishes are coordinated with the overall colour scheme of the fit-up.
- .5 Establish a quality control process for the Construction and Contract Administration Service.
- .6 Update the Basis of Design (BOD).
- .7 Update Risk Analysis.
- .8 Prepare a written confirmation that:
 - .1 The Construction Documents are ready to be issued for tender.
 - .2 The checklist in the GP&S Document has been reviewed in concert with the



requirements of the Consultant Agreement.

2.6.3 DELIVERABLES

- .1 Agenda and Minutes.
- .2 Construction Documents.
 - .1 66% complete – Building Permit ready.
 - .2 99% complete.
 - .3 100% complete, signed and sealed.
- .3 Furniture types and components schedule.
- .4 Furniture colours and finishes schedule.
- .5 Updated the Basis of Design (BOD).
- .6 Updated Risk Analysis.
- .7 Change Management Plan input updates.

2.7 TENDER SERVICES

2.7.1 GENERAL

- .1 The objective of this service is to support the Departmental Representative with the tender.
- .2 The Contract Authority for this project is the Real Property Contracting branch (RPC) of PSPC.

2.7.2 SCOPE AND ACTIVITIES

- .1 Provide response to all questions within two (2) business days during the bidding period and submit to Departmental Representative.
 - .1 Provide information required by bidders to interpret construction documents.
 - .2 Prepare addenda, if required.
- .2 During Bid Review and Analysis, assist the Departmental Representative, as required, by analyzing and reconciling any differences between pre-tender estimates and submitted bids.
- .3 If three or more Addenda issued, prepare complete “Issued for Construction” documents (IFC), including addenda for all tender packages.
 - .1 Three (3) hard copy and electronic copy, searchable PDF.

2.7.3 DELIVERABLES

- .1 Addenda.
- .2 Written response to all questions.
- .3 Recommendation and/or analysis of bids.
- .4 “Issued for Construction” documents (IFC) - if required.

2.8 CONSTRUCTION SUPPORT SERVICE

2.8.1 GENERAL

- .1 The objective of this service is to support the Departmental Representative at the construction phase and ensure the quality, budget and schedule of the project meet the project requirements.

2.8.2 SCOPE AND ACTIVITIES

- .1 Chair bi-weekly on-site project meetings.



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- .1 Prepare agenda and minutes complete with issue, action and decision logs.
- .2 General Services
 - .1 Update Project Logs tracking approved major decisions, including those impacting project scope, budget and schedule.
 - .2 Prepare and issue a communications protocol and a shop drawing review protocol in consultation with the Departmental Representative.
 - .3 Turned over all samples, materials, mixes and test results to the Departmental Representative for future maintenance.
- .3 Site Visits
 - .1 Provide Field Reviews bi-weekly to monitor the construction activities throughout the construction period and keep Departmental Representative informed of work progress:
 - .1 Reject unsatisfactory work.
 - .2 Provide written reports.
 - .1 Document with site photos.
- .4 Construction & Contract administration
 - .1 Interpret contract documents and provide additional drawings to clarify or supplement Construction Documents with Supplemental Instructions to the Contractor with reasonable promptness.
 - .2 Review Contractor's submittals.
 - .3 Provide technical advice.
 - .4 Coordinate Sub-Consultants' work.
 - .5 Authorize special tests, inspections and minor works that do not impact project cost and schedule.
 - .6 Assist the Departmental Representative to prepare Certificate of Substantial Completion.
 - .7 Review, witness, verify test, approve and sign off all commissioning submittals for performance parameters before test and after test and for adherence to OPR and BOD including but not limited to:
 - .1 All factory test reports and data.
 - .2 Installation, start-up and TAB.
 - .3 Components based checks.
 - .4 Systems based checks.
 - .5 Integrated systems based checks.
 - .6 Cx forms and verification checklists, process and procedures specific to components, systems and different levels of integration between systems.
 - .7 Cx schedule.
 - .8 Deferred, seasonal and re-test system deficiency.
 - .9 Review and assist with O & M and Owner Training Manual.
 - .10 Oversee and Document Functional Performance Testing.
 - .11 Follow up on testing issues as required.
 - .12 Update Cx Issues Log.
 - .13 Conduct field reviews complete with Cx site reports verifying components



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- and systems being commissioned in accordance with the OPR and the BOD.
 - .14 Chair Cx Team meetings and report progress on a bi-weekly basis c/w minutes for distribution.
 - .15 Provide verification of final reports upon completion of the entire project.
 - .16 Lead and facilitate the Cx Team's Interim Acceptance Report sign-off.
 - .17 Engineer(s) of Record shall provide a Letter of Acceptance.
 - .8 Provide Final Commissioning Report documenting all final commissioning work, testing, verification and results achieved during the project construction specific to components, equipment, systems, integrated systems and assemblies.
Commissioning Report must at a minimum include the following:
 - .1 Identification of components, systems, different levels of integration between systems and/or assemblies that required commissioning.
 - .2 Deferred Cx testing.
 - .3 Static verification check sheets.
 - .4 Factory test reports.
 - .5 Installation verification check sheets.
 - .6 Start-up check sheets.
 - .7 Functional system performance verification.
 - .8 Integrate systems functional performance verification.
 - .9 Cx issue logs and progress report.
 - .10 All commissioning Site review report.
 - .11 Final Commissioning Plan.
 - .12 Final OPR and BOD report.
 - .13 Engineer of Record provide a letter of Acceptance.
 - .5 Office Furniture Support Services
 - .1 Coordinate furniture and equipment installation with disciplines to ensure that all required services are incorporated into office furniture and equipment as required.
 - .1 Confirm that all power, telecommunications and any other building infrastructure are connected as required to the commodity components.
 - .2 Review supplier shop drawings / installation drawings.
 - .3 Provide periodic field reviews, complete with reports, to identify deficiencies and assist the Departmental Representative with administration services.
 - .1 Review at furniture delivery, interim storage, unpacking, uncrating and disposal of packing materials.
 - .2 Report and provide/coordinate resolution for the replacement, storage, packing, shipping and return of damaged and mis-ordered furniture, components, equipment and appliances.
 - .3 Provide deficiency and final acceptance lists for each commodity installation.
 - .6 Permits
 - .1 Provide required documentation in order to obtain the permits including Occupancy Permit.
 - .7 Cost Services
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- .1 Evaluate change orders, claims, work completed and provide recommendations.
- .2 Review Contractor's Progress Claims to determine the amounts owing to the Contractor and certify payments to the Contractor.
- .3 Assist the construction team with cost management advice, if requested.
- .4 Obtain detailed cost breakdown from the contractor.
- .8 Scheduling Services
 - .1 Review Contractor's monthly schedule report, report on findings and provide recommendations to the PSPC for further discussion with the Contractor.
- .9 Changes to the Work
 - .1 Assist the Departmental Representative to prepare CCN's and COs, to be issued by the Departmental Representative.

