#### QUALITY MANAGEMENT GUIDES



# GUIDE TO THE STANDARD FOR THE AUTHENTICATION OF DOCUMENTS

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### PREFACE

This Guide to the Standard for the Authentication of Documents (the "Guide") was developed by Engineers and Geoscientists British Columbia to explain the standards of practice, conduct, and competence for Professional Registrants related to their responsibility for Authenticating Documents.

This current revision was undertaken to provide clarity in guidance to Professional Registrants, in accordance with the scheme and requirements of the *Professional Governance Act* and the Engineers and Geoscientists BC Bylaws. This Guide provides Engineers and Geoscientists BC's interpretation of section 7.3.7, Standard for Issuance of Manual Seal, Authenticating Documents, and Use of Permit to Practice Number, of the Bylaws. Professional Registrants are required to meet that standard by having regard for the information included in this Guide and by exercising their professional judgment when applying that standard in their practice. This is a living document that is to be revised and updated as required in the future, to reflect the developing state of practice.

## ABBREVIATIONS

ABBREVIATION	TERM
AHJ	Authority Having Jurisdiction
AIBC	Architectural Institute of British Columbia
BC	British Columbia
CADD	Computer-Aided Drafting and Design
EGBC	Engineers and Geoscientists BC
РЗ	Public-Private Partnerships
PDF	Portable Document Format
РРМР	Professional Practice Management Plan

### DEFINITIONS

The following definitions are specific to this Guide. These words and terms are capitalized throughout the document:

TERM	DEFINITION
Act	The Professional Governance Act, S.B.C. 2018, c. 47.
Authenticate, Authenticating (see also Manually Authenticating and Digitally Authenticating)	The act of a Professional Registrant Manually Authenticating or Digitally Authenticating a Document.
Bylaws	The Bylaws of Engineers and Geoscientists BC made under the Act.
Certificate Authority	A third party approved by Engineers and Geoscientists BC to issue Digital Certificates to Professional Registrants.
Delegated (and derivatives)	A Subordinate being directed to undertake certain work or decisions related to Regulated Practice on behalf of a Professional Registrant who takes professional responsibility for the work of the Subordinate.
Digitally Authenticating	<ul> <li>A Professional Registrant applying all of the following to a Document:</li> <li>(a) the Professional Registrant's Digital Seal;</li> <li>(b) a digital image of the Professional Registrant's signature;</li> <li>(c) a digital image of the date of authentication; and</li> <li>(d) the Professional Registrant's Digital Certificate.</li> </ul>
Digital Certificate	A certificate issued to a Professional Registrant by a Certificate Authority that attests to the legitimacy of information through the use of encryption.
Digital Seal	A digital image of a Professional Registrant's Manual Seal with no material variation in format or wording.
Direct Supervision (and derivatives)	The responsibility for the control and conduct of the work or decisions related to the Regulated Practice activities that have been Delegated to a Subordinate.
Document(s)	Includes any physical or electronic Record, including but not limited to a report, certificate, memo, specification, drawing, map, or plan, that conveys a design, direction, estimate, calculation, opinion, interpretation, observation, model, or simulation that relates to the Regulated Practice.
Documentation	See the definition for "Record".
Engineers and Geoscientists BC	The Association of Professional Engineers and Geoscientists of the Province of British Columbia, also operating as Engineers and Geoscientists BC.

TERM	DEFINITION
Firm	<ul> <li>As defined in the Act:</li> <li>"(a) a legal entity or combination of legal entities engaged in providing services in respect of a Regulated Practice, or</li> <li>(b) a ministry or agency of the government that the Lieutenant Governor in Council may prescribe by regulation,</li> <li>but does not include a legal entity or combination of legal entities that may be exempted from this Act by regulation of the Lieutenant Governor in Council."</li> </ul>
Guide	A guide to a program or regulatory topic, published by Engineers and Geoscientists BC. These include Guides to quality management standards that in accordance with the <i>Act</i> and Bylaws define professional obligations related to specific processes and explain the minimum standards of practice, conduct, and competence expected from Professional Registrants and Firms.
Manual Seal	The ink stamp or embossing machine issued to a Professional Registrant by Engineers and Geoscientists BC that can create an impression on a Document.
Manually Authenticating	<ul> <li>A Professional Registrant applying all of the following to a Document:</li> <li>(a) the Professional Registrant's Manual Seal;</li> <li>(b) the Professional Registrant's handwritten signature; and</li> <li>(c) the date of authentication.</li> </ul>
Non-Ink Signature	A signature created using a touch screen or electronic pen in a manner that requires a unique gesture for each instance.
Permit to Practice	A certificate bearing a Permit to Practice number that is issued to a Registrant Firm by EGBC and confirms that the registrant Firm is entitled to engage in the practice of engineering and/or geoscience in British Columbia, subject to any suspensions, limitations, conditions, or restrictions on the registrant Firm's registration. Note: Some provincial government entities may not require a Permit to Practice (see Section 1.1 of the <i>Professional Governance General Regulations</i> for details).
Professional of Record	The Professional Registrant who is professionally responsible for activities, work, or Documents related to the Regulated Practice.
Professional Practice Management Plan	A Document developed and maintained by a Firm, which must meet the requirements set out in section 7.7.3 of the Bylaws.
Professional Registrant	<ul> <li>A registrant of Engineers and Geoscientists BC who is registered in one of the following categories of registrants:</li> <li>(a) professional engineer;</li> <li>(b) professional geoscientist;</li> <li>(c) professional licensee engineering;</li> <li>(d) professional licensee geoscience;</li> <li>(e) life member prior to 1998;</li> <li>(f) honorary life member.</li> </ul>

TERM	DEFINITION
Record (Documentation)	Any Document that is evidence of Regulated Practice activities, events, or transactions, or is evidence that a Professional Registrant has met their professional and contractual obligations.
Regulated Practice	As defined in the <i>Act</i> and the <i>Regulation</i> , the carrying on of a profession by a registrant of a regulatory body, which for the purposes of this Guide means the practice of professional engineering or the practice of professional geoscience.
Regulation	The Engineers and Geoscientists Regulation, OIC 2021/037.
Seal (synonymous with stamp)	The Professional Registrant's Seal. It is either a Manual Seal or Digital Seal and is collectively called "Seal" in this Guide.
Shop Drawing	Includes, but is not limited to, a pre-existing standard or generic drawing, diagram, illustration, schedule, performance chart, brochure, or other printed information that is provided by a contractor to a Professional of Record, or is used by a Professional of Record, to illustrate details of a portion of work. Refer to the Engineers and Geoscientists BC <i>Professional Practice Guidelines – Shop Drawings</i> .
Subordinate	Any individual who engages in Regulated Practice under the Direct Supervision of a Professional Registrant.

## VERSION HISTORY

VERSION NUMBER	PUBLISHED DATE	DESCRIPTION OF CHANGES
4.0	June 15, 2023	Updated content to conform with the <i>Professional Governance Act</i> and updated Bylaws; reorganized Section 3.2 of this Guide; added guidance for authorities in another jurisdiction not accepting authenticated documents; added guidance on standardized manufactured components; minor editorial corrections.
3.1	April 6, 2022	Added Sections 3.2.9.3 and 3.2.9.4.
3.0	February 17, 2021	Updated the content and terminology to conform with the <i>Professional Governance Act</i> and updated Bylaws; changed the main title from "Use of Seal" to "Guide to the Standard for the Authentication of Documents"; changed the document category from "quality management guidelines" to "quality management guides."
2.0	December 4, 2017	Updated format to align with new Engineers and Geoscientists BC brand; minor editorial corrections; additional clarifications and examples added.
1.2	October 15, 2013	Minor editorial corrections.
1.1	February 24, 2013	Minor editorial corrections.
1.0	May 2012	Initial version.

# 1.0 INTRODUCTION

#### 1.1 OVERVIEW

- 1.1.1 Engineers and Geoscientists BC is the regulatory and licensing body for the engineering and geoscience professions in British Columbia (BC). To protect the public, Engineers and Geoscientists BC establishes, monitors, and enforces standards for the qualifications and practice of Professional Registrants.
- 1.1.2 Engineers and Geoscientists BC provides practice resources to Professional Registrants to assist them in meeting their professional and ethical obligations under the *Act* and Bylaws. One category of these practice resources is Guides to quality management standards, which establish the standards of practice, conduct, and competence for quality management in professional activities.
- 1.1.3 This Guide to the Standard for the Authentication of Documents explains the standards of practice, conduct, and competence for Professional Registrants related to Authenticating Documents. It explains how Professional Registrants must Authenticate Documents that they have prepared or that have been prepared under their Direct Supervision.
- 1.1.4 This current revision was undertaken to provide clarity in guidance to Professional Registrants, in accordance with the scheme and requirements of the *Act* and the current Bylaws, and to assist Professional Registrants in upholding

their professional obligations under the *Act* and Bylaws.

1.1.5 This Guide provides Engineers and Geoscientists BC's interpretation of the standard described in section 7.3.7. Standard for Issuance of Manual Seal, Authenticating Documents, and Use of Permit to Practice Number, of the Bylaws. Professional Registrants are required to meet that standard by having regard for the information included in this Guide and by exercising their professional judgment when applying that standard in their practice. By following this Guide, Professional Registrants will be meeting the intent of the requirements in the Bylaw and appropriately upholding their professional responsibilities under section 7.3.7. There may be limited circumstances where, in a Professional Registrant's professional judgment, there are sound technical or ethical reasons to depart from the interpretation in this Guide. In those circumstances, Professional Registrants must record the technical or ethical reasons for the departure and must use their professional judgment to make sure the resulting work still meets the intent of the standards in the Bylaws, as well as the Professional Registrant's broader professional and ethical obligations. The Record of these decisions must be retained according to the requirements of section 7.3.2 of the Bylaws.

