

**Florida Department of Transportation**  
**CADD Manual**  
**Record of Changes as of 2/9/2015**

**NOTICE!!** The CADD Production Criteria Handbook (CPCH) has been merged into the CADD Manual with this release. It is important to understand in this merger that the essence of the original CADD Manual and CPCH is still there. The CPCH document will subsequently be eliminated and all references will be transferred to the CADD Manual. The new CADD Manual maintains its original authority with the following information included throughout all Chapters:

- Merger of content from the CPCH
- Current Digital Delivery process decisions, updates and clarifications
- Current 3D Deliverable decisions, updates and clarifications
- Technical Advisory Committee (TAC) and CADD Manager review results
- All other review results and changes reported since the last posted CADD Manual and CPCH revisions

*NOTE: All headers updated to reflect new effective date.*

**Chapter 1 Introduction**

- 1.1 No Modification
- 1.2 No Modification
- 1.3 No Modification
- 1.4 Removed "Engineering Data"
- 1.5 Updated Chapter Titles and Descriptions to clarify updated information
- 1.6 Added reference: "Florida Administrative Code, Chapter 1B-26.003(10)" and descriptions
- 1.7 Plain language defining.
- 1.7.1 Renamed for clarification from "Support of CADD" to "CADD Manager Responsibility"
- 1.7.2 Renamed for clarification from "Use of CADD in Engineering" to "CADD TAC Responsibility"
- 1.8 No Modification
- 1.9 No Modification
- 1.10 Updated phone number on form.

**Chapter 2 Computer Systems**

- 2.1 Plain language defining.
- 2.2 No Modification
- 2.3 Removed "CADD Server", "CADD Systems", "CADD Workstation" and "Engineering Data"
- 2.4 Added reference description.
- 2.5 Renamed for clarification from "Procurement of Engineering/CADD Hardware and Software" to "Procurement of CADD Hardware and Software"

**Chapter 3 Production Standards**

- 3.1 Updated verbiage to clarify.
- 3.2 Updated verbiage to clarify.
- 3.3 Update definitions to clarify current usage.
- 3.4 Updated references and added descriptions.
- 3.5 Renamed for clarification from "Department Resource Standards" to "CADD Resource and Support Files"
- 3.5.1 Renamed for clarification from "Graphics Software" to "Supporting Database Resources"
- 3.5.2 Renamed for clarification from "Civil Engineering Software" to "Seed/Template Files"
- 3.5.2.1 New! MicroStation Seed Files
- 3.5.2.2 New! AutoCAD Template Files
- 3.6 Renamed for clarification from "Project Directory Structure" to "CADD Standard Rules"
- 3.7 Renamed for clarification from "CADD Resource Files and Standards" to "Levels/Layers and Symbology"
- 3.7.1 New! Levels and Layers
- 3.7.2 New! Color
- 3.7.3 New! Line Weight
- 3.7.4 New! Line Styles/Linetypes
- 3.7.4.1 New! Custom Line Styles
- 3.8 Renamed for clarification from "File Naming Conventions" to "Cell Libraries / Block Drawings"
- 3.9 Renamed for clarification from "Delivery Components" to "Text"
- 3.9.1 Renamed for clarification from "Engineering Data" to "True Type Fonts (TTF)"

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- ~~3.9.1.1~~ REMOVED
- ~~3.9.1.2~~ REMOVED
- ~~3.9.1.3~~ REMOVED
- ~~3.9.2~~ REMOVED
- ~~3.9.3~~ REMOVED
- ~~3.9.4~~ REMOVED
- ~~3.9.5~~ REMOVED
- ~~3.9.6~~ REMOVED
- ~~3.9.7~~ REMOVED
- ~~3.9.8~~ REMOVED

