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Field Reviews of Engineering and Geoscience Work



The Association of Professional
Engineers and Geoscientists of Alberta

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Preface

An APEGA professional practice guideline describes the level of performance expected of *licensed professionals*. Part 8 of the *General Regulation* under Sections 58 and 59 allows APEGA to publish guides that define and promote the expectations of APEGA *permit holders* and *licensed professionals*.

The differences between a professional practice standard, a practice guideline, and a practice bulletin are as follows.

- An APEGA professional practice standard sets the minimum standard of practice *permit holders* and *licensed professionals* must meet. It is the standard against which a *permit holder's* or *licensed professional's* practice and conduct will be assessed by APEGA's statutory boards.
- A professional practice guideline provides professional practice advice and best practice recommendations to help *permit holders* and *licensed professionals* meet their professional obligations. APEGA statutory boards may assess a *permit holder's* or *licensed professional's* practice and conduct against practice guidelines.
- A professional practice bulletin provides clarity and guidance on a specific subject related to professional practice. Bulletins remain in force until a practice standard or guideline on the subject is developed, or until the practice bulletin is repealed.

Practice standards, guidelines, and bulletins should be read in conjunction with the *Engineering and Geoscience Professions Act* and *General Regulation*, APEGA's bylaws, and any other applicable legislation, codes, or standards.

Contributors

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1.0 Overview

Proper and adequate *field reviews* of engineering and geoscience *professional work products (PWP)* are fundamental to upholding the Code of Ethics, which requires that *permit holders, licensed professionals, and members-in-training* shall, in their areas of practice, hold paramount the health, safety, and welfare of the public and have regard for the environment.

There are no specific provisions for *field reviews* in the *Engineering and Geoscience Professions Act, General Regulation, APEGA bylaws, or practice standards*. However, it is important that *permit holders and licensed professionals* understand their professional and ethical obligations regarding *field reviews* of engineering and geoscience *PWPs* during their implementation or construction. *Field reviews* help *permit holders and licensed professionals* protect the public interest and the interest of public safety by safeguarding life, health, the environment, and the property and economic interests of the public.

Field reviews are also required by other legislation, standards, codes, or bylaws, such as the National Building Code – 2019 Alberta Edition. These obligations apply to *licensed professionals* working in their professional capacity in all fields of engineering and geoscience, even though the specific details of *field reviews* in each field or sector may be different.

For *permit holders*, processes for performing or directly supervising and controlling *field reviews* of *PWPs* are an important component of the *Professional Practice Management Plan*.

This guideline provides recommendations for planning and conducting *field reviews*.

1.1 PURPOSE AND SCOPE

This guideline describes:

- the purpose of carrying out *field reviews* during the implementation or construction of engineering or geoscience *PWPs*
- what a *field review* is and is not
- how to conduct *field reviews*, including:
 - o who can conduct them
 - o what they contain
 - o how to determine their number, frequency, and timing
 - o what should be documented
- the professional responsibilities of *permit holders and licensed professionals* involved in *field reviews*, including *field reviews* carried out under their *direct supervision and control*

Guidance on costs, compensation, or *contracts* associated with performing *field reviews* is outside the scope of this guideline.

1.2 REFERENCES

The following publications support this guideline. Refer to the latest versions available at apega.ca/practice-standards.

- *The Engineering and Geosciences Professions (EGP) Act, General Regulation, and APEGA's bylaws*
- *Authenticating Professional Work Products* practice standard
- *Professional Practice Management Plan* practice standard
- *Relying on the Work of Others and Outsourcing* practice standard
- *Ethical Practice* guideline

Requirements and interpretations have also been adapted from the following external references¹:

Engineers and Geoscientists British Columbia. 2021. [Guide to the Standard for Documented Field Reviews During Implementation or Construction](#) – Quality Management Guides.

Engineers Canada. 2018. [Public guideline: Direct supervision](#).

National Research Council of Canada. 2019. [National Building Code – 2019 Alberta Edition](#).

Professional Engineers Ontario. 2021. [Professional Engineers Providing General Review of Construction](#).