#### 1.2 PURPOSE OF THIS GUIDE

- 1.2.1 This document explains the standards of practice, conduct, and competence expected of Professional Registrants when Authenticating Documents. This Guide provides a common approach applicable to all Professional Registrants who Authenticate Documents as part of their professional activities.
- 1.2.2 This Guide is specific to individual Professional Registrants. For requirements of Registrant Firms, refer to the <u>Regulation of Firms Permit to Practice</u> <u>Manual</u> (Engineers and Geoscientists BC, 2021).
- 1.2.3 The specific objectives of this Guide are to:
  - describe the minimum standard, scope, and purpose of Authenticating Documents;
  - assist Professional Registrants in establishing and maintaining a documented quality management procedure for Authenticating Documents;
  - assist Professional Registrants in understanding the purpose of Authenticating Documents;
  - assist Professional Registrants in clarifying what Documents must be Authenticated;
  - assist Professional Registrants in understanding acceptable methods of Authenticating Documents; and
  - provide guidance on how to meet the quality management requirements under the *Act* and Bylaws when Authenticating Documents.

# 1.3 ROLE OF ENGINEERS AND GEOSCIENTISTS BC

- 1.3.1 This Guide and the current revision were developed under the direction of Engineers and Geoscientists BC's Board and, prior to publication, underwent final legal and editorial reviews. This Guide forms part of Engineers and Geoscientists BC's continuing commitment to establishing and monitoring the quality of professional services that Professional Registrants provide to their clients and to the public.
- 1.3.2 Authenticating Documents is a requirement that is critical for assisting Professional Registrants in fulfilling their professional obligations, including holding paramount the safety, health, and welfare of the public. The Authentication of Documents by Professional Registrants clearly evidences their taking of professional responsibility for the professional engineering or professional geoscience work that they carry out, or which they delegate to Subordinates. As such, clients and others may place reliance on the Documents and their contents as having been provided by Professional Registrants who are held to high standards of knowledge, skill, and ethical conduct for the provision of the professional services.

#### 1.4 SCOPE

1.4.1 Professional Registrants are required to Authenticate all Documents that they prepare and deliver in their professional capacity or that were prepared under their Direct Supervision. Once granted a professional designation, Professional Registrants are issued a Manual Seal by Engineers and Geoscientists BC. Engineers and Geoscientists BC retains ownership of the Seal and is the sole authority to establish rules for its use.

- 1.4.2 This Guide is intended to assist Professional Registrants in establishing and maintaining a documented quality management procedure for the appropriate use of their Seals that complies with the requirements of the *Act* and of the Bylaws by:
  - explaining the purpose of a Seal;
  - defining which Documents require Authenticating;
  - defining who is permitted to Authenticate a Document;
  - demonstrating how to Authenticate Documents in one's professional capacity, including Documents prepared under one's Direct Supervision;
  - demonstrating how to Authenticate Documents with limited prior involvement; and
  - describing how to Authenticate Documents.
- 1.4.3 Professional Registrants must Authenticate all Documents that they prepare and deliver in their professional capacity or that were prepared under their Direct Supervision. Furthermore, they must only Authenticate and deliver Documents for which they are willing to accept professional responsibility. Failure to Authenticate a Document that is required to be Authenticated and that a Professional Registrant has prepared and delivered is a breach of the Bylaws.

- 1.4.4 These obligations apply to Professional Registrants working in their professional capacity in all industries when their work involves, among other things:
  - ongoing professional engineering or professional geoscience work;
  - projects with a defined start and finish;
  - products and services requiring the application of professional engineering or professional geoscience;
  - professional engineering or professional geoscience deliverables such as reports, drawings, specifications, digital artifacts, or other deliverables;
  - implementation or use of professional engineering or professional geoscience work as may be found in a manufacturing facility, technology company, operations, or utilities work;
  - construction or installation of professional engineering or professional geoscience work;
  - implementation or construction carried out by others;
  - implementation or construction being carried out by the Professional Registrant's Firm's own forces;
  - professional engineering or professional geoscience work carried out for use internally within the Professional Registrant's Firm; and
  - professional engineering or professional geoscience work carried out for others.
- 1.4.5 Terminology used within an industry may not match the terminology used in this Guide. However, the obligations of Professional Registrants who

Authenticate work in all industries remain the same: to ensure that authentication of Documents in Regulated Practice meets the intent of the *Act*, the Bylaws, and this Guide.

 1.4.6 Although this Guide includes discussion of typical terms in professional liability insurance policies for Professional Registrants, this Guide does not intend or purport to provide legal advice to Professional Registrants on insurance coverage issues. Professional Registrants should consult their insurance brokers and legal advisers on any questions they may have specifically in relation to their professional liability insurance policies and coverage.

# 2.0 REGULATORY FRAMEWORK

- 2.1 Section 49(3) of the *Act*, Certificate of registration and seal, states that:
  - "(3) Subject to subsection (4), the council of the regulatory body may make bylaws
  - (a) providing for the issuance of a seal to registrants in good standing, and
  - (b) governing the use of the seal."

2.2 Section 57(1) of the Act, Standards of conduct and competence, states that:

. . .

"Subject to subsections (2) and (3), the council of each regulatory body must make bylaws establishing the following:

- (a) standards of professional and ethical conduct for registrants, which standards may be different for different categories or subcategories of registrants;
- (b) standards of competence for registrants, which standards may be different for different categories or subcategories of registrants or different areas of practices;"
- 2.3 Section 7.3.7, of the Bylaws, Standard for Issuance of Manual Seal, Authenticating Documents, and Use of Permit to Practice Number, states that:
  - "(1) EGBC may provide a Professional Registrant In Good Standing with

a Manual Seal bearing the following information:

- (a) the Professional Registrant's first initial(s), middle initial(s), and last name(s);
- (b) the words "professional engineer", "professional geoscientist", "professional licensee engineering", or "professional licensee geoscience", as applicable.
- (2) EGBC retains ownership of a Manual Seal issued by EGBC.
- (3) A Professional Registrant must establish, maintain, and follow documented procedures related to a Professional Registrant's Manual Seal, a Professional Registrant's Digital Seal, and Authenticating Documents, in accordance with the requirements set out in this section of the Bylaws.
- (4) Only a Professional Registrant may Authenticate a Document.
- (5) A Professional Registrant must Authenticate
- (a) a Document that:
  - the Professional Registrant has prepared in their professional capacity or has been prepared under their Direct Supervision,

- (ii) contains content related to the Regulated Practice, and
- (iii) will be relied on by others, or
- (b) a Document that is otherwise required to be Authenticated by applicable legislation, associated regulations, the Bylaws, or standards approved by the Board.
- (6) Despite subsection (5), a Professional Registrant who is a professional licensee engineering or a professional licensee geoscience must not Authenticate Documents outside the authorized area of practice identified on their licence.
- (7) If a deliverable is provided in a format that cannot be reasonably read by an individual, a Professional Registrant must adhere to an authentication process that has been prescribed by standards or guidelines approved by the Board.
- (8) A Professional Registrant must not charge a fee for only Authenticating a Document.
- (9) With respect to Manually Authenticating, a Professional Registrant must not allow another person to apply any of the following:
- (a) the Professional Registrant's Manual Seal, or a likeness or digital image of the Professional Registrant's Manual Seal, except under the Professional Registrant's express and written

authorization, which authorization must be specific to each application and not an ongoing authorization;

- (b) the Professional Registrant's handwritten signature, or a likeness of the Professional Registrant's handwritten signature, under any circumstances;
- (c) the date of Authentication, except under the Professional Registrant's express and written authorization, which authorization must be specific to each application and not an ongoing authorization.
- (10) With respect to Digitally Authenticating, a Professional Registrant must not allow another person to do any of the following:
- (a) apply the Professional Registrant's Digital Certificate under any circumstances;
- (b) gain access to the Professional Registrant's Digital Certificate or to any password, PIN, or other factor used to secure access to or control over the Professional Registrant's Digital Certificate, under any circumstances.
- (11) In the event of suspension or cancellation of a Professional Registrant's registration,
- (a) the Professional Registrant must return their Manual Seal to EGBC upon request,

(b) EGBC will disable any Digital Certificate issued to the Professional Registrant for the period of the suspension or cancellation, and 2.4

- (c) the Professional Registrant must not Authenticate any Document for the period of the suspension or cancellation.
- (12) A Registrant must ensure that any Manual Seal and any Digital Certificate issued to them remains secure and under their sole control at all times."

This Guide is intended to assist Professional Registrants in understanding the standard of practice and in fulfilling their professional obligations in accordance with section 7.3.7 of the Bylaws. This Guide may be used by Engineers and Geoscientists BC in disciplinary proceedings as evidence of professional standards, and of the conduct expected of a Professional Registrant in particular circumstances, in support of allegations of conduct unbecoming a registrant, incompetence, or professional misconduct.

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# 3.0 STANDARDS FOR PRACTICE

#### 3.1 PURPOSE AND REQUIREMENTS OF AUTHENTICATION

- 3.1.1 The purpose of the Seal is for properly and appropriately Authenticating Documents that are prepared and delivered by Professional Registrants in their professional capacity or under their Direct Supervision. A Seal is neither a mark of warranty, nor is it a guarantee of accuracy. Instead, it should be considered a "mark of reliance" indicating that others can rely on the fact that the opinions, judgments, or designs in the Authenticated Documents were provided by a Professional Registrant who is held to high standards of knowledge, skill, and ethical conduct.
- 3.1.2 The Authentication of Documents using a Professional Registrant's Seal with signature and date verifies that the Documents have not been modified or tampered with, and the Authentication further provides that the Professional Registrant has accepted professional responsibility for the original engineering or geoscience contents of the Documents.
- 3.1.3 Also, the Seal is important in visibly evidencing commitment by a Professional Registrant to the standards of the Professional Registrant's profession in preparing the contents of the Documents. When Authenticating a Document, a Professional Registrant is confirming:
  - that the professional engineering or professional geoscience work

reflected in the Document was prepared by the Professional Registrant, in their professional capacity or under their Direct Supervision;

- that the Professional Registrant is professionally responsible and accountable for the Document;
- the authenticity of the Document;
- the Professional Registrant's identity;
- the Professional Registrant's designation, and that the Professional Registrant is entitled to engage in the relevant Regulated Practice;
- the requirements of relevant legislation have been met;
- the applicable requirements under the *Act* and the Bylaws have been met, including the quality management Bylaw and the Code of Ethics;
- the Professional Registrant is qualified by training or experience in the professional engineering or professional geoscience discipline(s) related to the Document; and
- the intent of the relevant Engineers and Geoscientists BC professional practice guidelines and practice advisories have been met.
- 3.1.4 In addition to the Seal, the Firm's Permit to Practice number must also be visibly applied to any Document issued on behalf of the Firm according to the Firm's procedures as documented in their Professional Practice Management Plan (PPMP).

