

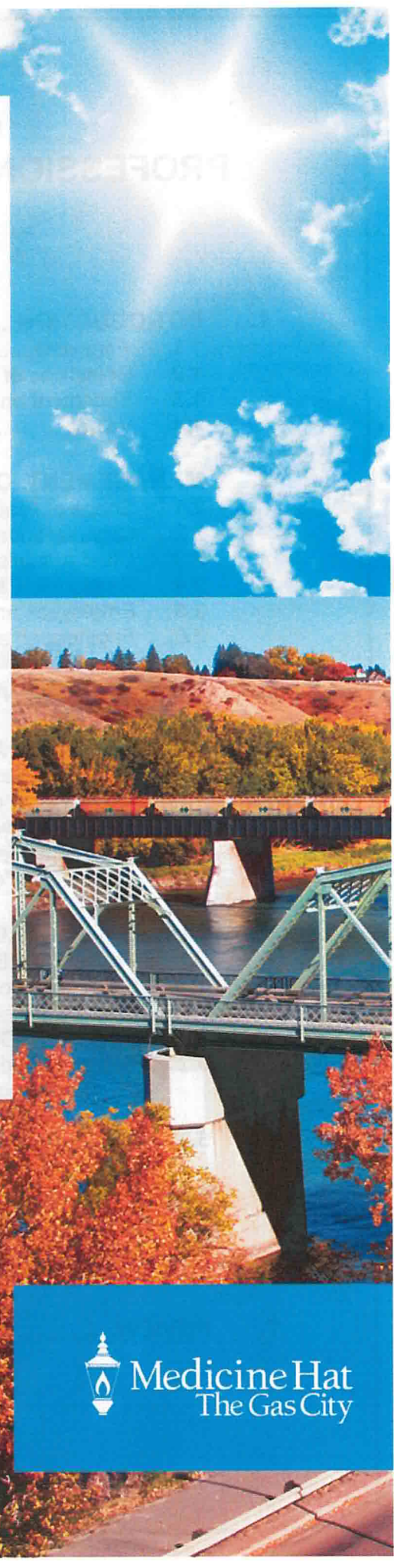
# Professional Practice Management Plan

Permit to Practice (P04206), authorizing the City of Medicine Hat to engage in the practice of engineering, geology and geophysics in the Province of Alberta, by the Association of Professional Engineers and Geoscientists of Alberta (APEGA).

Recommended by: City of Medicine Hat Responsible Members

Approved by:   
Robert Nicolay, Chief Administrative Officer

Date: 2019-03-20



Medicine Hat  
The Gas City

# CITY OF MEDICINE HAT PROFESSIONAL PRACTICE MANAGEMENT PLAN

## Table of Contents

<b>1.</b>	<b>INTRODUCTION.....</b>	<b>3</b>
1.1.	Foreword .....	3
1.2	Objectives of Professional Practice Management Plan .....	3
1.3	Statement on Ethics.....	3
1.4.	Values .....	3
<b>2.</b>	<b>MANAGEMENT, ORGANIZATION AND RESPONSIBILITIES .....</b>	<b>4</b>
2.1	Scope of Practice.....	4
2.2.	Organizational Structure .....	4
2.3	Chief Administrative Officer (CAO) .....	4
2.4	Responsible Members (RM's).....	5
2.5	Employees and Contractors.....	5
2.6	Engineering and Geoscience Consultants.....	6
<b>3.</b>	<b>ETHICAL STANDARDS .....</b>	<b>6</b>
<b>4.</b>	<b>PROFESSIONAL AND TECHNICAL RESOURCES .....</b>	<b>6</b>
4.1	Personnel Resources.....	6
4.1.1.	Hiring of Professional Engineers, Geoscientists and Technologists:.....	6
4.1.2.	Review of Work by Others .....	6
4.2	Reference Materials.....	7
4.3	Information Technology .....	7
<b>5.</b>	<b>QUALITY CONTROL.....</b>	<b>7</b>
5.1	Professional Business Practices.....	7
5.1.1.	Freedom of Information and Protection of Privacy Act (FOIPP) .....	7
5.1.2.	Conflict of Interest and Dispute Resolution.....	8
5.1.3.	Multi-Disciplinary Teams.....	8
5.2	Technical and Construction Work.....	8
5.2.1.	Relying on the Work of Others.....	9
5.2.2.	Training and Use of Applicable Codes/Standards .....	9
5.3	Project Management.....	9
<b>6.</b>	<b>PROFESSIONAL DOCUMENTS AND RECORDS .....</b>	<b>9</b>
6.1	Document Policy/Retention.....	9
6.2.	Professional Documents Requiring Authentication.....	10
6.3.	Signing Letters, Faxes or E-mail.....	11
<b>7.</b>	<b>REVIEW .....</b>	<b>11</b>

