Project Brief

Architectural and Engineering Services
New Police Facility, Deschambault Lake Saskatchewan

Canada

PROJECT DESCRIPTION

PD 1 PROJECT INFORMATION

PD 1.1 SERVICES

1.1.1 Royal Canadian Mounted Police (RCMP) 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.

PD 1.2 THE GENERAL PROCUREMENT AND PROCEDURES AND STANDARDS DOCUMENT (GP&S)

1.2.1 The Project Brief document must be used in conjunction with the GP&S, as the two documents are complimentary.

1.2.2 The Project Brief describes project-specific requirements, services and deliverables while the GP&S document outlines with minimum standards and procedures common to all projects.

1.2.3 In the case of a conflict between the two documents, the requirements of the Project Brief override the GP&S Document.

PD 1.3 GENERAL

1.3.1 Project Title: New Modular Detachment and Employee Housing, Deschambault Lake

1.3.2 Location of the Project: Deschambault Lake, Saskatchewan

PD 2 PROJECT INTRODUCTION AND BACKGROUND

PD 2.1 OVERVIEW

2.1.1 The services of an Architectural firm, acting as Prime Consultant, are required to undertake the design and construction administration services needed to facilitate the implementation of a new modular detachment and storage garage in Deschambault Lake, Saskatchewan for the RCMP.

2.1.2 As Prime Consultant, the selected Architectural firm will provide a full consulting Team including the required expertise in civil, structural, mechanical, electrical, landscape architecture, scheduling and commissioning Consultants.

PD 2.2 USER DEPARTMENT

2.2.1 The User Department, referred to throughout the Project Brief, is:
The Royal Canadian Mounted Police (RCMP)

2.2.2 RCMP Mission

The RCMP is Canada's national police service. Proud of our traditions and confident in meeting future challenges, we commit to preserve the peace, uphold the law and provide quality service in partnership with our communities.

The project objective is to design, contract administration, construction, delivery and set-up of a new modular police detachment facility to meet the RCMP's program requirements on a building site secured by the RCMP in Deschambault Lake, Saskatchewan. The anticipated size of the facility is approximately 661m^2 plus a detached storage garage building of approximately 72m^2.

There is also a requirement for the provision of new modular employee housing for the detachment operation in Deschambault Lake. A total of three (3) modular houses are required and will be expected to be provided in advance of the detachment. Each proposed housing unit is approximately 1000ft2 and will most likely have a crawlspace (no basement). Exemplary floor plans will be provided to the successful proponent. The complete working drawings required for the housing units (including site work & grading) will be the responsibility of the successful proponent.

The planned new housing for Deschambault Lake must be of modular construction should there ever be a requirement to relocate the housing to meet other demands. These housing units would normally only be moved once to the proposed site, however they must be designed to enable a normal relocation to another community in the future. The intent would be to have the construction contract for the housing and modular detachment to be issued as a single tender, with the housing units being made available to the contractor for their use as accommodations during the delivery, set up and completion of the detachment project.

The new modular detachment and employee housing for Deschambault Lake will be situated on the same parcel of land that is approximately 4 acres in area. It is intended that only the front half of the site will require development to accommodate the planned facilities. The site is partially treed. Selective tree clearing is expected to allow for use of the existing vegetation in the site/landscape plan.

PD 2.3 CONSTRAINTS AND CHALLENGES

2.3.1 Security Clearances will be required for personnel working on this project

2.3.2 Budget control and management is of significant importance in the completion of this project. Utilization of innovative design to reduce the overall cost of the project is critical and design options provided will be challenged to ensure economies and efficiencies are achieved.

2.3.3 These facilities will be constructed for use in a community that does not offer the services that are available in more developed locations. An absolute consideration must be ease of maintenance and easy access to parts for repair of equipment and systems installed in the facilities.

2.3.4 These facilities must be designed to meet the requirements of the National Energy Code for Buildings 2017 (NECB). Compliance must be demonstrated utilizing the performance path method, and will require the use of a computer simulated energy analysis model. Preliminary compliance of the design with the NECB 2017 requirements must be demonstrated at the Design Development stage and then updated to show continued compliance at both 66% and 99% Contract document stages. The software utilized for modelling must be compliant with ANSI/ASHRAE 140.

2.3.5 These facilities will need to be designed and developed to enable transport via the Provincial road network to the community noted. The individual modules must be easily connectable to one another to create a single large operating detachment and designed to ensure that the building envelope at the connection points is as secure as the remainder of the structure.

PD 2.4 SUMMARY OF REQUIREMENT

2.4.1 Design to meet the requirements of the functional programs, applicable codes, the RCMP and Treasury Board Standards and Guidelines, and contract administration phase of the separate corresponding construction contract for the design of RCMP detachment facilities.

2.4.2 Work to include:

2.4.2.1 New design options to meet functional requirements

2.4.2.2 Completion of Tender Documents

2.4.2.3 Construction

2.4.2.4 Project Administration

2.4.2.5 Post Construction - Warranty

PD 3 PROJECT OBJECTIVES

PD 3.1 OBJECTIVE ONE: FUNCTIONAL PERFORMANCE

3.1.1 Provide a modular design that will allow for varying functional requirements and meet the specific spatial values for the new facility in the community of Deschambault Lake, Saskatchewan that responds to the operational and functional requirements of the RCMP. Particular attention must be paid to the connection points to ensure that a complete building envelope is maintained.

3.1.2 Achieve:

.1 A design that that provides functional, responsive and efficient workspace in keeping with the functional programs, the RCMP and Treasury Board standards,

.2 Healthy and safe working environments that fully support optimum work productivity,

.3 Effective and continuous physical security for the occupants in the conduct of their daily business,

.4 Integration of RCMP systems for Security and Information Services with project requirements

.5 Easy to use and adaptable systems and technologies to support requirements with capacity for growth and change.

.6 Effective and efficient office furniture plan, utilizing approved suppliers from the Government of Canada's National Master Standing Offer Agreement, fully coordinated with the Mechanical and Electrical disciplines.

.7 A facility that is designed in a manner that will allow for simple future expansion to the administration and detention portions of the facility.