- 3.1.5 To comply with the Bylaws, Professional Registrants must have established, or have access to through their Firm's PPMP, documented quality management procedures related to Authenticating a Document.
- 3.1.6 A documented quality management procedure is one that has been thought out and reduced to writing in a suitable form. The process may be captured in a written procedure, process flowchart, set of checklists, forms, or other Documentation developed to suit the nature of the work undertaken by Professional Registrants.

# 3.2 WHICH DOCUMENTS REQUIRE AUTHENTICATION

#### 3.2.1 GENERAL

- 3.2.1.1 Documents requiring authentication are those that are prepared by Professional Registrants in their professional capacity or under their Direct Supervision, involving the delivery of products or services requiring the application of professional engineering or professional geoscience.
- 3.2.1.2 The requirement to Authenticate Documents applies equally to electronic Documents and physical Documents.
- 3.2.1.3 Documents are delivered in various stages throughout a project's lifecycle. All Documents that are prepared and delivered for reliance by others must be Authenticated; this includes Documents prepared for the various stages of a

professional engineering or professional geoscience project.

Typical stages in consulting engineering projects for buildings include, but are not limited to:

- tendering;
- design;
- permitting;
- construction;
- commissioning; and
- demolition.

Other areas of professional engineering and professional geoscience are too varied to give relevant examples of typical stages. Nevertheless, the Authenticating of Documents is required in all areas of professional engineering and professional geoscience work.

- 3.2.1.4 The Seal is used to Authenticate what a Professional Registrant has taken professional responsibility for and when they took professional responsibility for it.
- 3.2.1.5 If the receiver of the Authenticated Documents is in another jurisdiction and refuses to accept a Seal on the project deliverables, Professional Registrants may provide unsealed deliverables but must keep a record of the refusal and keep an Authenticated version for their own records.
- 3.2.1.6 Refer to <u>Appendix A: When Authentication</u> <u>is Required</u>, which identifies various types of Documents and provides recommendations on Authenticating according to good professional practices.

#### 3.2.2 DOCUMENT TYPE

#### 3.2.2.1 Internal Documents

Documents issued informally within a 3.2.2.1.1 Firm that are preliminary, conceptual, or not intended to be relied on by others, do not need to be Authenticated. However, when Documents are prepared by one department of a Firm and issued formally to another department, branch, office, division, or other part of the same Firm, and those Documents will be used, relied on, acted upon, or externally issued by the other part, those Documents must be Authenticated at the time of issuance by the preparer of the Documents. For example, preliminary Documents issued to another department to determine permitting requirements would not need to be Authenticated. However, Documents issued to another department that will be used to apply for a permit would need to be Authenticated, even if those Documents were not ready for or issued for construction.

#### 3.2.2.2 Preliminary Documents

- 3.2.2.2.1 Certain Documents are considered preliminary Documents and do not need to be Authenticated. These include:
  - documents that are incomplete or are not in their final form (i.e., will not be relied upon);
  - documents that are being issued to indicate general works or degree of complexity; and
  - documents that are marked and issued as being "for discussion," for "information only," or for collaboration purposes.

- 3.2.2.2.2 The intent that these Documents are preliminary must be clear to those who are receiving them, as in the following examples:
  - Documents issued for "information only" to bidders to allow them to provide budget prices to a consultant do not need to be Authenticated; however, Documents issued to bidders who will rely on the adequacy of those Documents to provide fixed prices must be Authenticated.
  - Documents submitted for regulatory or permitting purposes, which, regardless of the level of detail within the Documents, are complete for the intended purpose, must be Authenticated.
- 3.2.2.2.3 A work-in-progress non-finalized Document, or a draft Document, should be clearly marked with a notation that confirms the status of the Document such as "Preliminary," "Draft," "For Review Only," "For Discussion Only," or "Not For Reliance."

#### 3.2.2.3 Bound Documents

- 3.2.2.3.1 Drawings, maps, or plans bound into another Document, such as those listed in Section 3.2.2.3.2 below, do not require Authenticating, provided the Document into which they are bound is Authenticated.
- 3.2.2.3.2 Bound Documents may include booklets, reports, assessments, investigations, and evaluations. However, drawing sets are not considered bound Documents and each drawing in a drawing set must be Authenticated.

#### 3.2.2.4 Reviewed Documents

3.2.2.4.1 Reviewers of Documents, where the Document was prepared by a Professional Registrant, should not Authenticate the Document. The Document should only be Authenticated by the Professional of Record. If the reviewer is Directly Supervising the preparation of the Document by a non-Professional Registrant, the reviewer is in fact the Professional of Record and should Authenticate the Document.

#### 3.2.2.5 Copies of Originally Authenticated Documents

- 3.2.2.5.1 Users of a Document that was previously Authenticated and delivered by the Professional Registrant may request copies of the original Document in hard copy or electronic format. Where a copy of an Authenticated Document will suffice, the copy does not need to be re-Authenticated.
- 3.2.2.5.2 A physical Document that has been Manually Authenticated may be scanned and transmitted electronically.
- 3.2.2.5.3 Professional Registrants are cautioned against issuing copies of Documents after they have been Authenticated (whether in hard copy, as an electronic PDF file, or in a fax transmission) without proper controls in place for preventing their Seals from being misused by others.

#### 3.2.2.6 Documents Issued in the Field

3.2.2.6.1 Documents issued in the field that are not Authenticated at the time must be followed up with an appropriately Authenticated Document, when they include professional engineering or professional geoscience decisions or opinions that change Documents issued for construction or implementation. Unless required by contractual obligations, the Authenticated Document does not also need to be issued to the recipient of the field-issued Document; however, the Authenticated Document must be filed and retained as a Record to meet the intent of this Guide.

#### 3.2.2.7 Articles and Presentations

3.2.2.7.1 Purely informative materials that are prepared only for general information and are not materials on which someone would be expected to take action or rely, should not be Authenticated. Technical journal articles, conference papers, magazine articles, and slide presentations are examples of materials that may fall within this category.

#### 3.2.2.8 Emails

- 3.2.2.8.1 During work on a project, it is common to exchange many emails. If emails contain professional engineering and/or professional geoscience opinions or decisions that will be relied on by others, then this information must be captured in an Authenticated Document within a reasonable timeframe. For example, the emailed information could be captured in the next issuance of an Authenticated drawing, Authenticated report, or in a weekly Authenticated memo.
- 3.2.2.8.2 Alternatively, if a Digital Seal is used in combination with the Digital Certificate, a Digital Seal and Digital Certificate can be applied to an email. This can be achieved by converting the email to a PDF Document, applying the Digital Seal and Digital Certificate, and attaching the PDF Document to a covering email. Professional judgment must be used to determine if the communication requires

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a Seal and what type of Authenticated Document is most appropriate.

#### 3.2.3 DRAWING TYPE

- 3.2.3.1 Computer-Aided Drafting and Design (CADD) Drawing Files
- 3.2.3.1.1 Clients, such as municipal governments, may request CADD drawing files in an editable format, such as DWG, for ongoing maintenance of their facilities or infrastructure, and to publish online for use by others. Drawings in this file format can be altered by the client.

A Professional Registrant has a number of options for Authenticating their original work to distinguish it from future changes to the drawings made by the client. The Professional Registrant may use the following methods:

- Embed the CADD file(s) in a portable document format (PDF) file and Authenticate the PDF file using a Digital Seal in conjunction with a Digital Certificate issued by a Certificate Authority that has been approved by Engineers and Geoscientists BC
- Manually Authenticate a hard-copy version of the drawings and provide the hard copy together with a set of editable CADD files that are not Authenticated
- Scan an Authenticated set of drawings and provide the Authenticated set together with a set of editable CADD files that are not Authenticated

#### 3.2.3.2 Shop Drawings

3.2.3.2.1 Refer to the Engineers and Geoscientists BC *Professional Practice Guidelines* –

Shop Drawings (Engineers and Geoscientists BC 2015) to determine which types of Shop Drawings should be Authenticated by Professional Registrants.

#### 3.2.3.3 Standardized Manufactured Components

- Drawings and specifications that were 3.2.3.3.1 prepared for standardized manufactured components that were built to a recognized standard and have an approved certified mark by a recognized body (such as the International Standards Organization or Canadian Standards Association), do not require Authentication and can be relied upon. A few examples include compressors, condensers, electrical panels, and similar catalogue items. Pre-engineered buildings are not considered standardized manufactured components and require Authentication as per Clause 3.2.5.4 of this Guide.
- 3.2.3.3.2 Note that some regulations may require Authentication of standardized manufactured components in certain instances. An example is the Occupational Health and Safety Regulation requirement for annual inspection and certification of certain types of equipment, as described in the <u>Professional Practice Guidelines –</u> <u>Annual Equipment Inspection and Certification in British Columbia</u> (Engineers and Geoscientists BC, 2020).
- 3.2.3.3.3 When standardized manufactured components are incorporated into a custom design of a larger system, Authentication of the entire system design is required.
- 3.2.3.3.4 When standardized manufactured components are modified, they are no

longer standard, and Authentication is required.

