



Digital Delivery Update

REGIONAL CADD TRAINING 2016



REGIONAL CADD TRAINING 2016

- ▶ New Florida Board of Engineers Rules
 - ▶ Multiple Sheet Document Signing
 - ▶ Component Sets
- 



New Florida Board of Engineers Rules

Rule 61G15-23 SEALS

- ▶ **61G15-23.001** Signature, Date and Seal Shall Be Affixed
 - ▶ when, where and what to sign
- ▶ **61G15-23.002** Seals Acceptable to the Board
 - ▶ what type of seal can be used
- ▶ **61G15-23.003** Procedures for Physically Signing and Sealing Plans, Specifications, Reports or Other Documents
 - ▶ this relates to the paper signing process
- ▶ **61G15-23.004** Procedures for Digitally Signing and Sealing Electronically Transmitted Plans, Specifications, Reports or Other Documents
 - ▶ this is the digital process using PKI
- ▶ **61G15-23.005** Procedures for Electronically Signing and Sealing Electronically Transmitted Plans, Specifications, Reports or Other Documents
 - ▶ this is the old process with PEDDS



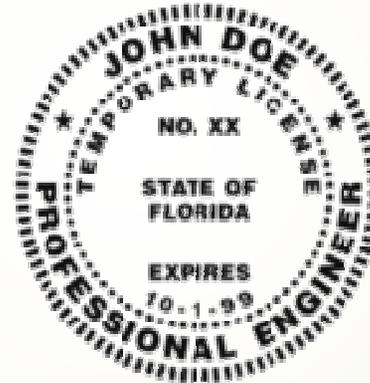
61G15-23.002

Seals Acceptable to the Board

- ▶ Wet Seals
- ▶ Embossing Seals
- ▶ Digitally Created Seals

61G15-23.002

Seals Acceptable to the Board





61G15-23.004

Procedures for Digitally Signing and Sealing...

(2)) A professional engineer utilizing a digital signature to electronically sign and seal engineering plans, specifications, reports or other documents shall have their identity authenticated by a certification authority and shall assure that the digital signature is:

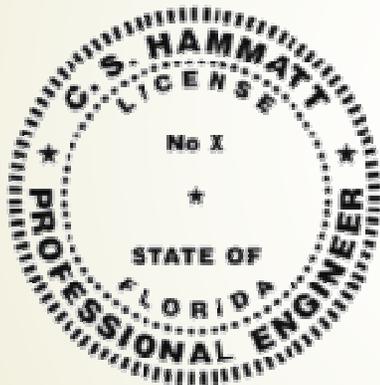
- ▶ (a) Unique to the person using it;
- ▶ (b) Capable of verification;
- ▶ (c) Under the sole control of the person using it; and,
- ▶ (d) Linked to a document in such a manner that the digital signature and correspondingly the document is invalidated if any data in the document is changed

61G15-23.004

Procedures for Digitally Signing and Sealing...

Appearance

This item has been electronically signed and sealed by C. S. Hammatt, PE. On [DATE] using a Digital Signature.



C.S. Hammatt, P.E.
[DATE]

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



61G15-23.004

Procedures for Digitally Signing and Sealing...

C. S. Hammatt, State of Florida, Professional Engineer, License No. X

This item has been electronically signed and sealed by
C. S. Hammatt, PE. On [DATE] using a Digital Signature.

C.S. Hammatt, P.E.
[DATE]

Appearance



Printed copies of this document are not considered
signed and sealed and the signature must be verified
on any electronic copies.

New Florida Board of Engineers Rules January 2016 Quarterly Newsletter



FBPE
FLORIDA BOARD OF
PROFESSIONAL ENGINEERS

Connection

Volume 4 - Issue 3 *Linking You with the Florida Board's Latest Engineering News & Information*

F.A.C. Rule 61G15, Chapter 23, "SEALS" Undergoes Major Reorganization

Submitted by: William C. Bracken, PE, SI, CFM on behalf of the FBPE

Starting back in 2012 the FBPE began examining and updating its rules regarding the various methods of signing, dating and sealing engineering documents. As changes were made and additional sections were added the chapter became cumbersome and difficult to navigate. This point was emphasized by numerous complaints from licensees and the increasing number of improperly signed, dated and sealed engineering documents that were turned over to the Board.