PD 3.2 Objective Two: Design Quality and Character

3.2.1 Provide a modular design that will effectively and appropriately serve the RCMP and its operations for an expected life span of 30 years before major refit.

3.2.2 Achieve:

.1 Design excellence, use of quality materials and precise execution in accordance with best current practice, standards and codes, respecting the location and climate where these facilities will be located and those effects on a modular structure.

.2 Quality and construction methods shall be robust and able to withstand transportation and delivery of the modules to the location where it will operate and should reflect the expectations defined in CSA Standard S478-95, “Guidelines on Durability in Buildings (Design)”. The final product shall be designed to have a medium life of 25 to 49 years per the standard.

.2 A design that will reflect the importance and the nature of the functions it serves and fits within the surrounding environment.

.3 A fully integrated design.

PD 3.3 Objective Three: Building Performance

3.3.1 Provide a modular building and building systems that will enable long-term efficient and cost effective life cycle performance.

3.3.2 Achieve:

.1 A building that embodies sustainable design and application principles and is implemented in an environmentally responsible manner,

.2 Compliance with the NEBC 2017. Design shall utilize the Energy performance compliance path as defined in the 2017 NECB and document compliance.

.3 Healthy and safe environments that meet or exceed all applicable codes for construction, fire, health, and life safety.

.4 A building that fully integrates all components and systems (architectural, structural, mechanical, electrical, range equipment, IT, multimedia, security, and furniture),

.5 Building fabric and systems that are of a high quality; designed in response to sound building science, life cycle cost effectiveness, general ease of maintenance and constructed with the best workmanship possible,

.6 Mechanical systems that can be accessed and easily repaired and / or replaced in the building life cycle as required.

PD 3.4 OBJECTIVE FOUR: PROJECT DELIVERY

3.4.1 Deliver the project utilizing best practices in support of RCMP's needs, respecting the approved scope, expected quality, budget and schedule.

3.4.2 Achieve:

.1 A cohesive functional partnership and open communication between all members of the project delivery team and stakeholders throughout all phases of project delivery,

.2 An integrated and focused Consultant team with an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives, working constructively to ensure a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all project team members, including representatives from the RCMP.

.3 Rigorous quality assurance reviews during the design and construction phases, conducted as an integral element of the design process for all major disciplines,

.4 A rigorous quality management plan in order to respond and correct, in a timely and effective manner, all issues as they occur,

.5 Appointment of a competent and qualified Project Architect to provide enduring vision and guidance for the entire project duration, to be responsible for the production and delivery of all documents, review of construction for conformity to intent, and to ensure that there is a continuity of key personnel working as an integrated dedicated team for the full duration of the project,

.6 Professional conduct in all phases of the project, employing best practices for budget, schedule, quality, and scope management,

.7 A continuous risk identification and management program employing effective methodologies to avoid unexpected project impacts, and to ensure construction claims avoidance,

.8 Continuous and comprehensive documentation of the project at all stages of the project implementation for Records of Decisions, project follow up and development of lessons learned.

PD 4 SCOPE OF WORK

OVERVIEW

4.1.1 *Phase I* Review the site, the current functional programs and provide two (2) concepts for consideration by the RCMP for design and placement of the new modular detachment, new employee housing units and storage garage on the available land space also ensuring optimal use of space and consideration for future growth. The RCMP have recently designed and constructed modular detachments in Saskatchewan and the designs utilized for those projects will be made available to the consultant team to provide perspective only. It is intended that the consultant team will seek to use these documents for the purposes of gaining an understanding of the intended results. The RCMP have recently designed and constructed new modular residential housing accommodation units. Copies of these exemplary floor plans will be provided to the successful proponent for use in incorporating these requirements into the construction documents.

Phase II Design and completion of Tender Documents for the separate corresponding construction contract based upon approved recommendations from Phase I.

Phase III Contract Administration, of the separate corresponding construction contract including Commissioning and warranty.

4.2.1 Architectural, Interior Design

4.2.1.1 Functional Programs have been completed, identifying detailed space requirements, and will be available to the successful proponent. The functional program will require review by all stakeholders to confirm requirements. Services to include all professional expertise required to fully complete the design and construction administration of this project.

Consultant Services will also include office furniture layouts including workstations etc.; to include all detachment furniture, fixtures and equipment.

Develop the site to ensure proper optimization of building footprint to site size ratio, ensuring that the parking required and site requirements identified are accommodated.

The table below provides an overview of the spaces required.

Deschambault Lake Detachment	
Usage	SQ Meters (approx. +/-)
Public Area (Reception, Vestibules, etc)	41.2
Office Area	49.7
General Support Area	93.4
Operational Support Area	60.7
Secure Area	195.3
Total Basic	440.3
Circulation Gross Up (24%)	105.7
Total Usable	546.0
Service/Common area (10%)	54.6
Total Rentable	600.6
Vertical Penetrations/Exterior Walls (10%)	60.1
Total Gross Space	661.0

4.3.3 Civil Engineering

4.3.3.1 All applicable civil elements to deliver this project. Elements include but not limited to connection to municipal utilities, site grading, site access and parking and storm water run-off and collection systems. A geo-technical investigation and topographical report of the proposed site was completed and will be available to the successful proponent.

4.3.4 Structural Engineering

4.3.4.1 All applicable structural elements for the project design. A geo-technical and topographical investigation of the proposed site was completed and will be available to the successful proponent.

4.3.5 Mechanical Engineering

4.3.5.1 All applicable mechanical systems for the operation of a detachment facility and housing units, including connection to required utilities.

4.3.6 Electrical Engineering

4.3.6.1 All applicable electrical systems for the operation of a detachment facility and housing units, including connection to required utilities.

4.3.7 Landscape Architecture

4.3.7.1 All applicable elements for the development of the landscape of the site with specific attention placed in having the landscape blend into the surrounding environment.

4.3.8 Building Components and Connectivity

General

This project includes implementation of the Building Components and Connectivity (BCC) program. The objective of the BCC program is to meet the operational requirements of the end-users to allow immediate occupancy of the space. Building components means building fixtures, furnishings and equipment. Building connectivity means the physical, electronic and other systems that connect buildings and the workstations in them.