1.3 DEFINITIONS

For the purposes of this guideline, the following terms and definitions apply. These terms are italicized throughout the text.

Authentication

Authenticating a *professional work product* means a *licensed professional* has completed, performed a *thorough review* of, or *directly supervised and controlled* the engineering or geoscience work and accepts professional responsibility for the engineering or geoscience involved. *Authentication* must be performed in accordance with the practice standard [Authenticating Professional Work Products](#).

Client

The *person, owner, or agent of the owner* who requires the services of a consulting *licensed professional*.

Constructor

The *person* implementing or constructing *professional work products*.

Contract

An agreement entered into between two or more parties that may give rise to obligations the courts may enforce.

¹ These web links were accessed at the time of writing this document. Please contact the respective organization for a specific document if it is not available via the link in this guideline.

Direct Supervision and Control

The high degree of guidance a *licensed professional* provides to one or more individuals. The *licensed professional* accepts professional responsibility for engineering or geoscience tasks performed under their guidance. *Direct supervision and control* includes directing, monitoring, and controlling the engineering and geoscience work performed, including making all the decisions related to the practices of engineering and geoscience.

Direct supervision and control requirements are detailed in the practice standard [Relying on the Work of Others and Outsourcing](#).

Due Diligence

The level of judgment, care, forethought, and determination a *person* reasonably uses to avoid harming oneself, other people, property, or the environment.

Evidence

Proof of fact(s) presented at trial.

Field Review

The work conducted to confirm and verify the engineering or geoscience concepts and specific requirements during implementation or construction of the *professional work product (PWP)*. This includes considering and incorporating all material changes that affect the intended purpose of the original *PWP* that may have resulted from field changes and that require input and *authentication* from a *licensed professional*.

Field Reviewer

A *licensed professional*, or an individual working under their *direct supervision and control*, who carries out the *field review*.

Licensed Professional

A professional engineer, professional geoscientist, professional licensee (engineering), professional licensee (geoscience), licensee (engineering), or licensee (geoscience) entitled by the *Engineering and Geoscience Professions Act* to practise engineering or geoscience in Alberta.

Output

See *Professional Services Output*

Permit Holder

A partnership, or other association of persons, or a corporation that holds a *Permit to Practice* under the *Engineering and Geoscience Professions (EGP) Act*. The Association of Science and Engineering Technology Professionals of Alberta (ASET) permit holders, as defined in Section 86(4) of the *EGP Act*, are not included.

Permit to Practice

An APEGA licence given to *permit holders* to practise engineering or geoscience in Alberta.

Person

An individual or business entity.

Professional Practice Management Plan

A *permit holder's* written corporate policies, procedures, and systems describing the quality control and assurance measures in place to ensure appropriate standards of professional practice are maintained as described in Section 48(1)(d) of the *General Regulation*.

Professional Services

Services that involve the practice of engineering as defined in Section 1(q) of the *Engineering and Geoscience Professions (EGP) Act* or the practice of geoscience as defined in Section 1(r) of the *EGP Act*. The products of *professional services* are called *outputs*.

Professional Services Output (or Output)

Any product—physical or electronic—resulting from a *professional service*. Not all *outputs* require *authentication* and *validation*.

Professional Work Product

A *professional services output* that requires *authentication* and *validation* as described in the practice standard [Authenticating Professional Work Products](#). Defined in the *General Regulation* as "...plans, specifications, reports, or documents of a professional nature," a *PWP* is any *professional services output* with *technical information* that is complete and final for its intended purpose, and which is relied upon by others, internally or externally. A *PWP* can be physical (e.g., paper, plastic film), electronic (e.g., electronic document, image), or digital (e.g., software, modelling, simulation, or any other computer application that cannot be reproduced in a physical or electronic format). See the *authentication* test in the practice standard [Authenticating Professional Work Products](#) when assessing whether an *output* is a *PWP*.

Responsible Member

A *licensed professional* who is responsible to provide oversight of the practice of engineering or geoscience by the *permit holder* and meets the specification in Part 7, Section 48(1)(c) of the *General Regulation*. A *Responsible Member* must be qualified by education and experience in the profession of engineering or geoscience in which the partnership, corporation or other entity intends to engage, designated in writing by the *permit holder*, and registered with APEGA as a *Responsible Member*.