#### 3.2.3.4 Standard Drawings

- 3.2.3.4.1 A Professional Registrant may be asked to prepare a design drawing that is intended to be used in more than a single instance. The decision to Authenticate such a standard/generic drawing can only be made by the Professional Registrant who prepared the drawing. If it is not possible to sufficiently limit or specify the conditions under which the drawing can be used, the drawing should be left unauthenticated.
- 3.2.3.4.2 A Professional Registrant who subsequently uses an unauthenticated standard drawing is responsible for determining that the drawing is suitable for the current purpose and for its Authentication.
- 3.2.3.4.3 Authenticated standard/generic drawings may be incorporated into unauthenticated general drawings only if procedures for the use of the Authenticated standard/generic drawings is documented in the Firm's Professional Practice Management Plan (PPMP), which includes conditions and/or limits for which each Authenticated standard/generic drawing may be used.

Where unauthenticated general drawings are issued, it must be clearly noted that the engineering/geoscience content on the drawing has been produced following a documented quality management process using engineering/geoscience standards Authenticated by the Professional of Record under a Permit to Practice. The following is the recommended wording to be used: "<firm name> engineering/geoscience content on this drawing has been produced following <firm name's> documented quality management process using engineering/geoscience standards authenticated by the Professional of Record under Permit to Practice Number <10#####>"

3.2.3.4.4 A Firm may authorize a subcontractor to use standard/generic drawings Authenticated under the Firm's Permit to Practice number if either:

#### (1)

(a) the authorization is documented and retained as a Record by both parties, and

(b) the subcontractor Authenticates all documents in which standard/generic drawing(s) are used; or

(2)

(a) the authorization is documented and retained as a Record by both parties,

(b) the subcontractor follows the Firm's PPMP and the documented quality management process, and

(c) when unauthenticated general drawings are issued, it must be clearly noted on each drawing that the engineering/ geoscience content on the drawing has been produced following a documented quality management process using engineering/ geoscience standards Authenticated by the Professional of Record under a Permit to Practice, as per <u>Clause 3.2.3.4.3</u> of this Guide.

#### 3.2.3.5 Design-Build Drawings/Documents

3.2.3.5.1 Design-build Documents in a pre-bid package do not need to be Authenticated, as they are preliminary in nature and are prepared as part of the process of developing the final bid package for delivery. These Documents may include partially complete reports, letter reports, design briefs, memos, field memos, specifications, drawings, maps, or plans that provide recommendations, designs, directions, estimates, calculations, opinions, and interpretations or observations that involve technical professional engineering or professional geoscience matters. These Documents are typically prepared by the design-build team under contract with a construction contractor or contractor joint venture for the purpose of developing a commercial bid for a project procured via designbuild, engineering procurement construction, or public-private partnerships (P3).

3.2.3.5.2 The final bid package that will be submitted to the client(s), as well as any subsequent Documents, must be Authenticated prior to delivery. The design-build project model, which is commonly employed in P3 projects, involves preparing design-build drawings/Documents intended for use by those receiving and reviewing bid packages. Bid packages prepared for these purposes can vary in percentage of completion. There is a degree of uncertainty with respect to cost and impact on the final design.

> To address these issues, the Professional Registrant responsible for the professional engineering or professional geoscience work should incorporate the following declaration into the Documents that are being prepared and delivered at this stage of a project:

> > "The seal and signature of the undersigned on this document only certifies that the accuracy

and completeness of the design/information in the document is appropriate for the design-build tender stage of the project, and the state of completion of the document reflects that limited use.

The undersigned does not intend, warrant or guarantee, nor accept any responsibility for, the use of these documents for any purposes other than the designbuild tender stage."

#### 3.2.3.6 Final Design Drawings

3.2.3.6.1 Engineers and Geoscientists BC recommends that the Professional of Record responsible for design and field review services must Authenticate the final design drawings upon completion of the construction project. These drawings reflect design changes made during construction and incorporate contractrelated items such as addenda and change orders, but do not include asconstructed information provided by others.

#### 3.2.3.7 As-Built or As-Constructed Drawings

3.2.3.7.1 Engineers and Geoscientists BC discourages use of the terms "as-built drawings" or "as-constructed drawings," as those terms imply that the drawings show exactly what was built or constructed (in circumstances in which the Professional Registrant who supplied the drawings did not carry out or directly control the construction work). The terms may suggest an unintended level of certification or impose unintended liability on the Professional Registrant. For this reason, Engineers and Geoscientists BC recommends that the

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Professional Registrant instead use the term "record drawings."

Refer to Section 3.2.3.8 Record Drawings for the appropriate requirements for these drawings.

#### 3.2.3.8 Record Drawings

#### (I) GENERAL

- 3.2.3.8.1 There are substantial legal and liability issues associated with Professional Registrants Authenticating record drawings that include as-constructed conditions supplied by others who are not under the Direct Supervision of the Professional Registrants.
- 3.2.3.8.2 The Bylaws state that Professional Registrants must only Authenticate Documents that they have prepared in their professional capacity or that have been prepared under their Direct Supervision.
- 3.2.3.8.3 Professional Registrants are not permitted to Authenticate information on record drawings provided by others whom they did not Directly Supervise. This means that Professional Registrants are not permitted to take professional responsibility for record drawings that are prepared by, or are based on information or measurements provided by, a contractor, developer, operations manager, or others responsible for implementation or construction.
- 3.2.3.8.4 To Authenticate record drawings that include as-constructed conditions and remain in compliance with the Bylaws, the Professional Registrant (or the Professional Registrant's subordinate) must observe and record all asconstructed information, including measurements, used in the record

drawings. Even if the Professional Registrant (or the Professional Registrant's subordinate) had been present on the project site full-time, it is unlikely that the Professional Registrant could sufficiently observe and record all necessary measurements to take professional responsibility for asconstructed information on the record drawings.

#### (II) PROFESSIONAL LIABILITY INSURANCE

- 3.2.3.8.5 Authenticating record drawings also has serious implications for professional liability insurance coverage.
- 3.2.3.8.6 Standard professional liability insurance policies for Professional Registrants typically exclude coverage for claims against Professional Registrants resulting from warranties or guarantees that they provided, unless the Professional Registrant's liability would already exist at law.
- 3.2.3.8.7 If a Professional Registrant Authenticates and takes professional responsibility for record drawings, which include asconstructed information prepared by others, this may be considered a warranty or guarantee of the accuracy of the asconstructed information. As a result, the Professional Registrant's liability insurance coverage for any claim concerning the accuracy of the asconstructed information may be compromised or negated
- 3.2.3.8.8 If, however, the Professional Registrant prepares the record drawing only with asconstructed information observed and recorded by the Professional Registrant (or the Professional Registrant's subordinate), the Professional Registrant's liability would already exist

at law and the exclusion in the standard professional liability insurance policy would not apply.

#### (III) DECLARATION

3.2.3.8.9 To address these legal and liability issues, Engineers and Geoscientists BC recommends that the Professional Registrant responsible for the professional engineering or professional geoscience work and field review does not Authenticate record drawings when the as-constructed information was provided by others, unless the following declaration (or a similar one prepared by the Professional Registrant's insurance or legal advisor) is provided on the drawing:

> "The seal and signature of the undersigned on this drawing certifies that the design information contained in these drawings accurately reflects the original design and the material design changes made during construction that were brought to the undersigned's attention. These drawings are intended to incorporate addenda, change orders, and other material design changes, but not necessarily all site instructions.

The undersigned does not warrant or guarantee, nor accept any responsibility for, the accuracy or completeness of the as-constructed information supplied by others contained in these drawings, but does, by sealing and signing, certify that the as-constructed information, if accurate and complete, provides an asconstructed system which substantially complies in all material respects with the original design intent."

#### (IV) EXPOSURE TO DISCIPLINARY PROCEEDINGS

3.2.3.8.10 If Professional Registrants Authenticate record drawings containing as-

constructed information provided by others that they did not Directly Supervise, Professional Registrants may be exposed to disciplinary proceedings under the *Act* unless a declaration is provided on the drawings that is consistent with the one provided above.

#### 3.2.4 OTHER APPLICABLE LEGISLATION

3.2.4.1 Professional Registrants must be aware of and follow authentication requirements and protocols provided in other federal or provincial legislation, such as the *Occupational Health and Safety Regulation* of the *Workers Compensation Act*, the *BC Building Code*, and the *Safety Authority Act*.

#### 3.2.5 OUT-OF-PROVINCE ENGINEERED AND SUPPLIED EQUIPMENT

3.2.5.1 Where Professional Registrants specify using equipment, products, or components that require professional engineering design, manufacturing, or fabricating from out-of-province but for use on projects in BC, they should begin by preparing and Authenticating a performance specification for the equipment, products, or components. The specification should indicate the minimum functional, performance, interface, and quality requirements that apply to the equipment, products, or components being procured, and should require that the manufacturer orfabricator certify, with suitable evidence when required, that the equipment, products, or components meet the performance specification. In such circumstances, Engineers and Geoscientists BC does not require Professional Registrants to Authenticate the fabrication or vendor drawings.

- However, when Professional Registrants 3.2.5.2 receive such equipment, products, or components, they do have some obligations that require Authentication. If occupational health and safety legislation imposes any requirements, such as with guards and safety switches, Professional Registrants are responsible for checking and Authenticating that the equipment meets those requirements. Professional Registrants must also confirm that the equipment meets any Technical Safety BC requirements. Where the equipment requires services such as electrical, gas, or water feeds, Professional Registrants are responsible for designing and Authenticating Documents that specify the types of services and their connections, and show how the procured equipment connects to such services.
- 3.2.5.3 For field review requirements of out-ofprovince engineered and supplied equipment, see Section 3.8 of the <u>Guide</u> <u>to the Standard for Documented Field</u> <u>Reviews During Implementation or</u> <u>Construction</u> (Engineers and Geoscientists BC, 2023a).
- 3.2.5.4 Pre-engineered buildings designed and fabricated outside of BC are not considered equipment, products, or components; therefore, the design must be Authenticated by a Professional Registrant who is also responsible for field reviews during installation.