4.3.8.1 BCC Components include acquisition for the following list (but not limited to):

Commercially Available Furniture, utilizing the National Master Standing offers for the Government of Canada.

Purpose-Built Furniture and Shelving, mobile shelving.

Soft Seating,

Chairs,

Task Lighting,

Kitchenette Equipment (fridge, microwave, freezer)

Window treatment (ie. Blinds)

Health and Safety Equipment,

4.3.8.2 BCC Components do not include the following:

Office equipment related to administrative functions such as: computers, printers, fax machines, television sets, VCRs, converters, phone sets or radios.

4.3.8.3 BCC Connectivity includes the following building-specific list (but not limited to):

Cabling,

CATV,

Network,

Telephony,

Police Radio System Antennae/Whips,

Multimedia (TV, Smartboards),

Digital Asset Management System,

4.3.8.4 Scope of BCC for this Project

.1 For this project, BCC is divided into functional groups as follows:

.1 Information Services,

.2 Security,

.3 Furniture/Equipment.

.2 The responsibility for contracting for BCC will be in two parts as follows;

Information Services and Security Devices will be supplied and installed separately by the RCMP, however the design for rough-in to accommodate these devices must be included in the design for the Construction Contractor to provide.

Furniture and Equipment will be contracted as part of the project and therefore is part of the work of this contract. Commercial furniture may be selected from an approved supplier from a National Master Standing Offer.

The consultant will be responsible for completion of the systems furniture Client Selection Tool (CST) spreadsheet that will accompany the required systems furniture floor plans. The consultant will complete the RCMP provided CST spreadsheet document too ensure all required components (ie. Horizontal and vertical surfaces, brackets, electrical components, filing cabinets, tables etc but not limited to) of the furniture system will be provided by the successful Standing Offer Supplier. The consultant will also be required to assist with the evaluation of/review of and make recommendation for award of the Standing Offer Suppliers bids received. The Client Selection Tool (CST) spreadsheet document will only be made available to the successful proponent after contract award.

.3 It will be the Consultant's responsibility to ensure full coordination to accommodate all BCC implementation with the building construction project and

provide the related infrastructure and systems requirements.

.4 The Furniture Specialist member of the Consultant team must not have any affiliation with the Government of Canada National Master Standing Offer agreement for systems furniture.

PD 5 PROJECT BUDGET

5.1.1 Indicative Cost Estimate for construction of the Deschambault Lake Detachment is $4,310,100.00 for the Deschambault Lake Employee Housing is $1,000,000.00. The value includes construction costs, but does not include construction contingencies, escalation nor risk. This budget does not include any furniture associated costs. This budget is based on a Class “D” (indicative) estimate.

PD 6 PROJECT DELIVERY APPROACH (Construction)

6.1.1 The construction tender activity will use a traditional design – single tender – build approach

6.1.2 The Consultant engaged through this RFP by RCMP will provide the services required under the general direction of the RCMP Project Manager and will coordinate all design, and construction contract administration activities based on formal direction from the RCMP Departmental representative as delegated.

6.1.3 A General Contractor will be retained by RCMP and report directly to the RCMP Departmental Representative with support from the Consultant to co-ordinate all services related to construction.

PD 7 DESIGN QUALITY

7.11 The consultant is responsible for monitoring and confirming quality throughout the life of the contract. As part of the design quality assurance process the Consultant is responsible for coordinating peer reviews for each discipline. Peer reviews must be completed by all disciplines and documents with follow up responses and included in each design submission.

PD 8 PROJECT TEAM

8.1.1 The prime consultant (proponent) and his/her personnel identified in the submission, including sub-consultants and specialists comprise the integrated consultant design team (consultant team). The consultant team will be required to maintain its expertise/structure (and members) for the duration of the project.

8.1.2 The prime consultant shall be responsible to co-ordinate and direct all consultant team activities.

8.1.3 The consultant team shall be comprised of qualified professional and technical expertise with extensive relevant experience in designing new modular facilities for operations in remote and/or northern communities, and must be capable of providing the services identified in the Required Services section of this Statement of Work. It would be of significant benefit to have designed and implemented projects that have required a modular construction methodology.

8.1.3.1 All members of the consultant team must be eligible to work in the Province of Saskatchewan.

8.1.3.2 Members of the consultant team may have the necessary qualifications and expertise to provide services in more than one discipline or specialty.

8.1.3.3 Consultants are permitted to expand their consultant team to include additional disciplines at their own discretion, in compliance with the security clearance requirements of this contract.

8.1.4 Expertise and relevant experience requirements for this project are as follows:

8.1.4.1 Administrative
Project Management

8.1.4.2 Regulatory Analysis, Planning, Design, and Development
Building Code
Municipal Zoning
Occupational Health and Safety
Fire and Life Safety

8.1.4.3 Program Analysis, Planning, Design, and Development
Enriched front end planning

8.1.4.4 Site Analysis, Planning, Design, and Development
Site Planning
Landscape Architecture
Civil Engineering / Municipal Engineering (infrastructure)

8.1.4.5 Building Analysis, Planning, Design, and Development

<u>Architecture and Specialties</u>:
General Architecture
Interior Design
Sustainable Design

Codes and life safety
Building envelope
Signage and Way-finding
Security

Engineering:
Structural
Seismic
Mechanical
Heating Ventilation Air Conditioning (HVAC)
Plumbing
Fire protection
Indoor / outdoor air quality design and control
Building automation / energy management control systems
Electrical
Power
Lighting
Information technology and communications
Civil
Geotechnical
Commissioning

8.1.4.6 Budget, Schedule and Risk Analysis, Planning, Design, and Development

Cost planning, life cycle costing, estimating and control
Time Planning, Scheduling, and Control
Risk Management

PD 9 PROJECT SCHEDULE

9.1.1 Deschambault Lake Detachment :

Award of Consultant Contract	October 5 , 2020
Present Concept Design Options	November 16, 2020
Finalize Options for Floor Plan	December 18, 2020
Design Development Report	January 21, 2021
60 % Contract Documents	March 31, 2021
99% Contract Documents	June 10 ,2021
Final Tender Documents	July 5, 2021
Issued Construction Tender	August 2021
Award Construction Tender	October 2021
Construction Completion	January 2023
Building Occupancy	March 2023

9.1.2 Deschambault Lake Employee Housing :

Award of Consultant Contract	October 5, 2020
Present Concept Design Options	November 16, 2020
Finalize Options for Floor Plan (if required)	December 18, 2020
60 % Contract Documents	January 21, 2021
Final Tender Documents	March 31st, 2021
Issued Construction Tender	August 2021
Award Construction Tender	October 2021
Construction Completion	April 2022
Building Occupancy (RCMP)	January 2023

PD 10 EXISTING DOCUMENTATION

10.1.1 Copies of all pertinent documentation will be made available to the Consultant.

10.1.2 The successful Consultant will be provided with the following background documents;

10.1.2.1- Exemplary drawings of recently completed modular detachment projects in Saskatchewan.