The *Responsible Member* must have a sufficiently close relationship with the *permit holder* to undertake the roles and responsibilities associated with acting as a *Responsible Member*. The role of *Responsible Member* may not be delegated to other *licensed professionals* who are not *Responsible Members*.

A *Responsible Member* can be:

- a full-time, permanent employee of the *permit holder*
- a member of the *permit holder*
- a *sole practitioner*
- an individual providing *professional services* to the *permit holder* through a contractual arrangement or as a part-time employee

The *permit holder's Responsible Members* direct, supervise, and control all or part of a *permit holder's* professional practice in accordance with the *permit holder's Professional Practice Management Plan* and all relevant legislation, regulations, and codes.

Sole Practitioner

Within Alberta, an individual who practises as an incorporated entity. A *sole practitioner* must hold a *Permit to Practice*.

Technical Information

A term for content or data derived from the practice of engineering or geoscience as defined by the *Engineering and Geoscience Professions Act*, including advice, analyses, assessments, calculations, designs, evaluations, inputs (e.g., to planning or to modelling and simulation), interpretations, notes, opinions, recommendations, and process descriptions.

Thorough Review

An evaluation of the *outputs* of *professional services* prepared by others to verify their reliability, validity, and technical accuracy. *Thorough review* requirements are detailed in the practice standard [Relying on the Work of Others and Outsourcing](#).

Validation

Validating a *professional work product (PWP)* means a *permit holder's Responsible Member* has reviewed the *PWP* to ensure it meets the quality control and assurance measures described in the *permit holder's Professional Practice Management Plan*. *Validation* must be performed in accordance with the practice standard [Authenticating Professional Work Products](#).

2.0 Field Reviews

2.1 PURPOSE OF FIELD REVIEWS

The main purpose of *field reviews* is to ensure the implementation or construction of the *professional work product (PWP)* in the field aligns with the original design's intended purpose, specifications, and requirements. *Field reviews* also:

- verify the *PWP* is appropriate for the field condition
- confirm the original design and assumptions are valid as they relate to field implementation
- identify issues in the original design or specifications—or any other issues—due to site conditions that were not known while preparing the *PWP*
- create alignment between field-level decisions and engineering- or geoscience-level decisions
- ensure that if the implementation deviates from the intended design, the deviations are managed appropriately

2.2 WHAT ARE FIELD REVIEWS NOT INTENDED TO DO?

Field reviews are not supervision or quality inspection of the implementation or construction of the *PWP*. They do not guarantee defective work will be identified. *Field reviews* are not meant to manage construction quality, though *field reviewers* may, based on a contractual agreement, offer observations and analysis related to quality control or quality assurance. *Constructors* are expected to have and follow their own quality management programs.

Field reviews do not include code inspections such as those required by the National Building Code – 2019 Alberta Edition. In the building industry, code inspections are completed by the authority having jurisdiction. However, *permit holders* and *licensed professionals* may require *field reviews* as part of the overall project quality control and assurance processes.

The *constructor* is responsible for supervising the field work and determining how to ensure conformance with the *PWP*. The means and methods for implementing *PWP* requirements are determined by the *constructor* implementing the work.

Field reviews are not meant to be an inspection of safe work practices or site safety, and they do not include a review of the relevant safety program the *constructor* may have in place. This does not mean that *field reviewers* ignore concerns or apparent safety violations. *Field reviewers* and *licensed professionals* responsible for *field reviews* have a duty to hold public safety paramount.

When *field reviewers* become aware of safety violations or concerns, they must advise the *licensed professional* responsible for the *field review* and the party responsible for site safety. If the safety concern is urgent, *field reviewers* should attempt to communicate the risk to the workers or those at risk. If no action is taken, they must advise the *licensed professional* responsible for the *field review*, the *client*, or the relevant authorities.