# 1. INTRODUCTION

## 1.1. Foreword

As of February 2003, section 48(1) (d) of the *Engineering and Geoscience Professions Regulation* under the *Engineering and Geoscience Professions Act*, requires all Association of Professional Engineers and Geoscientists of Alberta (APEGA) permit holders to develop and maintain a Professional Practice Management Plan (PPMP) that is appropriate to their practices. This PPMP describes City of Medicine Hat (City) policy as it pertains to its practice of engineering and geoscience activities.

The programs and policies outlined in this plan and the referenced procedures are intended to ensure that the public interest is of prime importance and are considered paramount in the City's engineering and geoscience activities. This Plan is consistent with the City's Strategic Plan, Organizational Structure and Governance model. This document specifies responsibility and authority of personnel as they relate to the professional practice. All professional staff of the City will be mandated to be knowledgeable of the City's PPMP. The City's objective is to establish and maintain an effective and efficient PPMP.

## 1.2. Objectives of Professional Practice Management Plan

The objectives of the City's program are to:

- a. Maintain high standards of technical competence and professionalism.
- b. Ensure a consistency of performance.
- c. Acquire additional skills and knowledge as required.
- d. Ensure compliance with all applicable standards and guidelines as well as with all legal and contractual obligations.
- e. Identify lines of professional responsibility and establish reporting procedures.
- f. Conduct its practice in accordance with the Code of Ethics.

## 1.3. Statement on Ethics

The City is committed to practice in accordance with the Code of Ethics and to uphold the professional nature of the engineering and geoscience profession. Ethical conduct shall be observed in all professional work and more generally, in any public forum. This shall also apply where the work is carried out in jurisdictions outside of Alberta or Canada. In addition, local standards, human rights codes, safety and environmental codes, sensitivities and practices, including linguistic and cultural shall be observed.

## 1.4. Values

Our Corporate vision is to be a "*Community of Choice*" and our mission is "*to deliver value through exceptional public service*". All employees of the City are expected to adhere to our values of:

- a. Respect
- b. Integrity
- c. Accountability
- d. Courage
- e. Caring

As professionals, it is critical that our engineering and geosciences members help build a culture of service through these values.

## **2. MANAGEMENT, ORGANIZATION AND RESPONSIBILITIES**

### **2.1. Scope of Practice**

The scope of City's practice is municipal engineering and energy utility, within the fields of transportation and traffic management, storm water management, airport management, water, sewer and solid waste utilities, planning/design, building services, hazard controls, oil and gas extractions, and energy utilities within the electric, natural gas, and alternative energy areas, including the practice of geoscience.

#### **The departments involved include:**

- Environmental Utilities
- Planning & Development Services
- Municipal Works
- Electric Generation
- Utility (Gas and Electric) Distribution Systems
- Natural Gas and Petroleum Resources
- Corporate Asset Management

As the City also conducts activities not related to the practice of engineering, this PPMP applies only to the projects/activities falling within the practice of engineering and geosciences.

Corporate Asset Management (CAM) provides oversight for projects involving engineering principles. However, the oversight is limited to financial and non-technical judgement and CAM outsource third party engineering consultant support for project design and technical direction and supervision.

CAM also carries out facility management on the various city buildings. Maintenance and servicing is carried out in according to manufacturer's specifications and therefore deemed to fall outside the practice of engineering.

### **2.2. Organizational Structure**

Directions and communications on the PPMP shall generally flow downward from the Chief Administrative Officer through the chain of command as appropriate and/or reporting hierarchy, to Responsible Members, to professional employees, contractors and consulting companies, or upward as the situation requires.