10.1.2.2- Exemplary drawings of recently completed modular employee housing projects in Saskatchewan

10.1.2.3- Topographical Survey information of the site (performed 2019)

10.1.2.4- Geotechnical Report information of the site (performed 2019)

10.1.3 Disclaimer

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

.2 The documentation may be unreliable and is offered “as is” for use by the Consultant.

PD 11 SERVICE REQUIREMENTS

11.1 CONSULTANT SERVICE REQUIREMENTS

11.1.1 The Consultant will be responsible for providing and coordinating the full professional Architectural and Engineering services required, from the Pre-Design Services Stage to the completion of the Post Warranty Stage of the project. A summary of professional expertise and relevant specialty experience requirements for this project include, but are not limited to the following:

11.1.1.1 Architectural and Engineering Services

11.1.1.2 Budget and Schedule Management Services

11.1.2 Summary Scope of Services

11.1.2.1 Schematic Design Services to include review of the programs and building site along with topographical and geotechnical information for the new

modular detachment and identify any items that may require further detail or explanation.
11.1.2.2 Prepare a final Design Development Report based on the approved Schematic Design, complete with outline specifications, including peer review reports and Class “C” (design phase) estimate.
11.1.2.3 Conduct peer reviews and submit reports throughout design.
11.1.2.4 Prepare a fully coordinated set of construction drawings based on the approved Design Development Report, ready for tendering purposes and Class “A” (pre-tender) cost estimate.
11.1.2.5 Prepare specifications using National Master Specification (NMS) program including Division1.
11.1.2.6 Provide assistance during the tendering process including preparation of addenda and review tender results.
11.1.2.7 Provide identified contract administration services during the construction phase.
11.1.2.8 Recommend cost effective “Green Construction Materials”, Methods and Practices that can be incorporated into the project without significant impact on the project budget.
11.1.2.9 Identify Commissioning activities through standard Testing, Adjusting and balancing protocols, monitor these processes and document results. There is not a requirement to follow standardized commissioning protocols as per ASHRAE 202-2013 for this project.
11.1.2.10 Prepare Maintenance Manuals including maintenance schedule, as-built drawings and specifications.
11.1.2.11 Provide warranty services.

PD 12 GENERAL SERVICE REQUIREMENTS

12.1 OVERVIEW

12.1.1 The RCMP will act as the Project Manager and the Contracting Authority during all phases of design and construction of the project.

12.1.2 The Consultant team will be required to deliver integrated professional services, in accordance with the requirements set forth in this statement of work. The services will be administered in distinct stages, as follows:

- 12.1.2.1 Analysis of Project Requirements
- 12.1.2.2 Schematic Design (Design Concept)
- 12.1.2.3 Design Development
- 12.1.2.4 Construction Documents
- 12.1.2.5 Tender Call, Bid Evaluation and Construction Contract Award.
- 12.1.2.6 Construction and Contract Administration
- 12.1.2.7 Post Construction Services

12.1.3 The outline of deliverables and processes, as presented in this statement of work, are intended as a general outline only. It is not exhaustive and

does not preclude alternative or supplementary approaches as may be suggested by the Consultant for consideration by the Project Manager.

12.2 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the statement of work:

12.2.1 Standard of Care
12.2.2 Budget and Schedule Management Services
12.2.3 Project Information, Decisions, Approaches & Approvals
12.2.4 Change in Services
12.2.5 Code, By-Laws, Licenses, Permit Reviews
12.2.6 Provision of Staff and Sub-Consultant Services
12.2.7 Commissioning
12.2.7.1 Identify Commissioning activities, which outline the systematic approach to testing, adjusting, balancing and verifying the systems' performance in accordance with the design intent and related testing and verification forms.
12.2.7.2 Design to meet the requirements of the functional programs, applicable codes, the RCMP and Treasury Board standards and guidelines, and administration phase of the separate corresponding construction contract of the RCMP detachment facilities.

PD 13 PROJECT ADMINISTRATION REQUIREMENTS

13.1 LINES OF COMMUNICATION

13.1.1 Unless otherwise directed by the Project Manager, the Consultant shall communicate with the Project Manager only.
13.1.2 During construction tender call, the Contracting Authority conducts all correspondence and makes the contract award.

13.2 GENERAL DELIVERABLES

13.2.1 Where deliverables and submissions include summaries, reports, drawings, plans, specifications and schedules, two (2) original hard copies and one (1) copy in electronic format shall be provided to the RCMP Departmental Representative, unless otherwise specified.
13.2.2 Electronic format shall mean Deliverables

a)Written reports and studies	MS Word or PDF
b)Spreadsheets and budgets	Excel or PDF
c)Schedules	Microsoft Project or other acceptable product
d)Drawings	Auto CADD and PDF
e)Specifications	NMS MS Word and PDF
f)Monthly Reports	MS Word, Excel or PDF

13.3 ACCEPTANCE OF CONSULTANT DELIVERABLES

13.3.1 While the RCMP acknowledges the Consultant's obligations to meet project requirements, the project delivery process entitles the RCMP to review the work. The RCMP reserves the right to reject undesirable or unsatisfactory work. The Consultant must obtain the Project Manager's acceptance during each of the project stages.