If these actions fail and the *licensed professional* responsible for the *field review* believes workers or the public are in imminent danger, they have a duty to attempt to stop the work. In these situations, the *licensed professionals* responsible for *field reviews* should request assistance from the organization responsible for safety, such as a municipality's emergency services, and indicate the urgency of the situation. This level of action should be documented as part of the *field review*.

3.0 Conducting Field Reviews

The involvement of *licensed professionals* in *field reviews* is critically important because *licensed professionals*—either the originators of the *professional work product (PWP)* or other *licensed professionals* who are responsible for *field reviews*—can make a determination about conformance with the *PWP*. Therefore, *licensed professionals*, using their professional judgment, can make decisions about when and how *field reviews* should be conducted.

Licensed professionals do not need to conduct the *field reviews* themselves, but they must ensure the *field reviews* are properly conducted. This professional obligation aligns with one of the five Rules of Conduct under the Code of Ethics: “hold paramount the health, safety, and welfare of the public and have regard for the environment.”

3.1 WHO CAN CONDUCT FIELD REVIEWS?

Field reviews should be conducted by a licensed professional or an individual suitably qualified to conduct field reviews under a licensed professional's direct supervision and control. The licensed professional should exercise judgment when determining who is qualified to conduct field reviews under their supervision because they take professional responsibility at the end of the process. The field reviewer should be able to understand and interpret the content of the PWP's being implemented, their roles and limitations, and the associated contractual obligations. When possible and appropriate, the field reviewer should be accompanied on field reviews by a representative of the client and the constructor.

It is recommended that the *licensed professional* who prepared the *PWP* for implementation or construction also conduct the *field reviews* whenever possible. This is the ideal—and the most common—way to manage *field reviews*. When it is not feasible for the *licensed professional* who prepared the *PWP* to perform the *field review* or when they cannot provide *direct supervision and control*, another *licensed professional* with the appropriate competency and experience in that scope of practice should assume responsibility for the *field reviews*.

In situations where another *licensed professional* is responsible for *field reviews*, that individual acknowledges they:

- fully understand the original *PWP's* intended purpose, specifications, and requirements and take professional responsibility for the implementation of the design and the *field review* of the *PWP*
- ensure any material changes in the *PWP* resulting from field implementation are properly managed using a documented change management process
- ensure any material changes affecting the intended purpose of the original *PWP* are properly authenticated. If the work is done through a *permit holder*, such changes also require *validation*

This aligns with the requirements in the National Building Code – 2019 Alberta Edition. If the original registered professional of record² (a *licensed professional*) is replaced by another *licensed professional*, the building code schedules must be updated with this information and the authority having jurisdiction must be notified about the new registered professional of record.

The process for assigning, delegating, and executing *field reviews*, and if applicable, the method of interacting with the originator or author of the *PWP's*, should be documented. *Permit holders* can document this in their *Professional Practice Management Plan (PPMP)*.

Licensed professionals may delegate *field reviews* to another *licensed professional* or have the *field reviews* conducted under their *direct supervision and control*. Before delegating or supervising *field reviews*, the *licensed professionals* should assess the:

- level, complexity, and critical nature of the *field review*
- requirements or recommendations set out in legislation, standards, and codes that may preclude delegation of *field reviews*

² The term “registered professional of record” is defined in the National Building Code – 2019 Alberta Edition as a “registered professional retained to be responsible for the integrity and completeness of the design and field reviews of one or more of the following elements of a project: (a) architectural, (b) structural, (c) mechanical, (d) electrical, and (e) geotechnical,” where “registered professional” refers to an “individual who qualifies as a (a) registered architectural professional, (b) registered engineering professional, or (c) licensed interior designer.”

- competency and experience of the proposed *field reviewer*
- proposed *field reviewer's* ability to deliver the required level of quality and accuracy

When delegating *field reviews*, *licensed professionals* should also provide direction to the *field reviewer* regarding the timing, frequency, and focus of *field reviews*, including specific aspects of the implementation or construction activities to be reviewed (see Sections 3.2 and 3.3).

3.2 WHAT DO FIELD REVIEWS INCLUDE?

Field reviews involve a visit by the *field reviewer* to the site where the implementation or construction of the engineering or geoscience work occurs.