**3.10** New! MicroStation Print Resource Files

**Chapter 4 Production Procedures**

- 4.1** Plain language defining.
- 4.2** No modification
- 4.3** No Modification
- 4.4** Update definitions to clarify current usage.
- 4.5** No Modification
- 4.6** Renamed for clarification from "FDOT CADD Resources" to "CADD Resources"
- 4.7** Renamed for clarification from "Producing the Electronic Project" to "Standard Project Folder"
- 4.7.1** New! Electronic Delivery versus Digital Delivery Projects
- 4.7.2** New! Create Project
- 4.7.3** New! Discipline Sub-Folders .
- 4.7.3.1** New! Custom Sub-Folders
- 4.7.3.2** New! Engineering Data sub-folders
- 4.7.4** New! Standard Project Folder Structure
- 4.8** New! STANDARD FILE NAMES
- 4.8.1** New! Standard Design File Naming Convention
- 4.8.2** New! Print Image File Naming Convention
- 4.8.2.1** New! Sheet Numbers
- 4.8.2.2** New! Print Image File Naming Format
- 4.8.3** New! Standard File Name Extensions
- 4.8.4** New! Duplicate Files
- 4.9** New! REFERENCE FILES
- 4.10** New! ADD FILE SHARING
- 4.11** New! PROJECT INDEXING AND JOURNALING .
- 4.11.1** New! Index Guidelines and Format .
- 4.11.2** New! Journal Guidelines and Format
- 4.12** New! PRINTS
- 4.12.1** New! Print Borders
- 4.12.2** New! Print Image Files
- 4.12.3** New! Foreign Plan Sheets
- 4.12.4** New! Print Drivers
- 4.12.4.1** New! MicroStation Half-Toning
- 4.12.4.2** New! Quality and Reproduction
- 4.12.5** New! Professional of Record Note
- 4.13** New! RIGHT OF WAY (R/W) MAPPING STANDARDS
- 4.13.1** New! Standard File Names
- 4.13.2** New! R/W Cell Library
- 4.13.3** New! Level/Layer and Symbology Standards
- 4.13.4** New! R/W Workspace
- 4.13.5** New! GEOPAK Feature Preferences
- 4.14** New! ENVIRONMENTAL MANAGEMENT STANDARDS
- 4.14.1** New! Standard File Names
- 4.15** New! SURVEY STANDARDS

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- 4.15.1** New! Level/Layer and Symbology Standards
- 4.15.2** New! Standard File Names
- 4.15.3** New! Data Files Created by Survey
- 4.15.4** New! Resource Files
- 4.15.5** New! GEOPAK and Bentley Survey
- 4.15.6** New! CIVIL 3D
- 4.15.7** New! Survey Data
- 4.15.8** New! County Mapping
- 4.16** New! DRAINAGE STANDARDS
- 4.16.1** New! Standard File Names
- 4.16.2** New! File Sharing and Merging
- 4.16.3** New! Resource Files
- 4.16.4** New! Engineering Data .
- 4.16.5** New! Packaging
- 4.17** New! ROADWAY STANDARDS .
- 4.17.1** New! Standard File Names
- 4.17.2** New! Engineering Data
- 4.18** New! SIGNING & PAVEMENT MARKING STANDARDS
- 4.18.1** New! Standard File Names
- 4.18.2** New! Sign Design
- 4.18.3** New! GuidSIGN
- 4.18.4** New! AutoTURN
- 4.19** New! SIGNALS STANDARDS
- 4.19.1** New! Standard File Names
- 4.20** New! HIGHWAY LIGHTING STANDARDS
- 4.20.1** New! Standard File Names
- 4.20.2** New! AGI32 Lighting Software
- 4.21** New! LANDSCAPE STANDARDS .
- 4.21.1** New! Standard File Names
- 4.22** New! STRUCTURES STANDARDS
- 4.22.1** New! Standard File Names
- 4.22.2** New! Resource Files .
- 4.22.3** New! Engineering Data
- 4.22.4** New! Level and Symbology Standards
- 4.22.5** New! Borders and Scales
- 4.22.6** New! Text Sizes and Weights
- 4.22.7** New! Colors
- 4.22.8** New! Special Symbols
- 4.22.9** New! Dimension Settings
- 4.22.10** New! Reference Files
- 4.22.11** New! Existing Bridge Plans
- 4.23** New! UTILITIES STANDARDS
- 4.23.1** New! Utility File Coordination Options
- 4.23.2** New! Utility Coordination
- 4.23.3** New! Exchange of Graphic Files
- 4.23.4** New! Standard File Names
- 4.23.5** New! Utility Work by Highway Contractor Agreement Plans
- 4.23.6** New! ASCII Files of Utility Data .
- 4.23.6.1** New! ASCII Header Convention
- 4.23.6.2** New! Format of Station and Offset ASCII File
- 4.23.6.3** New! Format of Northing and Easting ASCII File
- 4.23.6.4** New! ASCII Input File Examples
- 4.23.7** New! Utility Scanned Images
- 4.24** New! GEOTECHNICAL STANDARDS