<https://www.fbpe.org/>

New Florida Board of Engineers Rules

- ▶ CHAPTER 61G15-23 SEALS
- ▶ CHAPTER 61G15-30 RESPONSIBILITY RULES COMMON TO ALL ENGINEERS

The screenshot shows the homepage of the Florida Department of State's Florida Administrative Code & Florida Administrative Register website. The header includes the state seal, the department name, and navigation links for 'About Us', 'Contact Us', 'Help', and 'Agency Login'. The main navigation bar contains 'Home', 'Advanced Search', 'MyFLRules', and 'Rules Open for Comments'. The page is divided into several sections: 'I Want To' with links for comments, notifications, account creation, rulemaking information, and agency search; 'Full Text Search' with a search box and a dropdown menu for 'F.A.C.'; 'Most Recent FAR Issue' with a thumbnail image; 'For Agencies only' with links for submitting rules and finding publication dates; 'Related Resources' with a link to Florida laws; and 'MyFLRules' with a login form for username and password.

<https://www.flrules.org/>



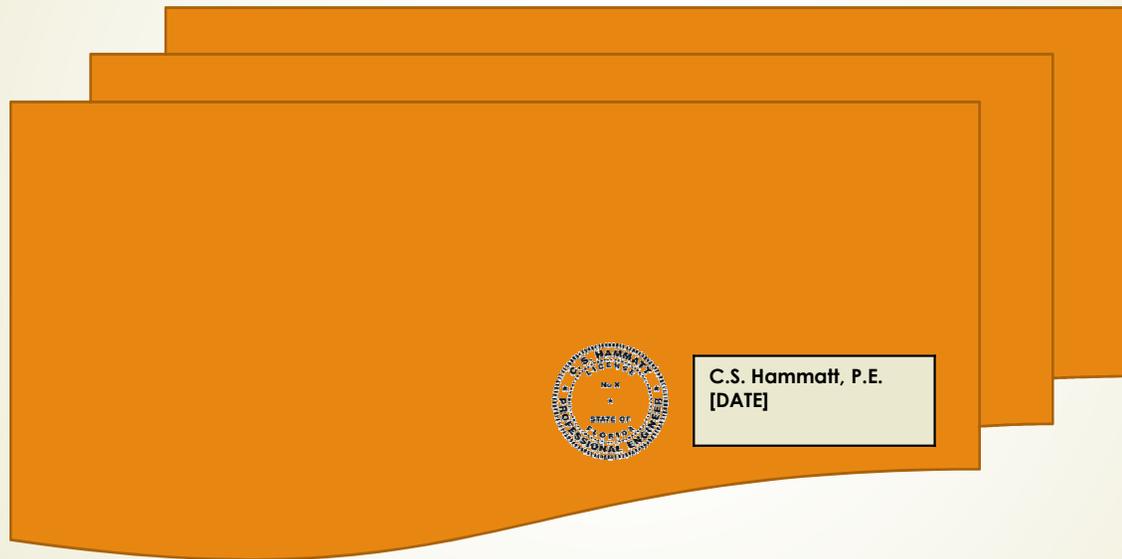
Signing Multiple Sheet Documents

61G15-23-004(3)(e)

When engineering plans, specifications, reports or other documents contain multiple sheets or pages, the licensee may apply a single digital signature *(emphasis added)* per electronically transmitted item as set out in Rule 61G15-23.001, F.A.C. A digital signature applied to an item in electronic form shall have the same force and effect as signing all of the individual sheets or pages contained within that item unless otherwise limited as specified in subsection 61G15-30.003(3), F.A.C.