In some situations, due to site accessibility issues or other circumstances, *field reviewers* may have only limited site access, or they may be prevented from physically visiting the site altogether. In these situations, *field reviewers* may conduct the *field reviews* virtually using technology such as high-quality, well-directed photos and videos, live video walkthroughs, and live measurements taken by others at the site. Virtual *field reviews* should be recorded and documented in a similar manner to physical on-site *field reviews*. This method, however, should be discussed and agreed to with the *client* and the *constructor* beforehand.

The *field reviewers* should ensure the authority having jurisdiction or permitting agencies understand and accept the protocols followed when *field reviews* are conducted virtually. It is recommended that the entire process for remote *field reviews*, including record-keeping, transmission, and retention, are appropriately documented.

Virtual or remote methods of performing *field reviews* may or may not be acceptable depending on the size of the project and the risk involved. Since *licensed professionals* take responsibility for *field reviews*, they should assess which method (physical or virtual) is suitable for the project and document the reasoning behind their decision.

During *field reviews*, the *field reviewer* should document observations, interpretations, and deviations from *PWPs*, and they should communicate these to the employer or *client* and the *constructor*. In some instances, testing or surveying may be needed to supplement observations. Testing and analysis should be carried out to recognized industry standards. However, testing in the context of *field reviews* is not the same as testing for routine quality control. Sometimes, as part of the contractual agreement, the scope of the *field reviews* may include reviewing the quality control processes of the *constructor* or the *client* for site-specific implementation of the *PWPs*, which the *field reviewer* should clarify beforehand.

Field reviewers should also document the items that should have been observed, measured, or interpreted but were not due to site constraints, along with the associated risks that may arise later.

The *licensed professional* responsible for *field reviews* should continue to report nonconforming work to their employer, *client*, and the *constructor* until it is rectified. They should also confirm and record when the work is rectified. If the work is found not to be rectified and they are concerned about the safety of the public, the *licensed professional* must notify the authority having jurisdiction.

Sometimes, *constructors* may seek advice or direction from *field reviewers*. When this advice or direction involves changes related to professional engineering or geoscience decisions, the changes should be reviewed with the *licensed professional* responsible for the *field review*. Any material changes must be authenticated and validated to comply with the practice standard [Authenticating Professional Work Products](#). In some circumstances, a formal request-for-information process may be implemented to manage and document communications and directions between the *licensed professional* responsible for *field reviews*, the *field reviewer*, and the *constructor* to effectively manage a full record of any potential deviation from the original design.

It is important that *field reviewers* do not alter *PWPs* without following a proper change management process that includes authorization from the *licensed professional* responsible for the *field review*. For the building sector, such authorization may be required from a registered professional of record. In some circumstances, a contractual agreement or a predefined process may require the *client's* authorization as well. When design changes are made in the field, risks should be addressed to ensure the original *PWP's* intended purpose is upheld.

When field decisions have an adverse effect on the quality, function, cost, or schedule of the project, the *licensed professional* responsible for the *field reviews* should advise their employer or *client*. *Permit holders* involved in the implementation of the *PWP* should define such decision-making and change management processes in their *PPMP*.

3.3 WHEN SHOULD FIELD REVIEWS OCCUR?

Licensed professionals who are responsible for *field reviews* should assess the work being carried out and its associated risks to determine the number, frequency, and timing of *field reviews*. The number of reviews should be consistent with accepted industry practice for the specific engineering or geoscience work being carried out.

