

Chapter 19

Sealing Design Documents

19.1	General	19-1
19.2	Sealing of Contract Plans/Record Set.....	19-2
19.2.1	Manual Sealing	19-2
19.2.2	Electronic Sealing	19-3
19.3	Sealing Other Engineering Documents.....	19-4
19.4	Sealing of Revisions.....	19-5
19.4.1	Plans	19-5
19.4.2	Other Engineering Documents.....	19-5
19.5	Support Documents	19-7
19.5.1	18 KIP Equivalent Single Axle Loads (ESAL)	19-7
19.5.2	Project Traffic.....	19-8

THIS PAGE LEFT BLANK INTENTIONALLY

Chapter 19

Sealing Design Documents

19.1 General

Section 334.175, Florida Statutes, requires that all design plans and surveys prepared by or for the Department be sealed by the professional engineer, surveyor, architect, or landscape architect in responsible charge of the project work. **Section 471.025, Florida Statutes**, requires that all final drawings, specifications, plans, reports, or documents prepared or issued by a licensed professional engineer and being filed for public record shall be sealed by the licensee. Such professional engineer must be duly licensed in the State of Florida.

Professional Engineers shall seal only those documents that conform to acceptable engineering standards and safeguard life, health, property and welfare of the public (**Rule 61G15-19.001, Florida Administrative Code (F.A.C.)**). A professional engineer may only seal an engineering report, plan, print or specification if that professional engineer was in responsible charge of the preparation and production of the engineering document (**Rule 61G15-23.002, F.A.C.**). Responsible charge means supervisory direction and/or control authority over engineering decisions made personally or by others (**Rule 61G15-18.011, F.A.C.**).

All landscape plans, specifications, and reports prepared by or for the Department shall be sealed by a registered landscape architect.

This chapter is based on **Florida Statutes** as well as the **Florida Administrative Code (F.A.C.)**. Though the intent of this chapter is to contain current and accurate information, it is not all-inclusive. The Laws and Rules regarding the signing and sealing of engineering documents continue to be amended, and it is the engineer's responsibility to be aware of any changes. If there is ever a discrepancy between this chapter and the Laws and Rules regarding the sealing of engineering documents, the Laws and Rules will govern.

This chapter explains the Department's requirements for sealing/signing design plans and other design documents prepared by or for the Department. It is the District's responsibility to verify that all record sets and documents are properly sealed and/or signed.

19.2 Sealing of Contract Plans/Record Set

An original set of the Contract Plans shall be sealed by the Engineer(s) of Record (EOR). This becomes the Record Set. An EOR is a Florida licensed professional engineer in responsible charge for the preparation of engineering documents. Under the provisions of **Rule 61G15-23.002(2)**, each sheet of the Record Set must be sealed by an EOR. The key sheet must be prepared and sealed by the EOR who is the Prime Professional for that component. Other individual sheets of the Record Set may be sealed by a delegated engineer, who in turn becomes the EOR for that portion of the work. A plans set shall not make reference to a sealed copy of "District Standards" that are kept on file at the District Office. Any "District Standards" intended for use on a project must be included in the plans set and sealed for that project.

In accordance with **Rule 61G15-23.002**, Engineers shall legibly indicate either (1) their name, address, and engineering license number on each sheet, OR (2) if practicing through a duly authorized engineering business, their name and engineering license number as well as the engineering business name, address, and certificate of authorization number (the engineering business license number). A title block on each sheet containing the printed name, address, and license number of the engineer or if applicable, the name and license number of the engineer and the name, address and certificate of authorization number of the engineering business will satisfy this requirement. Engineers working for local, State or Federal Government agencies shall legibly indicate their name and license number, and may indicate the name and address of the agency. See **Volume II, Section 1.4**.

19.2.1 Manual Sealing

To properly seal a document, the EOR will sign, write the date immediately under the signature, and seal over the signature and date. The location of this seal should be varied along the bottom of the sheet for convenient storage of a plans set, and to insure that the seal will not obliterate any critical information.

Plans prepared by an employee of a Utility or other employees exempted under **Section 471.003, Florida Statutes**, that will be appended to Department plans, are not required to be sealed except as follows. Utility plans that modify or detail attachments to a bridge or other structure belonging to the Department must have the sheets affecting such structure sealed. Plans prepared by nonexempt parties for a Utility, that will be appended to Department plans, must be sealed. For detailed requirements refer to the **Utility Accommodation Manual, Topic No. 710-020-001**.

19.2.2 Electronic Sealing

Information stored in electronic files representing plans, specifications, plats, reports, or other documents which must be sealed under the provisions of **Chapter 471, Florida Statutes**, shall be signed, dated and sealed by the professional engineer in responsible charge.