#### 3.2.6 NON-ENGINEERING OR NON-GEOSCIENCE DOCUMENTS

3.2.6.1 Professional Registrants must not Authenticate Documents that do not contain professional engineering or professional geoscience content, unless the Documents are required to be Authenticated by applicable legislation, associated regulations, the Bylaws, or policies endorsed by Engineers and Geoscientists BC Board.

#### 3.3 WHO IS PERMITTED TO AUTHENTICATE A DOCUMENT

#### 3.3.1 GENERAL

- 3.3.1.1 Documents associated with professional engineering and professional geoscience work, or projects that have been prepared and delivered by, or under the Direct Supervision of, a Professional Registrant, must be Authenticated by the Professional of Record.
- 3.3.1.2 As Authenticating a Document indicates that a Professional Registrant is taking professional responsibility for the Document, Authentication involves the practice of professional engineering or professional geoscience. Non-Practising Registrants therefore cannot Authenticate Documents. Non-Practising Registrants must secure their Manual Seals and/or Digital Seals and take reasonable steps to prevent their use by another person.

#### 3.3.2 PROFESSIONAL LICENSEES

3.3.2.1 Professional licensees engineering and professional licensees geoscience are granted scopes of practice, which are specified in their licences. Professional licensees engineering and professional licensees geoscience are authorized to Authenticate only those Documents that are within the defined scopes of practice identified on their licences.

### 3.3.3 WHO DECIDES WHETHER AND WHEN A DOCUMENT MUST BE AUTHENTICATED

- 3.3.3.1 Professional Registrants cannot avoid Authenticating Documents on the grounds of their job descriptions or at the request of employers or clients. Professional Registrants should, on their own, use their professional judgment to decide whether a Document must be Authenticated in accordance with the Bylaws.
- The process for Authenticating 3.3.3.2 Documents should not be automatic and should only occur after Professional Registrants have evaluated and are ready to accept professional responsibility for Documents. The legal liability of Professional Registrants is not dependent on whether or not the Professional Registrants Authenticate Documents that they prepared, or that were prepared under their Direct Supervision, and delivered to others who will rely on them. Professional Registrants are professionally responsible and accountable for any aspect of a project, work, or Document that they have prepared and delivered, whether or not they Authenticate any aspect of a project, work, or Document.
- 3.3.3.3 Before deciding to Authenticate a Document, a Professional Registrant typically prepares or has others prepare the Document, reviews the Document, and takes professional responsibility for the Document's content. Only after doing so, does the Professional Registrant Authenticate the Document and deliver it to those who will use or rely on it.

### 3.3.4 FEES ASSOCIATED WITH USE OF THE SEAL

3.3.4.1 A Professional Registrant may not charge a fee for simply Authenticating a Document. Authentication may be used only for professional engineering or professional geoscience work that the Professional Registrant carries out or reviews in their professional capacity, or for work carried out by others under their Direct Supervision.

### 3.3.5 AUTHENTICATING DOCUMENTS IN OTHER JURISDICTIONS

Professional Registrants who prepare 3.3.5.1 Documents related to products or services requiring the application of professional engineering or geoscience for works on projects located outside of BC must confirm the Authenticating requirements in the jurisdiction in which the works or projects are located. If there are no Authenticating requirements in the relevant jurisdiction, it is recommended that the Professional Registrant Authenticate the Documents. Where Authenticating requirements exist, Documents may only be Authenticated by individuals who are authorized to practice in the other jurisdiction.

#### 3.4 AUTHENTICATING IN PROFESSIONAL CAPACITY OR UNDER DIRECT SUPERVISION

#### 3.4.1 GENERAL

 3.4.1.1 Professional Registrants should only Authenticate Documents that they prepared or that were prepared under their Direct Supervision. See the <u>Guide to</u> <u>the Standard for Direct Supervision</u> (Engineers and Geoscientists BC, 2023b).

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- 3.4.1.2 Refer to <u>Section 3.5 Authenticating</u> <u>Documents with Limited Prior</u> <u>Involvement</u> for information on situations where Professional Registrants Authenticate Documents in their professional capacity despite having minimal or no prior involvement.
- 3.4.1.3 For guidance on intellectual property and copyright of Documents, refer to the *Guidelines on Intellectual Property*, published jointly by the Association of Consulting Engineering Companies– British Columbia (ACEC-BC), Engineers and Geoscientists BC, and the Architectural Institute of British Columbia (AIBC) (ACEC-BC; Engineers and Geoscientists BC; AIBC 2009).

#### 3.4.2 SINGLE DISCIPLINE DOCUMENTS

3.4.2.1 Documents involving a single discipline of engineering or geoscience must always be Authenticated by the Professional of Record. Where there is input from one or more Professional Registrant specialists, each specialist must also Authenticate the Document and qualify the extent of their responsibility. For example, in such a case, a structural engineer could qualify the authentication with a statement such as, "For Wood Trusses Only."

#### 3.4.3 MULTIPLE DISCIPLINE DOCUMENTS

3.4.3.1 If more than one engineering and/or geoscience discipline is included in one Document, the Professional Registrants for each discipline must Authenticate the portions of the Document for their specific disciplines and qualify the extent of their responsibilities. Where there is input from one or more Professional Registrant specialists, each specialist must also Authenticate the Document and qualify the extent of their responsibility. For example, a structural engineer could qualify the authentication with a statement such as, "For Structural Aspects Only."

#### 3.4.4 REVISED DOCUMENTS

- 3.4.4.1 When an Authenticated Document is revised by, or is revised under the Direct Supervision of, the same Professional Registrant who was responsible for the originally issued Document, the following applies:
  - The act of revising should be clearly indicated in the Document's title block.
  - Any revisions should be clearly identified.
  - When the Professional Registrant is ready to accept professional responsibility for the revisions, the Professional Registrant must Authenticate and date the Document to indicate the date of the revisions.
- 3.4.4.2 When an Authenticated Document is revised by, or is revised under the Direct Supervision of, a Professional Registrant other than the Professional Registrant who was responsible for the originally issued Document, the following applies:
  - The act of revising should be clearly identified in the Document's title block.
  - Only the revisions, including all elements of the Document affected by the revisions, must be Authenticated and dated by the Professional Registrant who is taking professional responsibility for the revisions

3.4.4.3 By Authenticating the revised Document, the Professional Registrant who Authenticates the revisions is responsible only for the revisions and their appropriateness in the revised Document. Care should be taken to clearly identify the revisions, as this identifies the boundary of professional responsibility between the Professional of Record for the original Document and the one taking responsibility for the revised Document.

#### 3.4.5 REISSUED DOCUMENTS

- 3.4.5.1 When an Authenticated Document is reissued by, or is reissued under the Direct Supervision of, the same Professional Registrant who was responsible for the originally issued Document, the following applies:
  - The act of reissuing should be clearly indicated in the title block.
  - If a reissued Document is reproduced from an unauthenticated master Document, the Professional Registrant must Authenticate the reproduced Document.
  - When reissuing a copy of a Document that was previously Authenticated, the same Professional Registrant who originally Authenticated the Document must initial and date the reissued copy of the Document.
- 3.4.5.2 An example of a Document reissued without revisions may be drawings previously prepared for a delayed phase of a project.
- 3.4.5.3 When an Authenticated Document is reissued by or under the Direct Supervision of a Professional Registrant other than the Professional Registrant

responsible for the originally issued Document, the following applies:

- The act of reissuing should be clearly indicated in the title block.
- The reissuing Professional Registrant must Authenticate the reissued Document, thereby accepting professional responsibility for the Document.
- 3.4.5.4 When a Professional Registrant other than the Professional Registrant responsible for the originally issued Document reissues or revises a Document, there is no requirement for the original Professional Registrant to be made aware of these actions.

#### 3.4.6 TRANSLATED DOCUMENTS

- 3.4.6.1 A Professional Registrant may be requested to Authenticate a Document in one or more languages other than their working language(s).
- 3.4.6.2 The act of translating engineering or geoscience Documents is the practice of professional engineering or professional geoscience; therefore, it is unlawful for someone who is not a Professional Registrant to translate an engineering or geoscience Document.

It would also be unprofessional for a Professional Registrant to Authenticate an engineering or geoscience Document that was translated by someone who is not a Professional Registrant into a language other than their working language(s), or to Authenticate a Document that is entirely or partly in a language other than their working language(s).

#### 3.5 AUTHENTICATING DOCUMENTS WITH LIMITED PRIOR INVOLVEMENT

#### 3.5.1 GENERAL

- 3.5.1.1 Professional Registrants are occasionally asked to Authenticate Documents prepared by others who were not under their Direct Supervision. This may involve a recently prepared Document or a Document that was prepared years prior. Professional Registrants should generally avoid Authenticating a Document unless the Document was prepared in their professional capacity or under their Direct Supervision.
- When Professional Registrants 3.5.1.2 Authenticate Documents they did not prepare, they are accepting full professional responsibility for the content of that Document in the same manner and extent as if the Document had been prepared in their professional capacity. This can result in a Professional Registrant being exposed to legal and insurance liability, as well as professional discipline, if the contents of the Document do not meet the standards expected of professional practice. In cases where it cannot be avoided, the Professional Registrant being asked to Authenticate the Document should follow the guidance provided in the following examples.
- 3.5.1.3 Example 1: Original Professional Registrant is no longer available

There are circumstances in which the original Professional Registrant who carried out the work and prepared the Document is no longer available to Authenticate the Document. A Professional Registrant can Authenticate the Document only if the Professional Registrant who originally prepared the Document is in fact no longer able to Authenticate it.

- 3.5.1.4 Valid reasons why the Professional Registrant who prepared the Document cannot Authenticate the Document include circumstances where the Professional Registrant (list is not inclusive):
  - has ceased being a Professional Registrant;
  - is medically incapable of Authenticating the Document
  - cannot be contacted despite the best efforts of the person seeking to have the Document Authenticated; or
  - is deceased.
- 3.5.1.5 Invalid reasons why the Professional Registrant who prepared the Document will not or cannot Authenticate the Document include circumstances where the Professional Registrant (list is not inclusive)
  - is involved in contractual disputes with the client; or
  - is unavailable due to being on vacation or leave.
- 3.5.1.6 Professional Registrants cannot withhold Authentication of a Document if the Document was prepared in their professional capacity and is complete for its intended purpose. This situation often arises in the course of contractual disputes, where a Professional Registrant may be tempted to withhold Authentication until the client delivers payment. Refusing to Authenticate a Document until payment is delivered or some other contractual dispute is resolved is inappropriate and unprofessional behaviour.