The number and frequency of *field reviews* should be determined based on the following factors (as applicable to the nature of the work):

- the *licensed professional's* judgment about what is necessary to determine whether the implementation or construction of the work conforms with the original *PWP's* intended purpose, specifications, and requirements. This includes assessing the level and nature of risk, complexity, unknown conditions, and duration of the implementation or construction
- accepted industry practice for the type and nature of work to be reviewed
- requirements of relevant APEGA practice standards, bulletins, and guidelines
- legislation, codes, standards, or other regulatory requirements that may be relevant and applicable to the nature of the *field review*
- the level of detail provided in the *PWP* prepared for the project or work
- the *constructor's* experience implementing similar projects
- the visibility and availability of the critical components of the work to be observed
- the number of deficiencies previously found in the project or work
- the *licensed professional's* experience managing *field reviews* for similar projects

Field reviewers should act reasonably but should not agree to employer or *client* demands to conduct fewer *field reviews* than they determine necessary. *Field reviewers* should not reduce the number of their own *field reviews* because others are also carrying out reviews. Educating employers and *clients* about the purpose of *field reviews* and documenting and agreeing in advance about the nature, purpose, and frequency of such reviews will help prevent misunderstandings. Sometimes it may be helpful to decide with the *clients* in advance about critical sign-off points or hold-points where *field reviews* will be conducted to help avoid missing critical reviews.

The number and frequency of *field reviews* may need to be adjusted if more deficiencies than expected are found in the project or work, for example, the discovery of subsurface conditions that may not have been anticipated at the outset of the project. If the *field reviewer* determines that the number and frequency of *field reviews* referenced in their agreement or scope of work is insufficient, they should undertake the following actions:

- advise their employer or *client* about the need and rationale for additional *field reviews*
- document and communicate to their employer or *client* the consequences of not conducting sufficient *field reviews*. The consequences could include:
 - o risks to public safety
 - o impacts to project cost and schedule
 - o a requirement to notify a regulatory body
 - o the inability to execute completion or assurance certificates such as the ones required by the National Building Code – 2019 Alberta Edition

If the employer or *client* continues to refuse additional *field reviews*, the *licensed professional* should notify the appropriate regulatory body and consider removing themselves from the project.

Field reviews should occur in a timely manner to suit the nature and progress of the implementation or construction of the work. If feasible, the *field reviewer* should familiarize themselves with the *constructor's* or *client's* construction schedule, construction plans, and safety protocols and procedures so they can safely access the site. Additionally, *field reviewers* should be familiar with any specific field observations resulting from inspections performed by specialists, such as geotechnical conditions revealed in open excavations.

Having knowledge about the *constructor's* construction schedule is important so that *licensed professionals* responsible for *field reviews* can complete them as required. The involved parties should ensure the *constructor's* construction schedule is shared with the *licensed professional* responsible for *field reviews*.

Field reviews should take place when critical components, elements, or systems of the work are available, observable, and in a state suitable for review. *Field reviews* carried out after critical work is covered or otherwise inaccessible are inadequate. The *field reviewer* should be aware of the project's critical milestones and ensure they do not miss the opportunity to review critical work while it is accessible. If critical work is completed and no longer accessible before a *field review* can occur, the *field reviewer* should consider requesting that the work be uncovered or exposed for review. If uncovering or exposing the work is not feasible or practical, the *field reviewer* should prepare a document for their employer or *client* stating this and specifying what they observed. If the *constructor* did not cooperate in exposing the work, this should also be stated in the document.

3.4 DOCUMENTING AND MANAGING FIELD REVIEWS

The *field reviewer* should document when the work conforms with the original *PWP*'s intended purpose, specifications, and requirements. When a *field reviewer* observes work that does not conform, they should document and communicate the issues to their employer or *client* and the *constructor*. This documentation should describe which work is nonconforming and how, and it should state what needs to be addressed so the work will conform with the *PWP*. The means and methods for rectifying any nonconforming work should remain the responsibility of the *constructor*.

There may be circumstances where the client identifies nonconformances and brings them to the attention of the *field reviewer*. The documentation should include this information and describe how these issues are rectified. This may involve the interactions with the originator of the *PWP*.

If the employer, *client*, or *constructor* does not make the work conform, the *field reviewer* should prepare and submit a written report to the appropriate authority having jurisdiction documenting the events and implications for their employer or *client* and the *constructor*.