Signing Multiple Sheet Documents

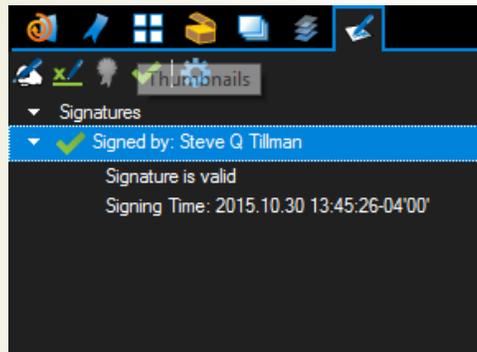
{fpid number}-PLANS.PDF



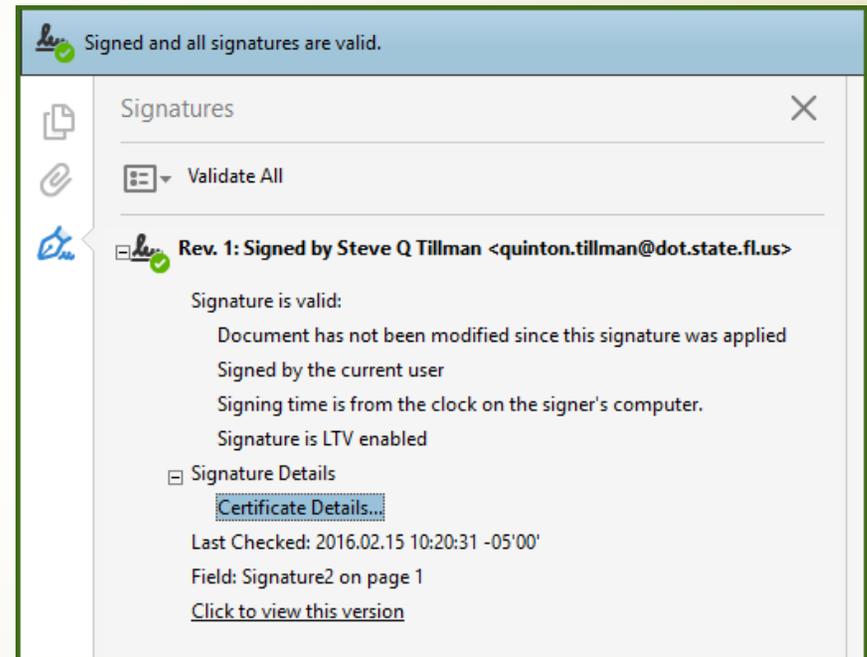
“Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies”.

Signing Multiple Sheet Documents

BlueBeam



Adobe

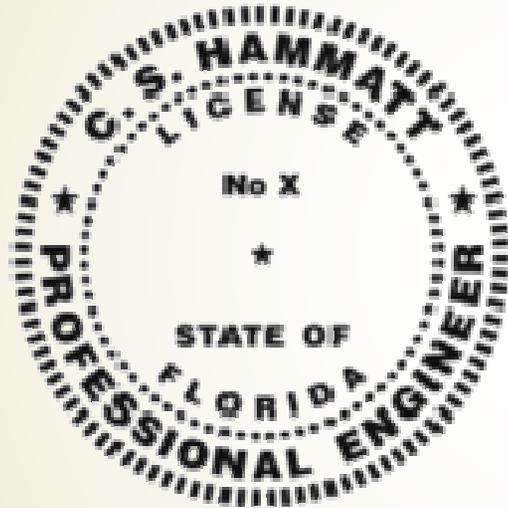


Signing Multiple Sheet Documents

Plans Preparation Manual – Vol 2, Ch 3

	<p>THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:</p> <p>JOHN ALAN DOE Date: 2013,10,09 16:52:48 - 4'00'</p> <p><small>PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENT.</small></p> <p>ROADWAY ENGINEERS, INC. 123 MAIN STREET TALLAHASSEE, FL 32301 CERTIFICATE OF AUTHORIZATION: 12345 JOHN ALAN DOE, P.E. NO. 99991</p>
<p>THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.</p>	
<p><u>ROADWAY PLANS</u></p>	
<p>SHEET NO.</p>	<p>SHEET DESCRIPTION</p>
<p>1</p>	<p>KEY SHEET</p>
<p>2</p>	<p>SIGNATURE SHEET</p>
<p>3 - 3A</p>	<p>SUMMARY OF PAY ITEMS</p>
<p>4</p>	<p>DRAINAGE MAP</p>
<p>5</p>	<p>TYPICAL SECTIONS</p>
<p>6</p>	<p>TYPICAL SECTION DETAILS</p>
<p>50-1 - 50-37</p>	<p>SUMMARY OF QUANTITIES</p>
<p>7 - 10</p>	<p>SUMMARY OF DRAINAGE STRUCTURES</p>
<p>12 - 16</p>	<p>ROADWAY PLAN-PROFILES</p>
<p>17 - 18</p>	<p>SPECIAL PROFILES</p>
<p>19</p>	<p>INTERSECTION LAYOUT/DETAIL</p>
<p>20 - 26</p>	<p>DRAINAGE STRUCTURES</p>
<p>27</p>	<p>LATERAL DITCH PLAN-PROFILES</p>
<p>28</p>	<p>LATERAL DITCH CROSS SECTIONS</p>
<p>29</p>	<p>SPECIAL DETAILS</p>
<p>30</p>	<p>ROADWAY SOIL SURVEY</p>
<p>31 - 42</p>	<p>CROSS SECTIONS</p>
<p>43 - 45</p>	<p>STORM WATER POLLUTION PREVENTION PLAN</p>
<p>46 - 50</p>	<p>TEMPORARY TRAFFIC CONTROL PLANS</p>
<p>51 - 54</p>	<p>UTILITY ADJUSTMENTS</p>
<p>55 - 59</p>	<p>SELECTIVE CLEARING AND GRUBBING</p>

Signing Multiple Sheet Documents



61G15-23.002
Digitally Created Seal

Signing Multiple Sheet Documents

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16:52:48 - 4'00'

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*ROADWAY ENGINEERS, INC.
123 MAIN STREET
TALLAHASSEE, FL 32301
CERTIFICATE OF AUTHORIZATION: 12345
JOHN ALAN DOE, P.E. NO. 99991*

61G15-23.004(3)(d)
...text similar to...