13.3.2 Acceptance indicates that, based on a general review of submitted materials, the material is considered to comply with governmental and departmental objectives and practices and that overall project objectives should be satisfied. The acceptance does not relieve the Consultant of professional responsibility for the work and compliance with the terms and conditions of the contract.

13.3.3 The RCMP acceptance does not prohibit rejection of work which is determined to be unsatisfactory at later stages of review. If budgetary or technical investigation reveals that earlier acceptance should be withdrawn, the Consultant is responsible for redesigning work and resubmitting for acceptance at the Consultant's cost.

13.4 DESIGN MEETINGS

13.4.1 The Prime Consultant along with the RCMP Project Manager shall arrange meetings generally throughout the design and tendering stages of the project, for all members of the project team. Sub-consultants participation will be at the discretion of the prime consultant, dependent on issues that require resolution. Project meetings will normally occur monthly, alternating between in-person meetings and conference calls, unless project requirements dictate otherwise.

13.4.2 Meetings will be held at the offices of the Departmental Representative and via teleconference call on an alternate basis, or wherever is deemed to be the most beneficial to meet requirements of the project.

13.4.3 The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within 96 hours of the meeting.

13.4.4 On occasion, there may be urgent problem solving meetings. The Consultant shall be available to attend such meetings.

13.5 SECURITY REQUIREMENTS

13.5.1 The Consultant Team will be required to obtain security clearances for some or all personnel working on this project.

13.5.2 The Consultant Team including the Sub-consultants will be required to sign non-disclosure documents for RCMP protected material, if applicable.

13.5.3 The Consultant shall distribute project documents such as drawings, specifications, reports, only to the design team members and only as required to perform the work.

PD 14 ANALYSIS OF PROJECT REQUIREMENTS

14.1 INTENT

14.1.1 This stage is intended for the Consultant to review and report on all aspects of the project requirements. The Consultant Team will review and analyse all available program information, consult with the RCMP and deliver a comprehensive Pre-Design Report. This approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

14.2 SCOPE AND ACTIVITIES:

14.2.1 Analyse the project requirements/program including any amendments,
14.2.2 Analyse the building design, security requirements and confirm design standards,
14.2.3 Review all other available existing material related to the project including requirements identified in the Project Brief,
14.2.4 Identify all additional information that will be needed to deliver the project,
14.2.5 Identify and verify all authorities having jurisdiction over the project and codes, regulations and standards that apply

14.3 DELIVERABLES

14.3.1 Prepare and submit an Analysis of Project Requirements for review and approval by the Departmental Representative. Revise as required by the Departmental Representative. Resubmit for acceptance.

14.3.2 The above noted Report will consolidate the Scope and Activities identified above and will be utilized as the benchmark project control document to monitor progress of the project. The report will be used as a basis for monthly reporting of progress and will require supplements and modifications to reflect changes in project parameters as may be identified and accepted throughout the project life cycle.

PD 15 SCHEMATIC DESIGN (DESIGN CONCEPT)

15.1 INTENT

15.1.1 The Consultant must obtain written authorization from the Departmental Representative before proceeding with Schematic Design.
15.1.2 The Consultant team will explore two distinctly different design concepts presented in sketch format (single line, produced to scale), fully integrated and supported by two or more distinctly different engineering solutions for the structure, mechanical, electrical systems, along with massing models, site slides and photographs, energy analysis and life cycle cost analysis, analytical data and calculations and sufficient narrative to allow comparison, analysis against project requirements, budget and selection of a design direction for preparation of a final design concept.
15.1.3 The Schematic Design will be in sufficient detail to illustrate and communicate the project characteristics. Provide a detailed review and analysis of the project requirements including all updates and amendments to ensure all

requirements are fully integrated into the Schematic Design. Out of this process the Schematic Design will be accepted and authorization to proceed to Design Development will be based on the accepted Schematic Design.

15.1.4 The RCMP Departmental Representative, in concert with project stakeholders shall choose one option to be further developed. Note: Although the Consultant is required to identify a preferred option, the RCMP Departmental Representative may select another option.

15.2 SCOPE AND ACTIVITIES:

15.2.1 Review, validate and update the details of the Functional Program requirements, including space data sheets,

15.2.2 Develop sustainable design options,

15.2.3 Prepare a minimum of two (2) Schematic Design options each for the Deschambault Lake detachment.

15.2.4 Analyse each option with regard to the project goals including cost and schedule,

15.2.5 Undertake a budget, schedule and risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost,

15.2.6 Present / submit Schematic Design options for review and approval to committees, review groups and authorities having jurisdiction as identified in the Project Administration (PA) section,

15.2.7 Provide and /or coordinate all project requirements,

15.2.8 Coordinate all services with the Departmental Representative

15.3 DELIVERABLES

15.3.1 Schematic (concept) design documents illustrate the functional relationships of the project elements as well as the project's scale and character, based on the final version of the functional program, the schedule, and the budget.

15.3.2 Prepare and submit, for review and approval by the RCMP Departmental Representative, an integrated Stage Two Project Report, and Schematic (Concept) Design. Revise as required by the Departmental Representative. Resubmit for acceptance.

PD 16 DESIGN DEVELOPMENT

16.1 INTENT

16.1.1 This stage will further develop the design option selected for refinement at the Schematic Design stage. The Design Development documents consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirmation of code compliance, detailed planning of construction and project approval. This design will be used as the basis for preparation of construction documents.

16.2 SCOPE AND ACTIVITIES:

16.2.1 Obtain written approval from Departmental Representative to proceed to

Design Development Stage,

16.2.2 Review, validate and update details of program requirements and base building BCC: Information Services, Security, Furniture and Equipment with the RCMP,

16.2.3 Update Functional Program room data sheets as required,

16.2.4 Coordinate services as required with BCC project for Information Services, Security, Furniture and Equipment,

16.2.5 Develop the sustainable design options; provide an overview of the status of measurement of the proposed building performance against the National Energy Code of Canada for buildings 2017.