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- 4.24.1 New! Standard File Names
- 4.24.2 New! Engineering Data
- 4.24.3 New! Soil Survey
- 4.24.4 New! Soil Boring Data
- 4.25 New! CONSTRUCTION STANDARDS
- 4.25.1 New! Standard File Names
- 4.26 New! INTELLIGENT TRANSPORTATION SYSTEMS STANDARDS
- 4.26.1 New! Standard File Names
- 4.27 New! ARCHITECHURAL STANDARDS
- 4.27.1 New! Adopted CADD File Format .
- 4.27.2 New! Adopted CADD Standards
- 4.27.3 New! Architectural Projects
- 4.27.4 New! Delineation between Architectural & Engineering Plans
- 4.27.5 New! Standard File Names
- 4.27.6 New! Standard Sheet File Names
- 4.27.7 New! Engineering Data .
- 4.27.8 New! Layers and Symbology .
- 4.27.9 New! Architectural Scale Chart
- 4.27.10 New! Text Type, Size and Line Weight .
- 4.27.11 New! Layer Names
- 4.27.12 New! File Structure
- 4.27.13 New! Signing and Sealing
- 4.27.14 New! Submittal .
- 4.28 New! SPECIFICATION STANDARDS
- 4.28.1 New! Standard File Names
- 4.28.1.1 New! Classical Electronic Delivery
- 4.28.1.2 New! Digital Delivery
- 4.28.2 New! Resource Files
- 4.28.3 New! Technical Special Provisions
- 4.28.4 New! File Structure (Specs Only Projects)
- 4.28.4.1 New! Classical Electronic Delivery
- 4.28.4.2 New! Digital Delivery
- Chapter 5 Electronic Data Delivery**
- 5.1 Plain language defining.
- 5.2 Update verbiage to clarify.
- 5.3 New! Definitions
- ~~5.3~~ 5.4 Renumbered "References" and updated.
- ~~5.4~~ 5.5 Renumbered "RECEIPT AND ACCEPTANCE OF ELECTRONIC DATA"
- ~~5.4.1~~ Incorporated into 5.5 formatting
- ~~5.4.2~~ Incorporated into 5.5 formatting
- ~~5.4.3~~ Incorporated into 5.5 formatting
- ~~5.5~~ 5.6 Renumbered "ENGINEERING DATA SERVICES"
- ~~5.5.1~~ Incorporated into 5.6 formatting
- ~~5.5.2~~ Incorporated into 5.6 formatting
- ~~5.6~~ 5.7 Renumbered "PUBLICATION AND DISTRIBUTION"
- 5.8 New! CLASSICAL ELECTRONIC VS DIGITAL DELIVERY
- 5.8.1 New! Production Deliverable Files
- 5.9 New! PROJECT DIRECTORY / BID SET EXAMPLES
- 5.10 New! FILE NAME CONVENTIONS FOR DELIVERY
- 5.10.1 New! Classical Electronic Delivery Projects
- 5.10.2 New! Digital Delivery Projects
- 5.11 New! PRE-PRODUCTION
- 5.12 New! PRODUCTION
- 5.12.1 New! Classical Electronic Delivery Projects