61G15-30.003(2)
Name, Business
Address

Signing Multiple Sheet Documents

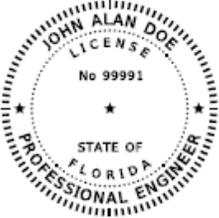
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ROADWAY PLANS

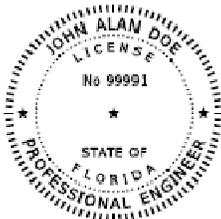
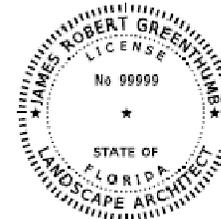
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61G15-30.003(3)
Clearly note
responsibility

Signing Multiple Sheet Documents

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<div style="border: 1px solid black; padding: 2px; display: inline-block; font-size: x-small;"> Life Sheet EXHIBIT SS-1 Date: 1/1/16 </div>																												
<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <th style="width: 50%;">DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS		DATE	DESCRIPTION			<p style="font-size: x-small;">JOHN ALAN DOE, P.E. P.E. NO.: 99991 ROADWAY ENGINEERS, INC. 123 MAIN STREET TALLAHASSEE, FL 32301 CERTIFICATE OF AUTHORIZATION: 12345</p>	<p style="font-size: x-small;">STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th style="width: 33%;">ROAD NO.</th> <th style="width: 33%;">COUNTY</th> <th style="width: 33%;">FINANCIAL PROJECT ID</th> </tr> </thead> <tbody> <tr> <td>SR 22</td> <td>BAY</td> <td>0000014-52-01</td> </tr> </tbody> </table>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SR 22	BAY	0000014-52-01	<p style="font-size: x-small;">SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">SIGNATURE SHEET</p> <p style="font-size: x-small;">2</p>												
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Signing Multiple Sheet Documents

- ▶ Each digital signature signs the entire file, all sheets in the file.
- ▶ Each professional of records defines limit of liability on the signature sheet.
- ▶ Sheets can neither be added nor removed after document is signed.
- ▶ The document cannot be altered after the document is signed.
- ▶ The document can be renamed.
- ▶ The document is completely portable.
- ▶ Sheets can be extracted (without signatures)