Electronic files may be sealed by creating a "signature" file that contains the engineer's name and PE number, a brief overall description of the engineering documents, and a list of the electronic files to be sealed. Each file in the list shall be identified by its file name utilizing relative Uniform Resource Locators (URL) syntax described in the **Internet Architecture Board's Request for Comments (RFC) 1738, December 1994**, which can be obtained from the Internet Website:

<ftp://ftp.isi.edu/in-notes/rfc1738.txt>

Each file shall have an authentication code defined as an SHA-1 message digest described in **Federal Information Processing Standard Publication 180-1 "Secure Hash Standard," 1995 April 17**, which can be obtained from the Internet Website:

<http://www.itl.nist.gov/fipspubs/fip180-1.htm>

A report shall be created that contains the engineer's name and PE number, a brief overall description of the engineering documents in question and the authentication code of the signature file. This report shall be printed and manually sealed by the professional engineer in responsible charge. The signature file is defined as sealed if its authentication code matches the authentication code on the printed, manually signed, dated and sealed report. Each electronic file listed in a sealed signature file is defined as sealed if the listed authentication code matches the file's computed authentication code.

For those sheets that are electronically signed and sealed, the following note shall be placed legibly on the sheet (outside and along the right sheet border line, within 1/8" of the line and beginning within 1" of the bottom sheet border line):

"NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE
SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C." *

* Note: The Rule number referenced is determined by the discipline of the professional that is signing and sealing (i.e., for Surveyors, this Rule is 61G17-7.0025, F.A.C.; for Geologists, this Rule is 61G16-2.005, F.A.C.).

19.3 Sealing Other Engineering Documents

Other engineering documents include related plans, reports, computations, specifications or criteria, as defined in **Rule 61G15-30.002 (4)**, and used in the development of design plans. Bound engineering documents must be sealed on a signature page or cover letter by the EOR. If a document includes work by more than one EOR, the signature page or cover letter must have an index with sufficient information for the user to be aware of each portion of the document for which each engineer is responsible. To seal a document, the engineer will sign, date immediately under the signature, and seal over the signature and date. With the exception of specifications, any document, report or computations not bound shall have all sheets sealed. Specifications will be sealed in accordance with the **Specifications Package Preparation Procedure**.

The following engineering documents shall be kept in the district's Project File(s).

1. Specifications and Special Provisions
2. Pavement Design Package
3. Typical Section Package
4. Drainage Computations
5. Hydraulics Reports
6. Bridge Development Report
7. Traffic Engineering Reports and Recommendations
8. Environmental Reports and Recommendations
9. Soil Survey Reports and Geotechnical Report
10. Value Engineering Record
11. Other Engineering Reports
12. Permit Documentation
13. Design Exceptions and Variations
14. Design Exceptions for Utilities prepared by an Engineering Consultant

19.4 Sealing of Revisions

Revisions are a partial modification of an engineering document after a plans package is sent to Tallahassee for contract letting. Whenever practical, revisions should be prepared by the original EOR.

19.4.1 Plans

Revisions to a plans sheet prior to the contract letting shall be prepared as outlined in **Chapter 20** of this volume. Revised sheets will be appended to the plans set.

Any plans sheet revised after the contract letting will be sealed in accordance with **Chapter 4** of the *Preparation and Documentation Manual, Topic No. 700-050-010*.

19.4.2 Other Engineering Documents

Each revised sheet shall be sealed by the EOR who prepared the revision and placed immediately behind the cover sheet of the sealed document. Specifications will be revised in accordance with the *Specification Package Preparation Procedure, Topic No. 630-010-005*.

THIS PAGE LEFT BLANK INTENTIONALLY

19.5 Support Documents

Engineering decisions are often made on the basis of support documents furnished by non engineering staff or offices. Two reports prepared in accordance with Department procedures will be attested as follows:

19.5.1 18 KIP Equivalent Single Axle Loads (ESAL)

Financial Project ID _____

State Road No. _____

County _____

I have reviewed the 18 KIP Equivalent Single Axle Loads to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT ***Project Traffic Forecasting Procedure*** using historical traffic data and other available information.

Name

Signature

Title

Organizational Unit

Date

19.5.2 Project Traffic

Financial Project ID _____

State Road No. _____

County _____

I have reviewed the Project Traffic to be used for design on this project. I hereby attest that it has been developed in accordance with the FDOT ***Project Traffic Forecasting Procedure*** using historical traffic data and other available information.

Name

Signature

Title

Organizational Unit

Date