2.8.3 DELIVERABLES

- .1 Agenda and Minutes complete with Issues, Decision and Action Logs for bi-weekly meetings.
- .2 Written Field Review and deficiency reports including commissioning site review reports.
- .3 Project records and submission reviews.
- .4 Final Commissioning Report.

2.9 POST CONSTRUCTION SERVICE

2.9.1 GENERAL

- .1 The purpose of this Service is to support the Departmental Representative in obtaining all final documents required for project close out.

2.9.2 SCOPE AND ACTIVITIES

- .1 Prepare record drawings and specifications based on addenda, change orders, commissioning and Contractor's as-builts.
- .2 Project Close-out Services
 - .1 Prepare and submit Final Certificate of Completion and final records.
 - .2 Review the Operations and Maintenance Manual.
 - .3 Finalize Commissioning Manual and System Manual.
- .3 Warranty Services
 - .1 Monitor and certify rectification of deficiencies before expiry of warranties.
 - .1 Participate in warranty inspection with Departmental Representative and Contractor.
 - .2 Provide warranty deficiency list.
 - .3 Provide Final Warranty Review report.
 - .2 Monitor environmental and life safety system checks to be carried out by Contractor/O&M staff before expiration of warranties.

2.9.3 DELIVERABLES

- .1 Warranty deficiency updates and final Report.
- .2 Final Certificate of Completion.
- .3 Record Drawings and Specifications.



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- .4 Comments to O&M Manual.
 - .5 Signed final Commissioning Manual and System Manual.



3 PROJECT ADMINISTRATION & AMMENDMENT TO GP&S

3.1 GENERAL REQUIREMENTS

3.1.1 PSPC PROCEDURES AND STANDARDS

- .1 In addition to adhering to the general project administration requirements contained in the GP&S document, the Consultant shall comply with the project specific requirements in this section.

3.2 AMMENDMENTS TO GP&S DOCUMENT

3.2.1 ARTICLE 2.7.2 PSPC DOCUMENTS AVAILABLE FROM PSPC PROJECT MANAGER:

- .1 Remove Item 5 *PSPC Commissioning Manual CP-1 version 2006*.

3.2.2 ARTICLE 2.7.3 CODES AND REGULATIONS

- .1 Replace Item 1 with: *NRC National Building Code of Canada 2015*.
- .2 Replace item 2 with: *NRC National Fire Code of Canada 2015*.
- .3 Replace item 3 with: *NRC Plumbing Fire Code of Canada 2015*.
- .4 Replace item 4 with: *NRC National Energy Code of Canada for Buildings 2015*.
- .5 Replace item 5 with: *CSA-C22.1-15 Canadian Electrical Code, Part 1, 2015*.

3.2.3 ARTICLE 2.7.4 STANDARDS AND GUIDELINES PRODUCED BY THE GOVERNMENT OF CANADA:

- .1 Add Item 8: *National Performance Standards for Office Buildings, August 28, 2016*.

3.2.4 ARTICLE 2.7.6 STANDARDS AND GUIDELINES:

- .1 Replace Item 26 with: *CSA/B561-12 Accessible Design for the Built Environment*.

3.2.5 ARTICLE 2.8 COMMISSIONING PROCESS

- .1 Replace article 2.8 with: *Project commissioning is to comply with the CSA Z320-11 Standard*.

3.2.6 ARTICLE 2.9.5.3 SUBMISSIONS

- .1 Revise item 2.9.5.3 with
 - .1 *GC Buy and Sell:*
 - .1 *Consultant shall provide both an electronic true copy and AutoCAD copy of the final documents (specifications and drawings) without password protection and printing restrictions.*

3.2.7 ARTICLE 2.10.22 CONTRACTING ISSUES

- .1 Remove item 2.10.22.3.4.

3.2.8 ARTICLE 2.11.9.1 AND .2 PRINTS

- .1 Revise to read:
 - .1 *Submissions are to be searchable pdf and AutoCAD 2011.*

3.2.9 ARTICLE 3.4.4.2.2 AND .3 COMMISSIONING PROCESS

- .1 Replace article with: *Project commissioning is to comply with the CSA Z320-11 Standard*.

3.2.10 ARTICLE 3.6 MEETINGS

- .1 Bi-weekly project meetings to be conducted via teleconference and on site, as required, or, otherwise, agreed to by the Departmental Representative.



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3.2.11 *ARTICLE 3.12 TECHNICAL AND FUNCTIONAL REVIEWS*

.1 Remove item 3.12.2.