16.2.6 If any alterations are required, analyse the impact on all project components, and resubmit for approval if required,

16.2.7 Expand and clarify the Schematic Design intent for each design discipline,

16.2.8 Present/submit design and materials to be used for review and approval to the project team, review groups and authorities having jurisdiction as identified in section Project Administration,

16.2.9 Provide and/or coordinate all information for all project disciplines,

16.2.10 Undertake a budget, schedule and risk analysis review and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost,

16.2.11 Coordinate services with the Departmental Representative,

16.2.12 Continue to review all applicable statutes, regulations, codes and by-laws in relation to the design of the project.

16.2.13 Site design development.

16.3 General Requirements

16.3.1 The objectives of the Design Development stage are to review the design layout as further outlined below.

16.4 Responsibilities of the RCMP

16.4.1 The RCMP shall:

16.4.1.1 Participate in meetings as representative for all stakeholders.

16..4.1.2 Review and provide a report on the Consultant's Design Development Report.

16.4.1.3 Review revisions and consultants rebuttal to the RCMP quality assurance report.

16.4.1.4 Review and accept the final Design Development Report.

16.4.1.5 Authorize the Consultant to proceed to Construction Documents

16.5 Responsibilities of the Consultant Team

16.5.1 The Consultant Team scope and activities shall include but are not limited to the following:

16.5.1.1 Administrative:

A) Attend all information exchange/ team meetings. Participation by the various disciplines will be on an as required basis.

B) Respond to comments provided by the RCMP as part of its review of the Design Development Report.

16.5.1.2 Regulatory:

A) Review, develop and prepare:

a) Detailed Building code analysis

b) Detailed Fire and life safety strategy, including consultation with the RCMP's Fire Protection Engineer.

c) Detailed Standards analysis which would also include fit-up requirements of the RCMP Property Management Manual.

d) Detailed Canada Labour Code Part II analysis.

16.5.1.3 Building Design

A) Refine and prepare detailed:

a) Design drawings, including floor plans, exterior elevations, building sections, wall sections, special details etc.

b) Substructure plans, including foundations, framing, etc.

c) Shell, including superstructure, exterior enclosure, roofing, etc.

d) Services, including plumbing, HVAC, fire protection, electrical, telecommunications, etc.

e) Commissioning activities plan.

f) Determination of cost effective green construction materials, methods and practices that can be incorporated into the project without significant impact on the project budget.

16.6 GENERAL DELIVERABLES

A) Design Development Report Structure and Content

.1 Drawings and other media to communicate the entire site and building project for all disciplines showing all elements and services in a level of detail necessary to make all design decisions and to substantively estimate the cost of the project,

.2 Provide a list of draft specification sections of all National Master Specification (NMS) sections to be used. Submit outline specifications for all systems and principle components and equipment. Provide in the outline specifications manufacturers' literature about principal equipment and system components proposed for use in the project.,

.3 Development of Furniture layouts and location on plans,

.4 Finishes and colour schemes, including Furniture/Equipment,

.5 Site/building renderings, 3D visualization,

Updated sustainable design opportunities, strategies, updated budgets

.6 Update to Risk Assessment Report,

.7 Fire Protection Engineer's Report including requirements, strategies or interventions for protection of the building and its occupants,

.8 Outline Commissioning Plan,

.9 Updated detailed schedule including deliverable requirements to be provided by the Client; Information Services, Security, Furniture and Equipment, to be integrated into the building,

.10 Class "C" (design phase) Estimate including estimated annual cash flows,

.11 Update life cycle cost analysis;

.12 Project Log tracking all approved major decisions including those affecting changes to project scope, budget and schedule,

.13 Provide detailed report that confirms compliance of design phase with the NECB 2017 requirements.

PD 17 CONSTRUCTION DOCUMENT SERVICES

17.1 GENERAL REQUIREMENTS

17.1.1 The objective of the Construction Document Stage is to prepare tender ready drawings and specifications, setting forth in detail all the requirements for the construction of the project along with a final (Class "A" pre-tender) cost estimate.

17.1.2 The Consultant must obtain written authorization from the Project Manager before proceeding with Construction Documents.

17.2 RESPONSIBILITIES OF THE RCMP

17.2.1 The RCMP shall:

17.2.1.1 Review and comment on consultant submissions.

17.2.1.2 Respond to questions from the Consultant Team as required.

17.2.1.3 Review revisions and consultant rebuttal to the RCMP quality assurance report.

17.2.1.4 Review and accept the final Construction Document progress at 60% and 99%. Formally accept documents ready for Tender.

17.3 Responsibilities of the Consultant Team

17.3.1 The Consultant Team Scope and activities shall include but are not limited to the following:

17.3.1.1 Regulatory:

A) Complete
a) Detailed building code analysis
b) Detailed fire and life safety strategy
c) Detailed standard analysis
d) Detailed Canada Labour Code Part II analysis

17.3.1.2 Scope and Activities

A) Obtain acceptance for submissions (66%, 99%, Final)
B) Confirm format of drawings and specifications
C) Submit drawings and specifications at the required stages (60%, 99% and Final)
D) Each discipline shall conduct peer reviews for submissions (60%, 99% and Final) and submit peer review report identifying comments and responses.
E) Provide written response to all review comments and incorporate them into the Construction Documents.
F) Advise as to the progress of cost estimates and submit updated cost estimates as the project develops
G) Update project schedule
H) Prepare a Class “B” (substantive) estimate at the 60% submission and a final Class “A” (pre-tender) estimate with the 99% submission.
I) Review and approve material, construction processes and specifications to meet sustainable development.

17.4 GENERAL DELIVERABLES

17.4.1 Deliverables identified are typical for most projects, but must be customized by the Consultant for specific requirements of the project

17.4.2 Completeness of work should reflect the stage of submission.

17.4.3 Aspects to be included (but not limited to) are identified below for each submission stage.

17.5 60% SUBMISSION STAGE DELIVERABLES

17.5.1 Comment applicable to all ASME disciplines:

17.5.1.1 Submit updated cost estimates (Class “B”)(substantive)

17.5.1.2 Submit updated project implementation schedule

17.5.1.3 Submit written peer review reports.

17.5.1.4 Submit written response to the RCMP on review comments made at Design Development Stage

17.5.1.5 Provide detailed report that confirms compliance of design phase with the NECB 2017 requirements.

17.5.1.6 Submit drawings and specification to the RCMP, Fire Protection Engineer for their review.

17.5.1.7 Specifications

A) 40% edited with all pertinent sections including sections on Structural, Mechanical and Electrical components.

