FDOT e-Construction

Amy Tootle, PE

State Construction Engineer
e-Construction – The Parts

• Document Management
  ➢ ProjectSolve SP
  ➢ EDMS

• Mobile Devices
  ➢ iPad Air 2

• Digital Signatures
  ➢ IdenTrust

• Specifications
  ➢ July 2015
Collaboration Process
- Standard Forms Automated in Library
- Include FIN and Contract No.
- Digital Signature Blocks
ProjectSolve SP

- CADD Files
- Final “As-Built” Plans
- Original Plans (Released for Construction)
• All Project Documentation in Folder
• Once Approved > EDMS
• Long Term Document Storage
• Keep for Life of Retention Period
Mobile Devices
Mobile Devices

Ipad Air 2
- Wifi + Cellular
- 64 GB
- Otterbox Defender Case
- Unlimited Data
Mobile Devices

- Web Interface with ProjectSolve SP
- Access to Enterprise Applications (VPN)
  - Junos Pulse
- Video/meeting capability
  - Skype
  - GoToMeeting
- As-Built Plans/PDF Documents
  - BlueBeam
- Email/calendar access
  - OWA
  - Outlook
- SiteManger
  - Citrix
- MS Office
  - One Drive/One Note/Word/Excel
Digital Signatures

Laws

• **Florida Statute 668** – Electronic Commerce

• **Florida Statute 471.025** – Regulation of Professions and Occupations (Engineering)

Rules

• **Florida Administrative Code 61G15-23.003** – Procedures for Signing and Sealing Electronically Transmitted Plans, Specifications, Reports or Other Documents.
Florida Statute 668 – Part I Electronic Signatures

Florida Statute 668.003 (3) :

“Digital signature” means a type of electronic signature that transforms a message using an asymmetric cryptosystem such that a person having the initial message and the signer’s public key can accurately determine:

• (a) Whether the transformation was created using the private key that corresponds to the signer’s public key.

• (b) Whether the initial message has been altered since the transformation was made.

A “key pair” is a private key and its corresponding public key in an asymmetric cryptosystem, under which the public key verifies a digital signature the private key creates.

An “asymmetric cryptosystem” is an algorithm or series of algorithms which provide a secure key pair.
Florida Statute 668.50 - Uniform Electronic Transaction Act (UETA):

- Establishes the legal equivalence of electronic records and signatures with paper writings and manually-signed signatures.

- All States enacted except: Washington, Illinois and New York
Florida Statute 471.025(1):

The board shall prescribe, by rule, one or more forms of seal to be used by licensees. Each licensee shall obtain at least one seal in the form approved by rule of the board and may, in addition, register his or her seal electronically in accordance with ss. 668.001-668.006.

….Drawings, specifications, plans, reports, final documents, or documents prepared or issued by a licensee may be transmitted electronically and may be signed by the licensee, dated, and sealed electronically with said seal in accordance with ss. 668.001-668.006.
(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.
Digital Signatures

IdenTrust

• NIST Level 3
• PKI Infrastructure
Digital Signatures

**DigiCert, Inc.**
2600 West Executive Parkway, Suite 500
Lehi, Utah 84043
[www.digicert.com](http://www.digicert.com)

**GlobalSign**
Two International Drive, Suite 105
Portsmouth, New Hampshire 03801
[www.globalsign.com](http://www.globalsign.com)

**IdenTrust**
55 Hawthorne Street, Suite 400
San Francisco, CA 94105
[www.identrust.com/fdot](http://www.identrust.com/fdot)

**Cybertrust/Verizon**
140 West Street
New York, New York 10007
[http://www.verizonenterprise.com](http://www.verizonenterprise.com)
Digital Signatures

**NOTICE OF FINAL INSPECTION:** The above listed project has been completed in reasonable close conformance with the approved plan.

**SIGNATURE**
Amy C Tootle

**TITLE**  State Construction Engineer
**INSPECTION DATE**  01/06/16

**NOTICE OF FINAL ACCEPTANCE:** The above listed project has been completed in reasonable close conformance with the approved plans and specifications including authorized changes and extra work.

**SIGNATURE**

**TITLE**  District Construction Engineer
**FINAL ACCEPTANCE DATE**
Specifications Section 4 – Scope of Work

4-1 Intent of Contract

The intent of the Contract is to provide for the construction and completion in every detail of the work described in the Contract. Furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the Contract Documents.

Upon execution of the Contract, the Contractor and Department agree that all informational, contractual and other business required for this project will be through a system of paperless electronic means. When the Specifications require a written submission of documentation, such documents must be submitted and exchanged electronically using the Department provided web-based collaboration site. All documents requiring a signature must be executed electronically by both parties in accordance with Chapter 668, Florida Statutes, and have the same force and effect as a written signature.

All persons requiring access to the collaboration site shall be identified during the preconstruction conference. Persons may be added or removed during the life of the Contract on an as needed basis. All persons that normally sign paper documents, and will be using the site, must acquire digital signature certificates.
Specifications

Some language removed from the July 2016 Specification Book:

- Copy
- Copies
- Deliver
- Four
- Notify
- Photographic
- Print
- Provide
- Three
- Two
- Xerographic
Contact Information

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