### **2.3. Chief Administrative Officer (CAO)**

The City's Chief Administrative Officer (CAO) is responsible overall for engineering and/or geoscience work within the context of our corporate license to practice. The CAO is also responsible to ensure that there is a PPMP in place and for ensuring that the Responsible Members carry out their responsibilities and requirements. The CAO will also ensure Responsible Members are trained on the PPMP and will advise APEGA of any changes and/or organizational changes as may be relevant to our PPMP.

## **2.4. Responsible Members (RM's)**

The Responsible Members (RM's) are identified annually during the APEGA permit renewal and are listed on the permit.

The RM's will provide the CAO with responsible direction and supervision of the City of Medicine Hat's professional practice and help ensure that its PPMP is implemented within the organization.

The RM's will ensure that they are active APEGA members and of good standing.

The City generally conducts the practice of engineering and geosciences in the following areas as outlined below:

- Environmental Utilities
- Planning & Development Services
- Municipal Works
- Electric Generation
- Utility (Gas and Electric) Distribution Systems
- Natural Gas and Petroleum Resources

In the event that one of the above departments does not have a designated Professional Engineer to fulfill the RM role, then the CAO will identify an RM for that area of practice. The RM's have the responsibility and authority to cease any engineering and/or geoscience work under their responsibility that is not in accordance with the PPMP.

P.Techs may perform work under our City Permit to Practice as licensed by APEGA. Where the City requires a P.Tech to assume the duties of an RM then a Permit to Practice under the Association of Science and Engineering Technology Professionals of Alberta (ASET) is also required. ASET also then requires that a Professional Management Plan be prepared and maintained appropriate to the respective practice, and done so in coordination with this PPMP.

## **2.5. Employees and Contractors**

It is expected that the RM's for each department will ensure that their respective employees performing engineering and/or geoscience activities will be made aware of the PPMP through a formal and reported training process/structure. All such respective employees are in consequence expected to follow the PPMP.

Professional contractors are mandated to be knowledgeable of the PPMP and/or have one of their own.

A copy of the PPMP is located on the City website at [www.medicinehat.ca](http://www.medicinehat.ca) under Government Publications, Plans and Reports.

## **2.6. Engineering and Geoscience Consultants**

Consulting companies that the City works with or hires shall be aware of its PPMP and shall submit on demand, their corporate PPMP.

Departments through the Project Manager (PM) and/or RM shall also ensure that consulting companies engaged on work with the City are also fully conversant with our PPMP.

## **3. ETHICAL STANDARDS**

The City shall follow the most current version of APEGA's *Guideline for Ethical Practice* in the practice of engineering and geoscience. The City shall also endeavour to conduct its professional practice in a manner that reinforces the fundamental virtues of ethical conduct, our corporate values, respect of public safety, competency, integrity, rule of law, and the dignity of the profession.

## **4. PROFESSIONAL AND TECHNICAL RESOURCES**

The City shall ensure that there is the necessary compliment of professional and technical staff resources with the capability and competency of undertaking the professional work being performed. In addition, staff shall have access to the necessary reference materials within budget constraints, to complete the work in accordance with recognized codes and standards.

### **4.1. Personnel Resources**

#### **4.1.1. Hiring of Professional Engineers, Geoscientists and Technologists:**

The City shall assess the skill levels required for staff, contract positions and consultants and hire or engage qualified personnel. Determination of skill and competency may include but not limited to verifying using current résumé, past experience, reliable references, and confirmation of good standing with APEGA and/or Association of Science and Engineering Technology (ASET) as may be required.

The required skill levels shall be included in the job descriptions. Professional staff or professional contractors must be qualified and competent to perform professional related work with the City. The City shall observe fair hiring practices and shall not discriminate on the basis of race, gender, age, religion or disability.

For professional engineers and geoscientists, the City will require that they be professional members in good standing with APEGA and/or have the ability to become a professional member. The same requirements apply for Technologists where there is a need to be a member of ASET.

#### **4.1.2. Review of Work by Others**

Reviewing and authenticating work completed by others (i.e. consulting companies) will follow these PPMP guidelines as per other professional work projects, to ensure that all safety, regulatory, and due diligence issues are addressed.

## **4.2. Reference Materials**

The City shall endeavor to maintain appropriate technical resources for use by professional and technical staff in performing their duties.

The City will maintain membership in APEGA through its Corporate License to Practice, and as may be required through ASET (refer to article 2.4 Responsible Members).