B) Confirm review of General Conditions of Contract and coordinate with Division 1.

C) Commissioning Activities outline and specification

D) Provide a list of the required component verification sheets, and system test procedures required for this project.

17.5.1.8 Architectural

A) Cover sheet with list of drawings

B) Site Plan

C) Roof Plan

D) Floor Plans

E) Reflected ceiling Plans

F) Exterior and Interior Elevations

G) Building and Wall Sections

H) Large Scale Detail Drawings

I) Door Schedule

J) Hardware Schedule

K) Room finish schedule

L) Millwork details

M) Furniture and Equipment layouts

17.5.1.9 Structural

A) Foundation Details

B) Roof Plans

C) Floor Plans

D) General Notes including

* Design code used
* Design loads
* Strength and grades of concrete, masonry, steel and/or other materials

E) Structural elements

F) Welding requirements

G) Schedule for steel beams, lintels, etc.

H) Co-ordination with Architectural, Mechanical and Electrical drawings.

17.5.1.10 Mechanical

A) Roof Plan

B) Floor Plans

C) Development of mechanical systems

D) Identify mechanical equipment in the different areas

E) Show major duct-work and piping.

F) Identify mechanical components either on schedule shown on drawings, or in specification.

G) Complete diffuser locations

H) Complete control specification to a 33% stage.

I) Testing, Adjusting and Balancing Plan

J) Co-ordination with Architectural, Civil, Structural and Electrical drawings.

17.5.1.11 Electrical

A) Roof Plan
B) Floor Plans
C) Lighting layout, showing switching information, fixture types
D) Power and system layout showing panel locations
E) Electrical room equipment layout
F) Communication system layout
G) Light fixture cuts
H) Single line diagrams
I) Co-ordination with Architectural, Structural, Mechanical and furniture layout drawings

17.5.1.12 Civil

A) Site Plan
B) Grading Plan
C) Building Service Plan
D) Grading Plan Sections
E) Details

17.5.1.13 Landscape

A) Planting Plan
B) Irrigation Plan if applicable

17.6 99% SUBMISSION DELIVERABLES

17.6.1 Comments applicable to all ASME Disciplines:

17.6.1.1 Submit written response to RCMP review comments made at 66% stage

17.6.1.2 Submit written peer review reports.

17.6.1.3 All working drawings and specifications -fully completed and coordinated with AMES drawings and with the Specs

17.6.1.4 Submit the completed commissioning plan include maintenance schedule.

17.6.1.5 Submit one copy of update Cost Plan, Class “A” (pre-tender) (+/- 5%) project cost estimate

17.6.1.6 Submit one copy of updated project schedule

17.6.1.7 Submit drawings and spec to RCMP Fire Protection Engineer for approval.

17.6.1.8 Provide detailed report that confirms compliance of design phase with the NECB 2017 requirements.

17.6.1.9 Specifications:

A) 99% edited specifications

17.6.2 Architectural and Interior Design

A) Complete set of coordinated construction drawings suitable for tender call, including all details of building envelope, interiors and elemental finishing schedule, along with complete BCC scope.

B) Provide final code review

C) One copy of the complete colour schedules, including textures, sheens, super graphics, colour chips and material samples.

D) Complete coordination with Structural, Mechanical and Electrical drawings to provide 99% completion.

17.6.3 Structural

A) Complete set of coordinated construction drawings, including details, sections, plans and schedules.

B) Information on drawings must fully comply with code, standards and statement of work.

17.6.4 Mechanical

A) Complete set of coordinated construction drawings suitable for tender call, including mechanical layout of mechanical rooms, fire protection system, and ventilation system. Heating and plumbing systems, air conditioning systems and control specifications.

B) Complete coordination with other disciplines to achieve 99% completion.

17.6.5 Electrical

A) Complete set of coordinated construction drawings suitable for tender call, including lighting, power, communications, fire alarm, security and control specifications.

B) Complete coordination with other disciplines to provide 99% completion.

17.6.6 Civil

A) Complete set of coordinated construction drawings suitable for tender call including excavation, grading, building services, storm water removal, parking and paving specifications, etc.

B) Complete coordination with other disciplines to achieve 99% completion.

17.6.7 Landscape

A) Complete set of coordinated construction drawings suitable for tender call including planting and irrigation specifications.

B) Complete coordination with other disciplines to achieve 99% completion.

17.7 100% Submission Stage - Final Tender Documents

Applies to all ASME disciplines.

17.7.1 All drawings and specifications, 100% reviewed and coordinated for tender call

17.7.2 All specification sections and an index of specifications. The specifications shall consist of typed and edited NMS sections.

17.7.3 Submit updated project implementation schedule.

17.7.4 Incorporate RCMP comments made at the 99% stage, either in the documents themselves if time allows, or as an Addendum during the tendering period.

17.7.5 Revised Class “A” (pre-tender) level cost estimate, if required

17.7.6 Submit original reproducible drawings and specifications for tendering purposes as well as a set of digitized specifications in PDF book marked by section and drawing files in PDF, on CD or by email, as requested by the Project Manager.

17.7.7 Submit and obtain formal acceptance on plans and specifications required by the Inspection Authorities before tender call.

17.7.8 Submit formal written consultant verification letter confirming design compliance with NECB 2017 requirements.

PD 18 SUBMISSIONS, REVIEW AND APPROVAL PROCESS

18.1 SUBMISSIONS:

18.1.1 Provide all required submissions, either to, or as directed by the Project Manager.

18.1.2 Provide required sets of Construction Drawings and Specifications to the Project Manager for review at the 66%, 99% submission stages.

18.1.3 The purpose of review and approval process is to ensure compliance with the project program, adherence to good design practice and technical quality assurance.

18.1.4 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the project brief.

A) RCMP Design Review
B) Peer Design Review
C) Other Authorities having Jurisdiction Review.