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- 3.5.1.7 The Professional Registrant may be requested to Authenticate a Document prepared by another Professional Registrant not under their Direct Supervision by an employer, client, Authority Having Jurisdiction (AHJ) or other government body or agency. In such cases, the Professional Registrant should request from the employer, client, AHJ, or other government body or agency a written explanation why the original Professional Registrant is unable to Authenticate the Document.
- 3.5.1.8 If the Professional Registrant determines that the reason the original Professional Registrant cannot Authenticate the Document is invalid, as per this Guide, the Professional Registrant must notify the employer, client, AHJ, or other government body or agency in writing that they will not Authenticate the Document. If the employer, client, AHJ, or other government body or agency is insistent that the new Professional Registrant Authenticate the Document, Professional Registrants should consider removing themselves from the situation and notifying Engineers and Geoscientists BC.
- 3.5.1.9 If the Professional Registrant determines that the reason the original Professional Registrant cannot Authenticate the Document is valid, prior to accepting professional responsibility and Authenticating the Document, the Professional Registrant should consider the following before Authenticating the Document and accepting professional responsibility for it:
  - What is the purpose of the Document, including who will rely on it and the types of decisions that may be made based on it.

- Does the Professional Registrant have the appropriate expertise in the necessary area of practice to make a judgment on the adequacy of the Document to be Authenticated.
- Was the work conducted and Document prepared by the original Professional Registrant or someone under their Direct Supervision.
- If the Document was prepared by someone under Direct Supervision, the Professional Registrant should consider discussing the Document with the person who prepared it.
- Does the Professional Registrant have or can they gain access to the project Documentation.
- Can the Professional Registrant confirm that the original Professional Registrant who carried out the work and prepared the Document
  - a) had the appropriate expertise to carry out the work,
  - b) was a Professional Registrant at the time the worked was carried out and the Document prepared, and
  - c) had a formal quality management system in place when the work was carried out, including documented checks.

The Professional Registrant must Document these considerations prior to determining whether to undertake the task. If the Professional Registrant undertakes the task, they must carry out an appropriate review of the professional engineering or professional geoscience work prior to Authenticating the Document. An appropriate review would include, at a minimum, a review of all key engineering or geoscience issues but may require more in-depth review depending on the nature of the work.

3.5.1.10 Example 2: Document was prepared by a person who is not a Professional Registrant in BC

The Professional Registrant is asked to Authenticate Documents prepared by someone who is not an engineering or geoscience professional in BC, and Authentication is required to permit the use or application of the Document for a project or works located within BC. This includes Documents prepared by engineers or geoscientists who are entitled to practice in other jurisdictions but not entitled to practice in BC.

- In this case, the Professional Registrant must carry out a detailed, thorough, and Documented review and assessment of the engineering or geoscience Document, including verification of inputs, assumptions, calculations, and any other relevant criteria prior to Authenticating the Document.
- By Authenticating the Document, the Professional Registrant assumes full professional responsibility for the Authenticated Document.

# 3.6 HOW TO AUTHENTICATE A DOCUMENT

#### 3.6.1 GENERAL

3.6.1.1 A Seal is not complete without a signature and date. The date must be the date of authentication, even though this date may differ from the date on the Document. Recommended best practice is that the date overlaps with the Seal to mitigate the risk of unauthorized copying of the Seal. This recommendation applies to both Manual Seals and Digital Seals.

- 3.6.1.2 Authenticated Documents may not be Authenticated by another individual signing on behalf of ("per") the Professional Registrant who is identified on the Seal.
- 3.6.1.3 Professional Registrants may express and give written authority to another person to apply the Professional Registrant's Manual Seal and date of authentication. The authorization must be specific to each application and not an ongoing authorization. The hand-written signature and/or digital certification must always remain the responsibility of the Professional Registrant and they must not provide authority to another person to do this.
- 3.6.1.4 A Professional Registrant Digitally Authenticating Documents must not, under any circumstances, allow another person to apply their Digital Certificate or gain access to the Digital Certificate or to any password, PIN, or other factor used to secure access to or control of the Professional Registrant's Digital Certificate.
- 3.6.1.5 All Authenticated Documents must also have the Firm's Permit to Practice number displayed visibly somewhere on the Document. The means and methods of applying the Permit to Practice number must be documented in the Firm's Professional Practice Management Plan and all Registered Professionals should be trained on their Firm's procedures."

#### 3.6.2 TYPES OF SEALS AND THEIR USE

3.6.2.1 The traditional ink stamp Seal issued by Engineers and Geoscientists BC to all Professional Registrants is used to Manually Authenticate physical Documents. The Seal is applied along with the Professional Registrant's signature and date.

> The authentication of Documents prepared in an electronic form require the application of a Digital Seal in combination with a Digital Certificate. In order to be recognized as equivalent to a physical Document, see Section 3.6.4 Digital Seals and Digital Certificate Technology. All Professional Registrants receive a Manual Seal as part of their membership; however, Professional Registrants can choose to additionally purchase a long-reach embosser Seal, which is acceptable to use on professional Documents.

- 3.6.2.2 For guidance on the location of the Seal for different types of Documents, refer to Table 1: Where to Apply Professional Seals
- 3.6.2.3 For examples of the various professional Seals, refer to Figure 1: Examples of Engineers and Geoscientists BC Seals.

#### 3.6.3 MANUAL SEAL

- 3.6.3.1 The ink impression of the ink stamp Seal should be clear and legible, and the Document must be signed and dated adjacent to or across the Seal. It is preferred if the ink used for the ink stamp Seal, and the ink used for the signature and date, are contrasting colours.
- 3.6.3.2 To mitigate the risk of unauthorized copying of the Seal, it is recommended that the date touch or cross the Seal. If

the Document will be posted online for public tender or other use, it is acceptable to add a qualifying statement across/behind the Seal, such as "BC Bid Tender."

### 3.6.4 DIGITAL SEALS AND DIGITAL CERTIFICATE TECHNOLOGY

- 3.6.4.1 Professional Registrants mayAuthenticate electronic Documents usinga Digital Seal in conjunction with a DigitalCertificate.
- 3.6.4.2 To Digitally Authenticate a Document, a Professional Registrant must:
  - 1. apply their Digital Seal;
  - apply a digital image of their signature in the vicinity of the Digital Seal;
  - 3. apply a digital image of the date of authentication preferably touching the Digital Seal; and
  - 4. apply their Digital Certificate (Note: A Professional Registrant must not allow another person, under any circumstances, to: (a) apply their Digital Certificate; or (b) gain access to their Digital Certificate or to any password, PIN, or other factor used to secure access to or control over their Digital Certificate.)
- 3.6.4.3 Where an electronic Document has been Digitally Authenticated, the electronic file is the original and any printed or scanned reproductions are copies. It is acceptable to provide these copies; however, these are convenience copies and clients and AHJs retain the right to request that originals be provided in either electronic or physical form.

#### 3.6.5 MINIMUM LEGAL REQUIREMENTS

- 3.6.5.1 The minimum legal requirements established under the Bylaws regarding the use of Digital Seals and Digital Certificates are as follows:
  - Professional Registrants must use a Digital Seal issued by Engineers and Geoscientists BC (this requirement can also be met by using a Digital Certificate technology service provider that has been independently confirmed to meet Engineers and Geoscientists BC best practices, as described in <u>Section 3.6.6 Certificate</u> <u>Authority Requirements</u>).
  - The Seal must bear the Professional Registrant's first initial, middle initial(s), and last name, with the Professional Registrant's designation stated as either
    - "Professional Engineer, Province of British Columbia",
    - "Professional Geoscientist, Province of British Columbia",
    - "Engineering Licensee, Province of British Columbia",
    - "Professional Licensee Engineering, Province of British Columbia",
    - "Geoscience Licensee, Province of British Columbia", or
    - "Professional Licensee Geoscience, Province of British Columbia".
  - The Digital Seal must be capable of being "returned" to Engineers and Geoscientists BC; that is, a Professional Registrant must be able to show Engineers and Geoscientists BC that they are no longer able to use the Digital Seal.

• The Digital Certificate must include the date the Document was Authenticated.

#### 3.6.6 CERTIFICATE AUTHORITY REQUIREMENTS

- 3.6.6.1 For a third party to be considered for approval by Engineers and Geoscientists BC Board to issue Digital Certificates to Professional Registrants, they must:
  - 1. be experienced in providing this technology to registrants of other professional associations
  - 2. have the resources, technical support, and systems in place to provide continuity of service for the foreseeable future;
  - 3. have protocols consistent with Engineers and Geoscientists BC's authority to regulate the use of the Professional Registrant's Seal, by allowing Engineers and Geoscientists BC to revoke or suspend the Professional Registrant's ability to use their Seal;
  - 4. have protocols consistent with Engineers and Geoscientists BC's need to ensure that only a Professional Registrant is granted the authority to possess and use a Digital Seal with their personalized Digital Certificate;
  - 5 have a platform that offers flexibility and ease of use for a wide range of purposes and applications (e.g., compatible with different file formats, ability to Authenticate multiple sets of Documents in a single operation)
  - 6. have Digital Certificate technology that is compatible with that used by registrants of the AIBC;
  - use a "Public Key Infrastructure", which is a combination of hardware, software, people, policies, and procedures needed to

QUALITY MANAGEMENT GUIDES GUIDE TO THE STANDARD FOR THE AUTHENTICATION OF DOCUMENTS create, manage, distribute, use, store, and revoke digital signatures;

- 8. have a Digital Certificate that is compliant with the International Telecommunications Union X509v3 standard;
- 9. maintain the Digital Certificate under the sole control and possession of the Professional Registrant;
- 10. allow the Digital Certificate to be stored on the media of the Professional Registrant's choice (e.g., hard drive, memory stick); and
- 11. provide interfaces between the technology and the software used by Professional Registrants so the image of the Engineers and Geoscientists BC professional Seal with signature and date appears when printing the Document.