The City will provide support to APEGA and ASET members to meet their ongoing and continual professional regulatory and development obligations in order to maintain Professional Certification.

The City will also support memberships in appropriate industry organizations where there is a demonstrated need as part of the professional practice.

## **4.3. Information Technology**

The computer systems and software used for professional related work shall be suitable for the activities being performed, and shall be maintained as up-to-date as is necessary, within budget constraints. Only duly licensed software shall be used.

# **5. QUALITY CONTROL**

The City shall as part of its practice of engineering and geoscience ensure that the designated PM has the skills, competencies, allocation of resources, and corporate oversight as required. In turn, the PM shall give consideration to the measures that are required to be in place that is conducive to good professional practice, and with appropriate quality assurance measures depending on the project and/or program complexity and risk.

## **5.1. Professional Business Practices**

### **5.1.1. *Freedom of Information and Protection of Privacy Act (FOIPP)***

All documents and information, including books, maps, drawings, photographs, letters and information that is written, photographed, recorded or stored in any manner submitted to the City in respect to projects, are records in the custody and control of the City. As such, they may be subject to the access and privacy provisions of the *FOIPP Act* (Alberta) and other legislation, whether currently in force or enacted in the future. The *FOIPP Act* may give a person the right to access the records in the custody or control of the City, subject to limited and specific exceptions.

The PM shall ensure hired consultants/contractors are advised that the *FOIPP Act* applies, and that Vendors and contractors are aware of the process and requirements should a *FOIPP* Request for Information or Privacy Breach occur. All parties acknowledge that the *FOIPP* Head of Local Body retains sole authority when making decisions regarding disclosure of records, and that any such decision can be subject to Review by the Privacy Commissioner. The Vendor should seek its own legal advice on specific aspects of these obligations.

### **5.1.2. Conflict of Interest and Dispute Resolution**

The City recognizes the potential for disputes or conflicts of interest and supports a proactive approach to identify and resolve contentious issues at the earliest stages. Resolution of disputes or conflicts between professionals or contractors shall be handled in the most appropriate and professional ways.

Typically the City will define how disputes are to be resolved within the City of Medicine Hat's Consulting and/or Contract Agreements.

Staff engaged in the selection of consultants and contractors and/or making recommendations shall ensure that they adhere to the corporate policies and requirements in regards to "impartiality and confidentiality".

### **5.1.3. Multi-Disciplinary Teams**

A PM may also be assigned to head multi-discipline teams engaged in the practice of engineering and/or geoscience, and is responsible for quality control of the work and its outcome.

## **5.2. Technical and Construction Work**

The City shall maintain a system of quality control that ensures all work being performed is properly defined, is undertaken by competent personnel, meets applicable codes and standards, provides for adequate supervision and checking, and specified requirements for documentation.

The City shall follow the formalized process that is in place for sub-division Construction Completion Certificate (CCC) and Final Acceptance Certificate (FAC) in accordance with our Municipal Servicing Standards Manual.

Typically for construction projects involving third party contractors the quality assurance and quality control requirements are outlined in the various contract documents. These documents should also specify requirements for inspections, final acceptance, and warranty work.

For all other construction activities where the City is directing work then it becomes the responsibility of the assigned PM to determine how inspections and requirements for quality control and quality assurance are to be managed.

Consideration for the breadth and scope of quality control may include, but not limited to the following aspects:

- Project scope, objectives, and risks (public safety, environmental, financial, legal, and reputation).
- Standard contract documents and processes for consistency and in accordance with appropriate industry practices.
- Level of complexity, and assignment of qualified personnel, and dedication of adequate resources.
- Requirements as deemed appropriate in accordance with applicable codes, standards, procedures, industry practice and regulations.
- Requirements for document control.
- Requirement for peer review.
- Measures that may be required for quality assurance and risk management.
- Pre and post inspections.



### **5.2.1. Relying on the Work of Others**

Due diligence requirements for relying on the work of others will be followed to ensure that the technical work is done competently, and in accordance with applicable codes, standards, and specified design requirements. Reference will be made to the most current version of APEGA's *Guideline for Professionals Relying on Work Prepared by Others*.

### **5.2.2. Training and Use of Applicable Codes/Standards**

Employees will be expected to be knowledgeable of applicable codes and standards when hired.