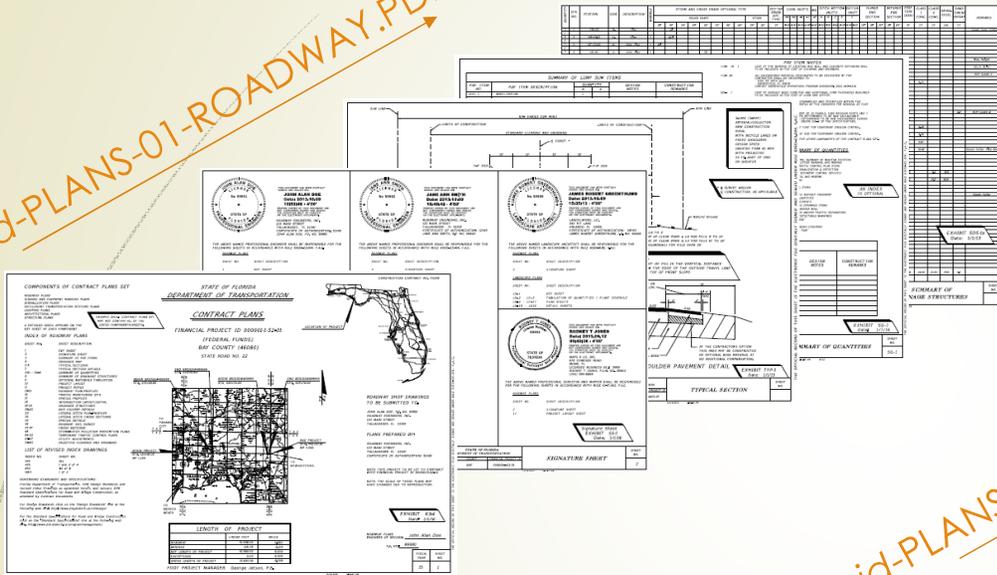
Signing Multiple Sheet Documents

5.10.1 fpid-PLANS.PDF File and Plans Component PDFs

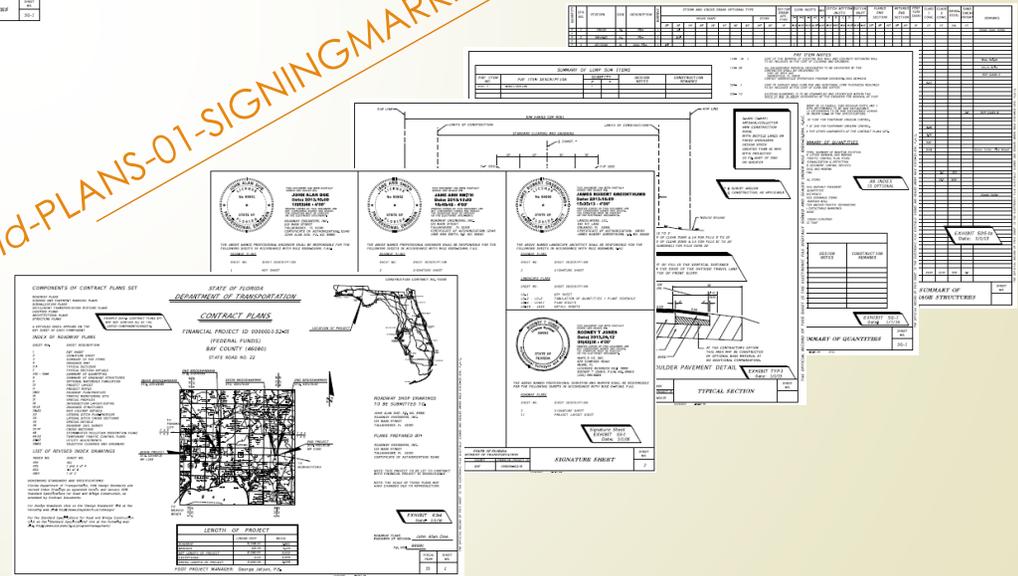
- ▶ The fpid-PLANS.PDF will contain all of the sheets in the plan set in consecutive order, including signature sheet(s) located directly behind the key sheet. One digital signature will be applied to the signature sheet for each professional of record signing the fpid-PLANS.PDF file.
 - ▶ A Signature Sheet is required for all contract plans sets, even when there is only one Professional of Record. See the PPM Volume 2, Section 3.3.
- 

Component Sets

fpid-PLANS-01-ROADWAY.PDF



fpid-PLANS-01-SIGNINGMARKING.PDF





Component Sets

5.10.1 fpid-PLANS.PDF File and Plans Component PDFs

- ▶ When the plans set fpid-PLANS.PDF is subdivided into component PDF files, each Plans Component PDF will contain all of the sheets in that component set in consecutive order. Each Plans Component PDF will have its own key sheet and a signature sheet(s) located directly behind the key sheet.
Subdivided plans component PDFs
- ▶ will have one of the applicable file names from the table below.



Component Sets

- ▶ *{fpid}*-PLANS-01-ROADWAY.PDF
- ▶ *{fpid}*-PLANS-02-SIGNINGMARKING.PDF
- ▶ *{fpid}*-PLANS-03-SIGNALIZATION.PDF
- ▶ *{fpid}*-PLANS-04-ITS.PDF
- ▶ *{fpid}*-PLANS-05-LIGHTING.PDF
- ▶ *{fpid}*-PLANS-06-LANDSCAPE.PDF
- ▶ *{fpid}*-PLANS-07-ARCHITECTURAL.PDF
- ▶ *{fpid}*-PLANS-08-STRUCTURES.PDF
- ▶ *{fpid}*-PLANS-09-TOLLFACILITIES.PDF



Component Sets

5.10.1.1 Early Work Sheets of Plan Sets

- ▶ fpid-PLANS-01-ROADWAY-PNC.PDF
- ▶ fpid-PLANS-01-ROADWAY-COREBORINGS.PDF
- ▶ fpid-PLANS-01-ROADWAY-VERIFIEDUTILITIES.PDF



Component Sets



- ▶ When to use component sets?
 - ▶ Complexity of the plan set.
 - ▶ Too many signatories on the project to manage in one set.
 - ▶ Too many components in the plan set.
- ▶ Who determines when to use components?



Component Sets

- ▶ Component sets always consist of consecutive sheets!
 - ▶ Component sets are done to suit the need of the project, not the convenience of the signatories.
 - ▶ District production management determines how sheets will be divided.
- 



Quinton Tillman P.E.

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Engineering / CADD Systems Office

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Digital Delivery Update