#### 3.6.7 NON-INK SIGNATURES

3.6.7.1 It is acceptable to use a touch screen or electronic pen for a Non-Ink Signature, as long as it is done in a manner that requires a unique gesture in each instance that a Document is signed. The Professional of Record must sign and date the Document adjacent to or across the Seal, and the signature must be applied by hand in each instance. There is a strict prohibition against copying an image of the signature and using it on other Documents or in other instances of Document authentication.

> A Non-Ink Signature is not a secure digital signature that attaches a Digital Certificate and does not protect the Document from alteration. Engineers and Geoscientists BC cannot confirm to those receiving such Documents electronically

that they have an appropriate level of security, protection of Document integrity, and proof of authenticity equivalent to a physical Document that has been Manually Authenticated by the Professional Registrant.

#### 3.6.8 UNACCEPTABLE SEALS

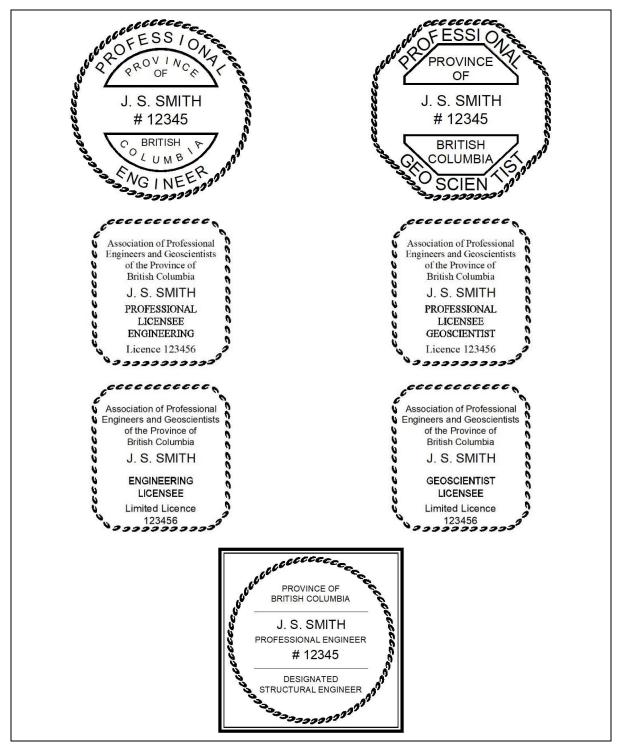
3.6.8.1 Engineers and Geoscientists BC does not approve the sealing of Documents in any manner other than as prescribed in this

> Guide, including but not limited to sealing of Documents with stick-on Seals, photocopied Seals, Digital Seals complete with an electronic image of signature in electronic files without a Digital Certificate, and electronically scanned images of ink stamp Seals applied to original Documents.

- 3.6.8.2 Placing an image of a handwritten signature and date with a Seal on an electronically prepared Document is not equivalent to Authenticating the Document and is not approved by Engineers and Geoscientists BC. To be acceptable, the minimum requirement is a live signature applied by the Professional Registrant named on the Seal.
- 3.6.8.3 Placing text, a graphic, or any other marking on an unauthenticated Document indicating that an appropriately Authenticated version exists at another location is not acceptable. If unauthenticated convenience copies are provided, an appropriate disclaimer should be placed on such copies to avoid unintended usage.

#### Table 1: Where to Apply Professional Seals

TYPE OF DOCUMENT	LOCATION
Drawings	In an allotted space in the title block or in the lower right-hand corner of each drawing
Specifications	On the first page or cover sheet of the section to which the Seal applies or, if responsible for the overall specification, on the cover sheet for the overall specification
Reports	Next to the title of the author or signature in the report, whether at the beginning or end of the report
Other Written Documents	Next to the title of the author or signature on the Document, whether at the beginning or end of the Document
Digital Files	Use a Digital Seal and signature only in combination with Digital Certificate technology that has been approved by Engineers and Geoscientists BC, and in locations appropriate to the type of Document



Acceptable examples of Seals (sign and date adjacent to or across the Seal).

Figure 1: Examples of Engineers and Geoscientists BC Seals

3.7 SUGGESTED METHODS FOR ISSUING AUTHENTICATED DOCUMENTS

#### 3.7.1 GENERAL

- 3.7.1.1 The Bylaws require that Professional Registrants Authenticate Documents that they prepare and intend to deliver, or that have been prepared and will be delivered under their Direct Supervision. Before deciding whether an issued Document must be Authenticated according to the Bylaws, the Professional Registrant should ask:
  - 1. Does the Document contain information resulting from the practice of professional engineering or professional geoscience?
  - 2. Is the Document complete for its intended purpose?
  - 3. Will the Document be relied upon by others (whether for bidding, permitting, construction, implementation, use, or other reliance)?

If the response to all three questions above is yes, then the Professional Registrant must Authenticate the Document.

If the Document is for information only, discussion purposes, or collaboration, or if the Document is not in its final form and it is obvious to the receiver that they cannot rely on it to price, construct, install, implement, or use, do not Authenticate the Document.

3.7.1.2 Section 3.7.2 Physically Issued Documents and Section 3.7.3 Digitally Issued Documents describe some practical methods for issuing Documents that must be Authenticated in compliance with the Bylaws.

#### 3.7.2 PHYSICALLY ISSUED DOCUMENTS

- 3.7.2.1 The following are acceptable ways to physically issue an Authenticated Document:
  - Print the Document, apply the Manual Seal to the physical Document, sign and date the Seal, and issue the physical Document. An Authenticated set must be retained by the Professional Registrant as a Record. This method may not be practical when issuing a large number of sets.
  - Print the Document, apply the Manual Seal to the physical Document, sign and date the Seal, reproduce multiple hard copies as needed, and issue the copies of the Document. The Professional Registrant does not need to originally Authenticate the copies. An Authenticated set must be retained by the Professional Registrant as a Record.
  - Apply a Digital Seal to the Document file, print the Document, sign and date the Seal on the original Document, reproduce multiple hard copies as needed, and issue the copies of the Document. Remove the Digital Seal from the working Document files. The Professional Registrant does not need to originally Authenticate the copies. An Authenticated set must be retained by the Professional Registrant as a Record.

- Apply a Digital Seal to the file with a Digital Certificate, add fine print to the digital signature zone stating, "This document is a printed copy from a Digitally Authenticated original," and print the Document. An Authenticated set must be retained by the Professional Registrant as a Record.
- 3.7.2.2 The Authenticated set retained as a Record may be either a physical original, a photocopy, a Digitally Authenticated original, or a scanned electronic copy.

#### 3.7.3 DIGITALLY ISSUED DOCUMENTS

- 3.7.3.1 The following are acceptable ways to digitally issue an Authenticated Document:
  - Apply a Digital Seal to the file with a Digital Certificate and transmit the

file to others. An Authenticated set must be retained by the Professional Registrant as a Record.

- Print the Document(s), Manually Authenticate the Document, scan the original of the Authenticated Document, and issue the scanned file digitally. An Authenticated set must be retained by the Professional Registrant as a Record.
- 3.7.3.2 Note: The application of an image of the Professional Registrant's signature to a Document is not permitted, unless it is done in conjunction with an appropriate Digital Certificate. A Professional Registrant who is aware of or authorizes an inappropriate application of an image of their signature in conjunction with their professional Seal may be disciplined.

# 4.0 REFERENCES

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Engineers and Geoscientists BC. 2023c. *Quality Management Guides – Guide to the Standard for Documented Independent Review of Structural Designs*. Version 3.0. Burnaby, BC: Engineers and Geoscientists BC. [accessed: 2023 June 9]. https://www.egbc.ca/Practice-Resources/Individual-Practice/Ouality-Management-Guides.

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Engineers and Geoscientists BC. 2015. *Professional Practice Guidelines – Shop Drawings*. Version 2.0. Burnaby, BC: Engineers and Geoscientists BC. [accessed: 2023 June 9]. <u>https://www.egbc.ca/app/Practice-Resources/Individual-Practice/Guidelines-Advisories</u>.

Engineers and Geoscientists BC. 2021. *Regulation of Firms Permit to Practice Manual*. Version 1.1. Burnaby, BC: Engineers and Geoscientists BC. [accessed: 2023 June 9]. <u>https://www.egbc.ca/Practice-Resources/Firm-Practice.</u>

## 5.0 APPENDIX

Appendix A: When Authentication is RequiredA-1
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### APPENDIX A: WHEN AUTHENTICATION IS REQUIRED

STAGE OR TYPE OF Document	INTERNALLY ISSUED CONCEPTUAL OR PRELIMINARY DOCUMENTS <sup>I</sup> (not intended or ready to be relied upon by others)	EXTERNALLY ISSUED OR FORMALLY PREPARED AND DELIVERED INTERNAL DOCUMENTS Delivered to external users such as clients, contractors, government ministries, or AHJs Delivered to internal users within the Firm such as other departments, branches, offices, or divisions for external or formal internal use <sup>2</sup>			RETAIN DOCUMENT?
		SINGLE DISCIPLINE – SINGLE PROFESSIONAL OF RECORD	SINGLE DISCIPLINE – MULTIPLE PROFESSIONALS OF RECORD	MULTIPLE DISCIPLINES	
PRELIMINARY OR DRAFT DOCUMENT A work in progress; non-finalized Document <sup>3</sup>	No	No, unless required by other laws or regulation If required, Authenticate as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	No, unless required by other laws or regulation If required, Authenticate as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	No, unless required by other laws or regulation If required, Authenticate as per originally issued Document and mark accordingly (e.g., PRELIMINARY, NOT FOR IMPLEMENTATION, NOT FOR CONSTRUCTION)	Yes, if submitted for legal or regulatory purposes
ESTIMATES	No	No, unless the Document contains professional engineering or professional geoscience content	No, unless the Document contains professional engineering or professional geoscience content	No, unless the Document contains professional engineering or professional geoscience content	Yes, if work awarded is based on the Document
BID, TENDER, PURCHASE, OR PROCUREMENT DOCUMENTS Documents prepared for any procurement process related to professional engineering and/or professional geoscience works, including any addenda incorporated in Documents during bidding process	No, if the tender, purchase or procurement Documents are being issued to bidders as information only and the bidders understand that they cannot rely on their completeness or accuracy (e.g., for budget pricing based on general works and degree of complexity)	Yes, Authenticate as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes, Authenticate as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes, Authenticate as per originally issued Document and mark accordingly (e.g., FOR TENDER ONLY, NOT FOR CONSTRUCTION, NOT FOR IMPLEMENTATION)	Yes
STANDARD DRAWING <sup>4</sup>	No	Yes	Yes, each professional to Authenticate and qualify area of responsibility	Yes, each professional to Authenticate and qualify area of responsibility	Yes

<sup>&</sup>lt;sup>1</sup> For discussion or review purposes only as the validity of the contents are not intended or ready to be relied on by others.