On-going internal and external training will be completed in order to meet legislative requirements. Please refer to APEGA's *Continuing Professional Development Program*.

Records of individual employees' training will be kept on file by the respective departments.

## **5.3. Project Management**

Generally, a PM engaged in the practice of engineering and/or geoscience is responsible for:

- Project definition including scope, deliverables, risk assessment and change control.
- Personnel management including organizational structure, communications, professional expertise, assignments and quality management systems.
- Work plan and schedule from design, through construction and to final acceptance.
- Financial management including budget, cost estimates and tracking expenditures.
- Documentation including approvals, contracts, agreements, drawings and specifications, change requests/orders, progress payments, completion and final acceptance certificates, and final records.
- Implementation activities including coordination, inspections, commissioning and close out activities.

## **6. PROFESSIONAL DOCUMENTS AND RECORDS**

### **6.1. Document Policy/Retention**

The City shall ensure that all professional documents are handled with the appropriate controls to maintain accuracy and completeness. Technical, professional and support staff are responsible to prepare the documents in accordance with the procedures identified for the project. Communications with regards to professional work should be recorded and filed in the project files. Verbal communications should be noted and a record of the conversation placed in the project file when applicable and in particular when there is professional guidance, direction, or decisions provided.

- Professional documents should list the relevant regulatory codes, standards as applicable and relevant. In addition, assumptions made to complete the work should be listed on the document or otherwise noted in the project files.

- Documentation is to be kept and filed in the project folders documents and stored either electronically or via hardcopy and shall be maintained for a period of no less than 10 years.
- Computer systems shall be on a scheduled back up procedure. The General Manager of the Information and Computer Services department shall determine the most appropriate schedule for system backups.

## 6.2. Professional Documents Requiring Authentication

APEGA advises, as documented in the *Practice Standard for Authenticating Professional Documents*:

*“Essentially, Alberta law requires every professional member who performs a task that is within the practice of engineering or geoscience to authenticate (stamp, sign and date) all final documents prepared or reviewed by the member as part of that task before the documents are issued. The requirement applies equally to an employee working for an employer or to a consultant working for a client.*

*The stamp and signature signify that a licensed professional member of APEGA has accepted responsibility for the engineering or geoscience work represented in the authenticated document. A stamp is only issued to an individual who is qualified to practice engineering or geoscience in some capacity. The stamp is not a warranty or a guarantee of accuracy”.*

In this context it is important to separate the concept of responsibility from the concept of liability. The City encourages professional responsibility and leadership.

The City requires all employee engineers and geoscientists to sign technical reports which will later be used to make a decision, and when they are issuing a report replying on the work of other professionals’ opinions or recommendations. The City will operate with the following rule:

*“Engineering and Geoscience Consultants must authenticate their professional documents. Professional employees of the City of Medicine Hat shall follow this example and will authenticate similar documents prepared in house.”*

A partial listing of the types of professional document requiring authentication is provided in the following table:

Professional Document	Authentication Required?
Engineering Design Reports and Plans	Yes
Construction Contract, Technical Design and Specifications Documents (including Addenda)	Yes
City Engineering Standard Specifications and Design Guidelines	Yes
Record Drawings ('As built')	Yes
Administrative Report to Committees and Council	No
Technical Reports prepared to provide support for Administrative Reports	Yes

All professional members shall be familiar with and adhere to the APEGA Practice Standard for Authenticating Professional Documents.

The City provides standard specification documents to the public via its website, and is intended to be used as guidelines only. As per the APEGA Practice Standard for Authenticating Professional Documents, *“documents with an original stamp, signature, and date are considered authenticated and copies of these documents are not considered as authenticated. As such, a professional member who subsequently uses an unauthenticated document provided by the City*

*is responsible for determining that the document is suitable for the current purpose and for its authentication”.*

### **6.3. Signing Letters, Faxes or E-mail**

When a Professional Member is expressing a formal opinion or a recommendation via any written medium, their professional designation (P.Eng., P.Geo., P.Geol., P.Geoph., P.Tech., P.L.(Eng), or P.L.(Geo) should be used in the “signature”. This shall be done whether the communication is internal or external. .

## **7. REVIEW**

This document shall be reviewed on an as-required basis, and/or at a minimum annually, as part of the application of our Corporate License to Practice.