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- 5.12.2 New! Digital Delivery Projects
- 5.12.3 New! Engineering Data
- 5.12.4 New! 3D Deliverables - Data for Machine Control in Construction
- 5.12.4.1 New! Types of Modeling Data Needed
- 5.12.4.2 New! 3D Deliverables Supporting AMG for 3D Projects
- 5.12.5 New! Maximum Corridor Frequency Interval Spacing for 3D Design
- 5.12.6 New! Quality Control of Corridor Models and Extracted Surface
- 5.12.7 New! Merging External Project Files
- 5.12.8 New! Reviewing the Project
- 5.12.9 New! Sign and Seal Project Files
- 5.12.9.1 New! Classical Electronic Delivery with PEDDS
- 5.12.9.2 New! Digital Delivery with Digital Signature
- 5.12.9.3 New! Multiple Signature Sheets for Digital Signature
- 5.12.9.4 New! Managing Digital Certificates
- 5.12.10 New! Securing the Project for Delivery
- 5.12.11 New! Media Requirements for Delivery
- 5.12.12 New! Compliance Certification
- 5.13 New! POST-PRODUCTION
- 5.14 New! REVISIONS
- 5.14.1 New! Classical Electronic Delivery
- 5.14.2 New! Revised Digital Delivery Bid Sets
- 5.15 New! STRUNG PROJECTS
- 5.16 New! RE-LET PROJECTS AND ROLL BACK REVISIONS
- 5.17 New! DESIGN BUILD PROJECTS

**Chapter 6 Support**

- 6.1 Plain language defining.
- 6.2 No modification
- 6.3 No modification
- 6.4 Update verbiage to clarify.
- 6.4.1 Update verbiage to clarify.
- 6.4.2 Update verbiage to clarify.
- 6.4.3 Renamed for clarification from "Training" to "Training Support"
- 6.5 Update verbiage to clarify.
- 6.5.1 Update verbiage to clarify.
- 6.5.1.1 Incorporated into 6.5.1
- 6.5.1.2 Incorporated into 6.5.1
- 6.5.2 Update verbiage to clarify.
- 6.5.2.1 Incorporated into 6.5.2
- 6.5.2.2 Incorporated into 6.5.2
- 6.5.2.3 Incorporated into 6.5.2
- 6.5.2.4 Incorporated into 6.5.2
- 6.5.3 Renamed for clarification from "Training" to "Training Support"

**Chapter 7 Software Development and Distribution**

- 7.1 Plain language defining.
- 7.2 Plain language defining.
- 7.3 No modification
- 7.4 Update verbiage to clarify.
- 7.4.1 Renamed for clarification from "Need Identification" to "Development or Acquisition"
- 7.4.2 Incorporated into 7.4.1
- 7.5 New! SOFTWARE UPDATES
- 7.5-7.6 Renumbered "SOFTWARE TESTING"
- 7.5.1 Incorporated into 7.5.1
- 7.5.2 Renumbered "Beta Testing Coordinator"
- 7.5.1

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- 7.6 7.7** Renumbered "TAC REVIEW AND RECOMMENDATION"
- 7.7 7.8** Renumbered "CADD PRODUCT APPROVAL AND DISTRIBUTION"
- 7.9** New! MINIMUM SYSTEM REQUIREMENTS
- 7.10** New! TRANSLATION OF FILES
- Chapter 8 Quality Assurance**
  - 8.1** Incorporated verbiage from CPCH and updated to current requirements.
  - 8.2** No modification
  - 8.3** Updated verbiage to clarify.
  - 8.4** Added reference: "Section 20.23(3), Florida Statutes (F.S.)"
  - 8.5** Resorted
  - 8.6** No modification
  - 8.7** Updated verbiage to clarify.
  - 8.8** Updated verbiage to clarify.
  - 8.9** New! PRESERVATION
  - 8.10** New! DELIVERY PROCESS MANAGEMENT
  - 8.11** New! QUALITY CONTROL (QC) – DATA PRODUCERS' ROLE
  - 8.12** New! QUALITY ASSURANCE (QA) – CENTRAL OFFICE ROLE
  - 8.12.1** New! QA Reports
- Appendix A** New! CADD Standard Rule Tables

Moved CADD Standard Rule Tables from Chapter 3 of the CPCH