Having complete and detailed documentation of *field reviews* containing directions given to their employer, *client*, or *constructor* helps demonstrate *due diligence* in *field reviews*. The documentation may also serve as *evidence* in case of a dispute. It is up to the *field reviewer* to determine what is appropriate and sufficient for a given project, but the following should be considered while documenting *field reviews*:

- observations made during *field reviews*—these can be recorded using standard forms that capture the date, time, and details of observations to help ensure consistent and complete records
- photographs or videos—these provide useful visual records of what was observed, particularly where the work being field reviewed will be buried or covered by construction. An audit trail can be developed using photographs by:
 - checking equipment, date, and time settings before taking photographs
 - including a description of what was photographed along with the date, time, location, weather, and photographer
 - defining set angles, viewpoints, and magnifications of a specific site location to capture consistent progress between *field reviews*
 - including references of scale in the photo where appropriate
 - setting up appropriate downloading and storage procedures
 - creating a non-editable backup of all photographs if they will be altered in any way, such as by enhancing or cropping
- field notebooks—these can be used to document dates, times, observations, surveys, and actions
- communications and directions to the *constructor* or others—these should be documented appropriately, with copies provided to the *client* as required. Communications to *constructors* should be limited to the nonconforming work and should avoid prescribing specific actions. Using a standard form may help to ensure consistent and complete records

- records of test and calibration results
- meeting records—site meetings that discuss *field reviews*, observations, and resolutions should be recorded and distributed to the *client*, *constructor*, and other relevant professionals as appropriate
- any other records or documentation suitable for the specific project

4.0 Professional Responsibilities

4.1 RESPONSIBILITIES OF LICENSED PROFESSIONALS

Under the Code of Ethics, a *licensed professional* responsible for *field reviews* has a professional obligation to demonstrate adequate *due diligence* in conducting *field reviews* or ensuring *field reviews* are completed to protect the public. As part of this *due diligence*, *licensed professionals* should develop and follow a process for *field reviews* and change management that incorporates the items described in this guideline.

One of the critical elements of the *field review* process is ensuring that all material changes to the original *professional work product (PWP)* are properly authenticated and validated to comply with the practice standard [Authenticating Professional Work Products](#). The *licensed professionals* who are responsible for *field reviews* are also obligated to inform their *clients* or employer and the *constructor* about their recommendations and follow up as necessary to monitor whether their recommendations are implemented.

Licensed professionals performing the work under other instruments like legislation, standards, codes, or bylaws should check and comply with *field review* requirements that may arise under those instruments. For example, to comply with the National Building Code – 2019 Alberta Edition (NBC[AE]) for the design and construction of a building, before beginning construction, the owner must retain a *licensed professional* (termed registered professional of record in the NBC[AE]) to be responsible for the integrity and completeness of the design. This professional must also ensure *field reviews* of one or more of these five project elements are completed: architectural, structural, mechanical, electrical, and geotechnical.

4.2 RESPONSIBILITIES OF PERMIT HOLDERS

Similarly, to protect the public, *permit holders* are obligated to ensure a documented process is followed to complete *field reviews* of the *PWPs* they produce or implement. As part of the quality management of the practice of engineering or geoscience, a process for *field reviews* and change management can be described in the *permit holder's Professional Practice Management Plan*. The process should include how *field reviewers* are assigned or delegated, how *field reviews* are documented, and how communication between *licensed professionals*, *clients*, *constructors*, and owners is handled to effectively manage and implement changes. For example, when the *licensed professionals* involved in *field reviews* are no longer available, the *permit holder* is responsible to ensure another competent *licensed professional* is appointed to manage the *field reviews*. *Permit holders* should consider including protocols in their *field review* processes for:

1. obtaining written confirmation from the employer or *client* about how and by whom the *field reviews* will be carried out
2. confirming that a qualified and competent *licensed professional* appropriate to the work will be conducting or directly supervising and controlling the *field reviews*
3. advising the employer or *client* about the availability of the *licensed professional* responsible for conducting the *field reviews* to answer questions regarding the work during implementation or construction
4. requesting copies of *field review* reports
5. retaining a record of any communication confirming items 1 to 4 and the employer's or *client's* response

To ensure timely and appropriate *field reviews*, the *field review* process may describe how *clients* and *constructors* will be involved in facilitating the execution of *field reviews* by *field reviewers*, clauses for access to construction sites, and safety provisions.