PD 19 TENDERING SERVICES

19.1 GENERAL REQUIREMENTS

19.1.1 The RCMP will undertake the public tendering of the Project

19.1.2 The Consultant must perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

A) Document Interpretation
B) Addenda

PD 20 CONSTRUCTION ADMINISTRATION SERVICES

20.1 GENERAL

20.1.1 The Consultant shall perform the following services in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

The consultant shall supply to the RCMP Departmental Representative, one set of “Issued for Construction” drawings,

that will include all addenda issued during the tendering phase and have been signed and sealed by all disciplines.

A) Construction Safety Reviews
B) Project Schedule monitoring and advisement
C) Monthly construction progress and quality assurance reports
D) Review Contractor Monthly Progress Payment Requests and certify acceptance.
E) Shop Drawing Reviews
F) Issuance of Site Instructions
G) Conduct, Document and Deliver Periodic Inspections
H) Development of Construction Change documents
I) Conduct, Document and Deliver Interim Inspection
J) Conduct, Document and Deliver Final inspection
K) Building Occupation
L) Record (As-built) Drawings and Specification
M) Warranty Inspection

20.1.2 DELIVERABLES

20.1.2.1 Written reports from site visits including persons involved.
20.1.2.2 Written reports from site visits on the progress of work and the verification of the work completed on the project at the end of each month in relation to progress claims submitted.
20.1.2.3 The above mentioned reports to include the following criteria (but not necessarily limited to):
20.1.2.3.1 Site Conditions,
20.1.2.3.2 Materials noted,
20.1.2.3.3 Work progress observed (new and previous visits),
20.1.2.3.4 Directions given to contractor, issues arising with quality or schedule and risks to be considered.
20.1.2.3.5 Schedule,
20.1.2.3.6 Site Photos

20.2 CONSTRUCTION PROJECT MEETINGS

20.2.1 In coordination with RCMP Project Manager arrange meetings as deemed suitable, throughout the entire construction period, for all members of the project team to attend, including representatives from:
A) End- Users
B) Prime Consultant
C) Prime Consultant's Sub-Consultants as determined by the Prime Consultant in conjunction with the Project Manager.
D) Contractor and their Subcontractors
It is expected that there will be a minimum of 4 on-site construction project meetings and no more than 6 meetings on site for the

Deschambault Lake employee housing project; a minimum of 14 on site construction project meetings and not more than 18 meetings on site for the Deschambault Lake detachment project. References to the site would normally mean the construction site where the detachment modules are pre-constructed or the location to which they will be delivered and set up. It may be deemed necessary, due to the location of the project site to arrange teleconference calls with all project stakeholders prior to the regular scheduled construction site meetings to review project status and work through challenges and issues prior to arriving on the construction site. The consultant must include all travel time and costs as part of their fixed fee.

20.2.2 The Consultant shall include in the contract documents the requirement for the Contractor to attend the meetings and conference calls. The **"consultant"** shall record the issues and decisions of all construction site meetings and teleconferences and prepare and distribute minutes to all the attendees within (3) three working days of the same meeting.

20.2.3 The Prime Consultant and their proposed Sub/Specialist Consultants, should be personally available to attend the design and construction meetings when the specific discipline is required and respond to inquiries within three (3) working days of the Project Manager's request, in the locality of the place of the work, from the date of the award of the Consultant's contract, until final inspection and turnover.

20.2.4 Review previous minutes for errors in fact, omissions or other discrepancies and ensure that previous records are accepted by all parties and that their acceptance is recorded.

20.2.5 Construction meetings will normally be held at the specific project site.

20.2.6 The Consultant shall attend meetings and conference calls, cooperate and coordinate with the Contractor, and the Consultant shall record the issues and decisions and prepare and distribute minutes within 72 hours of the meeting.

20.2.7 The Consultant shall include in the contract documents, for provision by the Contractor, requirements for a meeting room of sufficient size, appropriate furniture and equipment, to hold Project Meetings.

20.3 COMMISSIONING

20.3.1 Establish Design Criteria, functional and operational requirements, if not already established in the RFP or Project Brief. Full Commissioning is not required for this facility. The intent is to design, check and verify that all building systems are functioning to the design specifications.

20.3.2 Prepare a preliminary Commissioning Activities plan.

20.3.3 Direct and monitor the testing adjusting and balancing processes to ensure compliance with the statement of work and the approved commissioning plan.

20.3.4 Plan the performance verification (PV) activities, processes and their output, including development of project-specific:
1. Installation / Start-up Check Lists
2. Product Information (PI) Report Forms and Performance Verification (PV) Report Forms, and
3. Design data to PI and PV report forms

20.3.5 Prepare a Training plan.

20.3.6 Identify Contractor and subcontractor PV and testing responsibilities,

20.3.7 Review shop drawings and product data and accompanying Product Information (PI) as completed by the Contractor,

20.3.8 Ensure that all systems have been properly verified, balanced etc. in compliance with the Performance Specifications and Commissioning Plan, prior to occupancy.

20.3.9 Submit three (3) hard copies and one (1) electronic copy of the completed Maintenance Manuals and Maintenance Schedule to the Project Manager.

20.3.10 In consultation with the contractor and RCMP define and prepare a consolidated and comprehensive building systems maintenance program/manual. The program/manual should be explained thoroughly and must include schedules, procedures, responsibilities, preventative maintenance, trouble shooting and testing requirements. The building specific maintenance program will identify a series of maintenance requirements that provide a basis for planning, scheduling and executing planned maintenance for the purpose of improving equipment life expectancy and avoid equipment failures. Provide (2) hard copies and one (1) electronic copy of the completed Building Systems Maintenance Program Manual to the Project Manager.

20.3.11 Ensure that all required training and operating system demonstrations have been properly conducted and completed.

20.3.12 Identify and verify the rectification of all outstanding deficiencies,

20.3.13 Assist in the resolution of all issues relating to commissioning,

20.3.14 Prepare "as-built" documentation (plans and specifications) as described elsewhere in the RFP or Project Brief,

20.3.15 Recommend acceptance of the completed project,

PD21 POST CONSTRUCTION SERVICES

21.1 GENERAL

21.1.1 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all requirements of this RFP

21.1.1.2 Ten-Month Warranty Inspection and final Warranty Inspection.