Refer to Internal Documents and Preliminary Documents in Section 3.2.2.1 and Section 3.2.2.2 of this Guide. Refer to Internal Documents and Preliminary Documents in Section 3.2.2.1 and Section 3.2.2.2 of this Guide. Refer to Preliminary Documents in Section 3.2.2.2 of this Guide. Refer to Standard Drawings in Section 3.2.2.2 of this Guide. Refer to Standard Drawings in Section 3.2.3.4 of this Guide. A professional who subsequently uses an unauthenticated standard Document must determine that it is suitable for the current purpose and Authenticate it accordingly.

SPECIFICATIONS	No	Yes	Yes, each professional to Authenticate and qualify area of responsibility	Yes, each professional to Authenticate and qualify area of responsibility	Yes
ISSUED FOR PERMITTING Documents prepared and deemed ready for permit purposes	No	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR PERMIT PURPOSES ONLY	Yes
DESIGN-BUILD	No, if the Documents are being used for internal purposes in preparation of the bid package	Yes, Authenticate as per guidance in <u>Section 3.2.3.5</u>	Yes, Authenticate as per guidance in <u>Section 3.2.3.5</u>	Yes, Authenticate as per guidance in <u>Section 3.2.3.5</u>	Yes
ISSUED FOR CONSTRUCTION, IMPLEMENTATION OF USE DOCUMENTS Documents prepared and deemed ready for construction, implementation of use, including reissued bid Documents where no changes were made during bidding	Not Applicable	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in <u>Section 3.4.5</u>	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in <u>Section 3.4.5</u>	Yes, Authenticate as per originally issued Document and mark accordingly ISSUED FOR CONSTRUCTION, IMPLEMENTATION OR USE If reissuing bid Documents, see guidance in <u>Section 3.4.5</u>	Yes
REVISED DOCUMENT <sup>5</sup> Document changed from a master Document, or an earlier revised Document, by a different Professional Registrant	No	Yes, clearly identify revisions; Professional Registrant revising Document must Authenticate with date revised	Yes, clearly identify revisions; Professional Registrant revising Document must Authenticate with date revised	Yes, clearly identify revisions; Professional Registrant revising Document must Authenticate with date revised	Yes
FINAL DESIGN DRAWINGS Document that includes all design changes made by change order during construction, or by addenda during bidding, and not previously incorporated in Documents	Not Applicable	Yes, Authenticate as per originally issued Document	Yes, Authenticate as per originally issued Document	Yes, Authenticate as per originally issued Document	Yes

<sup>&</sup>lt;sup>5</sup> Refer to <u>Section 3.4.4</u> of this Guide for further information regarding a different Professional of Record Authenticating revised Documents.

RECORD DRAWINGS <sup>6</sup> Document that includes as-constructed or as-implemented information	Not Applicable	No, unless required to do so If required, Authenticate as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see Clause 3.2.3.8.9)	No, unless required to do so If required, Authenticate as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see <u>Clause 3.2.3.8.9</u> )	No, unless required to do so If required, Authenticate as per originally issued Document and, if Document includes as-constructed information supplied by others, add declaration not accepting responsibility for that information (see <u>Clause 3.2.3.8.9</u> )	Yes
FIELD DOCUMENTS <sup>7</sup> Professional Documents prepared and issued in the field that contain opinions or decisions that change the issued for construction Documents	Not Applicable	Authenticate in the field or follow up by preparing in office, Authenticating as per originally issued Document, and retaining in files This Guide does not require that an Authenticated copy be sent to field recipient	Authenticate in the field or follow up by preparing in office, Authenticating as per originally issued Document, and retaining in files This Guide does not require that an Authenticated copy be sent to field recipient	Authenticate in the field or follow up by preparing in office, Authenticating as per originally issued Document, and retaining in files This Guide does not require that an Authenticated copy be sent to field recipient	Yes
SHOP DRAWINGS Documents prepared and designed by a Professional Registrant for a fabricator, supplier, equipment manufacturer, installer, or erector	No	Yes, Authenticate as per originally issued Document (see the Professional Practice Guidelines – Shop Drawings)	Yes, Authenticate as per originally issued Document (see the Professional Practice Guidelines – Shop Drawings)	Yes, Authenticate as per originally issued Document (see the Professional Practice Guidelines – Shop Drawings)	Yes
<b>REPORTS</b> Prepared by a Professional Registrant	No	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes, next to the title of the author or signature in the report, whether at the beginning or end of the report	Yes
RECORDS OF INDEPENDENT REVIEWS <sup>8</sup>	Not Applicable	Yes, Authenticate in the Record of the Independent Review on the appropriate form	Yes, Authenticate in the Record of the Independent Review on the appropriate form	Yes, Authenticate in the Record of the Independent Review on the appropriate form	Yes
DRAWINGS, MAPS, OR PLANS BOUND INTO ANOTHER BOUND DOCUMENT Bound booklets containing reports, drawings, plans, maps	No	No, provided the bound Document is Authenticated	No, provided the bound Document is Authenticated	No, provided the bound Document is Authenticated	Yes

QUALITY MANAGEMENT GUIDES

GUIDE TO THE STANDARD FOR THE AUTHENTICATION OF DOCUMENTS

 <sup>&</sup>lt;sup>6</sup> Refer to <u>Section 3.2.3.8</u> of this Guide for further information regarding Authenticating record drawings.
 <sup>7</sup> Refer to <u>Section 3.2.2.6</u> of this Guide for further information regarding Authenticating field Documents.
 <sup>8</sup> Refer to the forms and checklists in Appendix A of the quality management guides, *Guide to the Standard for Documented Independent Review of Structural Designs* and *Guide to the Standard for Documented Independent Review of High-Risk Professional Activities or Work* (Engineers and Geoscientists BC 2023c, 2023d).

DOCUMENTS SUBMITTED IN RESPONSE TO DEMAND-SIDE LEGISLATION (e.g., the Occupational Health and Safety Regulations, BC Building Code, or Safety Authority Act)	Not Applicable	Yes, Authenticate as per originally issued Document	Yes, Authenticate as per originally issued Document	Yes, Authenticate as per originally issued Document	Yes
ELECTRONIC DOCUMENT Documents in digital format containing professional engineering or professional geoscience information	No	Yes, Authenticate as per originally issued Document using Digital Seal with Digital Certificate, or print to physical form, Authenticate and retain in files	Yes, Authenticate as per originally issued Document using Digital Seal with Digital Certificate, or print to physical form, Authenticate and retain in files	Yes, Authenticate as per originally issued Document using Digital Seal with Digital Certificate, or print to physical form, Authenticate, and retain in files	Yes
DOCUMENTS FOR NON-BC WORK Engineering or geoscience projects geographically located outside of BC	No	Authenticate only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Authenticate as a Professional Registrant	Authenticate only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Authenticate as a Professional Registrant	Authenticate only if a member or licensee in the respective jurisdiction where the works or projects are located Where there is no licensure requirement, Authenticate as a Professional Registrant	Yes
DOCUMENT PREPARED BY A NON- BC PROFESSIONAL Document prepared by a Professional Registrant in another jurisdiction who is not licensed to practice in BC	No	Authenticate as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Authenticate as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Authenticate as per originally issued Document only after sufficient review of the project/works and Document, to assume full responsibility for both	Yes, if Authenticated
DOCUMENT NOT PREPARED UNDER DIRECT SUPERVISION Document prepared by an individual not under the Direct Supervision of the Professional Registrant	No	Authenticate as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Authenticate as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Authenticate as per originally issued Document only after sufficient review of project/works and Document, to assume full responsibility for the Document including altering or revising the Document	Yes, if Authenticated

TRANSLATED DOCUMENTS <sup>9</sup> Document containing the same information in more than one language	Νο	Authenticate as per originally issued Document Authenticate translated Documents only if fluent in language to which Document translated	Authenticate as per originally issued Document Authenticate translated Documents only if fluent in language to which Document translated	Authenticate as per originally issued Document Authenticate translated Documents only if fluent in language to which Document translated	Yes, if Authenticated
DOCUMENTS IN MULTIPLE LANGUAGES <sup>10</sup>	No	Authenticate in multiple languages only if fluent in those languages	Authenticate in multiple languages only if fluent in those languages	Authenticate in multiple languages only if fluent in those languages	Yes, if Authenticated
ASSURANCE OF INSURANCE	No	No, unless required by other laws or regulation	No, unless required by other laws or regulation	No, unless required by other laws or regulation	No

 <sup>&</sup>lt;sup>9</sup> Refer to <u>Section 3.4.6</u> of this Guide for further information about Authenticating translated Documents
 <sup>10</sup> Refer to <u>Section 3.4.6</u> of this Guide for further information about Authenticating Documents in multiple languages.

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