

Naming and Submitting Roadway Drawings

1. Background

Submission of drawings for road projects at the tender stage and for record keeping as part of the final details submission is a contractual commitment on most road construction projects as per the [Engineering Consultant Guidelines](#) Vol. 1 and Vol. 2 documents. Details on the requirements for these drawings are provided in the Engineering Drafting Guidelines for Highway and Bridge Projects (section 2.2.5), and submission details are documented in the Project Administration Manual (e.g. PAM bulletin No. 11)

Drawings submissions for road projects have traditionally been denoted as “RD” drawings for longitudinal components (e.g. road plans and profiles) and “IN” drawings for point components such as intersections, interchanges, VIS (vehicle inspection stations), MIS (mobile inspection stations), SRA (safety rest areas) and RWIS (Road Weather Information System).

RD drawings have traditionally been assigned sequential 5 digit numbers that show up on the drawing and in the digital file name for the PDFs and CAD files. However, these numbers do not appear to offer additional value and take effort to coordinate assignment. In addition, assignment of numbers to each sheet in a drawing set requires assignment later in the project when the total number of sheets is known.

IN drawings have traditionally been assigned unique 4 digit numbers, managed by the AT GIS group as the unique identifier for that point, combined with a 1 or 2 digit drawing number that is assigned sequentially. This combination shows up on the drawing and in the digital file name for the PDFs and CAD files. The 4 digit identifier adds value as it provides a link to mapping. The sequential number uniquely identifies drawings within a set, but the need to increment this number from past projects creates unnecessary effort.

With a properly implemented document management system, drawing numbers and file names are less important, as document metadata can be used to search for information within the system. Drawings will typically be searched for by location (e.g. Highway Number and Control Section) and will be stored in a manner that will facilitate such a search. However, consistent file names can help manage submitted drawings until a document management system and process is fully implemented. This can be done without requiring the effort and coordination of the current process. As such, the following shall be used:

2. Drawing Numbering

RD Drawings:

For PDF files, combine all drawings into one PDF file with name RD-CON#-Date-P/C.pdf (e.g. RD-21543-2019-01-C.pdf) where:

RD is text to denote “Road Drawing”

CON# is the AT assigned engineering contract number for the project

(If there is no contract number e.g. work is for a developer, use a combination of highway number and control section instead, e.g. 1610 for Highway 16 and control section 10)

Date is the date of completion in YYYY-MM format (drawings are complete once stamped)

P/C is for status (P for proposed/tender; C for As Constructed/Record)

Note: The date will be the date of completion of the drawings at that stage (P or C) and as such the date on the file name for P drawings will be different from the date on the C drawings for the same project.

Each drawing sheet in the PDF file will include the Highway Number, Control Section and Drawing Sheet Number in the title block. The Drawing Sheet Number shall be in the format RD-CON#-SHT#-P/C where SHT# is the sequential sheet number starting at 01 (e.g. RD-21543-01-C).

For CAD files, each drawing will have a separate file, so the name shall follow the format RD-CON#-SHT#-Date-P/C.CAD e.g. “RD-21543-01-2019-01-P.dgn” where CAD is the extension for the CAD file type. All CAD files for a project can be zipped together for submission.

Note: Overhead signs and Cantilever Signs are **bridge structures** and are given **bridge** drawing numbers not roadway drawing numbers.

IN Drawings:

Note that the IN number is assigned by the GIS group of Alberta Transportation as a unique identifier for point like features. The consultant should search in the “AT Maps” tool for an existing IN number for any such IN sites in a project. If one is not there, one should be requested from the GIS group (use the trans.geodata.update@gov.ab.ca mailbox). As this may take some time, obtaining an IN number should happen near the start of the project. Note also that new Safety Rest Areas also require a RSF# from the GIS group, and this number should be included in the associated IN drawing.

For PDF files, combine all drawings into one PDF file for each IN site within the contract. The file name format should be IN-IN#-CON#-Date-P/C.pdf (e.g. IN-4963-21543-2019-01-P.pdf) where:

IN is text to denote “Intersection Drawing”

IN# is the IN number from “AT Maps” (typically 4 digit integer).

Each drawing sheet in the PDF file will include the IN number, Highway Number, Control Section and Drawing Sheet Number in the title block. The Drawing Sheet Number shall be in the format IN-IN#-SHT#-P/C (e.g. IN-4963-01-C).

For CAD files, each drawing will have a separate file so the name shall follow the format IN-IN#-CON#-SHT#-Date-P/C.CAD e.g. “IN-4963-21543-01-2019-01-P.dgn”. All CAD files for a project can be zipped together for submission.

Bridge Drawings and Planning Study Numbering:

The numbering process will remain the same as outlined in the Drafting Guidelines

3. Submission

Note that Alberta Transportation plans to soon implement a digital authentication process for engineering documents, and mylar drawings may no longer be required once this process is implemented. The submission details below are only for an interim basis.

Once project administrator acceptance has been obtained, mylar drawings (by mail or courier) and digital drawing files can be submitted by the consultant to Tina Bridger (Tina.Bridger@gov.ab.ca) for interim document management. Digital files for the record set (not for tender, also known as “as-built” drawings) should also be submitted by the consultant to the GIS group for map and system updates (trans.geodata.update@gov.ab.ca).

Attn: Tina Bridger
2nd Floor, Twin Atria Building
4999 – 98 Avenue NW
Edmonton, AB, T6B 2X3

4. Implementation Schedule

Starting September 01, 2019, unless stated otherwise in their Contract, Consultants are required to name, package and submit all engineering drawings to the Department as described above.

Before September 01, 2019, Consultants may choose to submit engineering drawings in accordance with this Design Bulletin (bypass need for department issued sequential drawing numbers).

Effective Date: Immediately. Questions on this bulletin may be directed to Des Williamson (780) 415-1015.

Approved by:

Des Williamson 2019.06.04
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Des Williamson, P. Eng.
Executive Director
Technical Services Branch

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