

Section 5.12 FINAL AS-BUILT PLANS PROCESS

5.12.1 Purpose

This procedure defines the process ~~for the Resident Office (RO), both Department and Consultant Construction Engineering and Inspection (CCEI) staff, to use for~~when preparing **Final As-Built Plans**. The standards provided are applicable to recording final quantities, revisions, and changes during construction in the **Final As-Built Plans**, as well as detailing the process to digitally sign and seal revisions and changes, where applicable.

5.12.2 Authority

Sections ~~20.23(3)(a)~~20.23(3)(a) and ~~334.048(3)~~334.048(3), Florida Statutes (F.S.)

5.12.3 References

~~Section 337.015(3)~~Section 337.015(3), ~~471.025~~471.025, and ~~668.003(3)~~, F.S. 668.003(3), F.S.

~~Rule 61G15-23~~Rule 61G15-23 and ~~Rule 61G15-27.001~~, F.A.C. Rule 61G15-27.001, F.A.C.

~~Standard Specifications for Road & Bridge Construction~~Standard Specifications for Road & Bridge Construction

~~Review and Administration Manual, Topic No. 700-050-05~~Review and Administration Manual, Topic No. 700-050-05

~~FDOT Design Manual, Topic 625-000-002~~FDOT Design Manual, Topic 625-000-002

~~CADD Manual, Topic No. 625-050-001~~CADD Manual, Topic No. 625-050-001

~~Records Management Procedure, Topic No. 050-020-025~~Records Management Procedure, Topic No. 050-020-025

5.12.4 General

One complete set of the original Contract Plans, digitally signed and sealed by the Engineer of Record (EOR), ~~shall will~~ be saved in the Department's collaboration site, ~~[currently ProjectSolve Sharepoint (PSSP)]~~. A separate, complete set of Contract Plans will be extracted (i.e. EOR digital signature removed) ~~Contract Plans shall will be and~~ maintained in the Department's collaboration site as the **Final As-Built Plans** for each construction project ~~in the Department's collaboration site~~.

Contents of the **Final As-Built Plans** will vary, but ~~shall will~~ always contain those sheets necessary to completely ~~cover record~~ all work performed. The **Final As-Built Plans** ~~shall~~ must include all revisions and changes, in both design and construction, that indicate precisely how the project was constructed. At the conclusion of the project, the **Final As-Built Plans** ~~shall will~~ be made available for review to the District Final Estimates Office (DFEO).

5.12.5 Digital Signing, Sealing, and Certifying for As-Built Plans

The Department requires the use of digital certificates acquired from a Public Key Infrastructure (PKI) approved provider to digitally sign documents. The PKI approved provider must be on the **Business Identity and Credentials** section of the [GSA IDManagement.gov Trust Services List](https://www.gsa.gov/IDManagement.govTrustServicesList) ~~when signing documents digitally~~. The digital certificate contains a unique digital ID that can be validated for authenticity. **Section 668.003(3), F.S.** defines using a certificate as a digital signature. For more information on digital signatures:

<http://www.fdot.gov/Construction/eConstruction/DigitalSignatures.shtm>

Rule 61G15.23, F.A.C. states that affixing a digital signature ~~shall~~ constitutes the signing and sealing of engineering work as defined in **Section 471.025, F.S.** The pictorial representation of the seal is not required. Affixing a digital signature can be done in two ways:

- (1) **Digitally signed** means the document is locked to prevent any modifications to the document. Modifications to the document after the digital signature is applied will invalidate the digital signature. The document must be extracted to “break” the certificate and allow editing. Contract Plans and revisions from the EOR are digitally signed.
- (2) **Digitally certified** means the document is digitally signed, but will allow markups and additional digital signatures to be added without breaking the original certificate. Markups are akin to “post its” in the paper world. Markups “float on top of” the signed document and are not bound by the digital signature. Digital signatures can still be validated after markups are added. The **Final As-Built Plans** ~~shall must~~ be **digitally certified** by the responsible ~~P~~professional Engineer (PE) prior to submittal to DFEO.

5.12.6 Receiving the Set of Contract Plans

(A) District Level Responsibilities

The District Construction Office is responsible for providing the Contract Plans and ~~b~~Back-up ~~f~~Files to the Resident Office (RO) for use during construction.

(B) Resident Level Responsibilities

~~Upon receipt, save T~~the original electronic Contract Plans set ~~will should be saved~~ to the Original Plans folder within the Department's collaboration site ~~upon receipt~~. ~~Extract T~~the Contract Plans ~~will should be extracted by the RO~~, separated ~~them~~ into the different components (if not provided by component), ~~and then saved~~ all components to the As-Built Plans folder within the Department's collaboration site. Electronically reflect Aall changes made to the contract ~~will be electronically reflected~~ on the extracted set of plans within the Department's collaboration site. Add all revisions to the extracted set of plans, and do not discard any~~No pages shall will be discarded from the extracted set of plans. All revisions will be added to the extracted set of plans.~~ This extracted set of plans is the **Final As-Built Plans** and will be ~~made a~~ part of the **Final Estimates Documentation**.

5.12.7 Updating the Plans after Contract Award

(A) Revisions by EOR

There are situations when it is necessary or desirable to require the modification of the Contract Plans by the EOR after a project is awarded: the Contract Plans may have contained errors or omissions; field conditions may have changed; or the scope of the project may have been revised. Once the EOR has provided the electronically revised sheet(s) to the District, it is the responsibility of the Resident Engineer to ensure the sheet(s) are saved in the collaboration site. The revised sheets will be extracted from the signed and sealed file and inserted into the **Final As-Built Plans** file. The original sheet(s) will be voided ~~out~~. A Contract modification will be issued to incorporate revised plans into the contract per **CPAM 7.3** and **7.4**.

(B) Changes by Resident Office

Once all changes are reflected on the **Final As-Built Plans** (the extracted set of plans from [CPAM Section 5.12.6 \(B\)](#)), the responsible Engineer will "flatten" the changes ~~into the document~~ to incorporate them into the document changes. The responsible PE will digitally certify the document to sign and seal the **Final As-Built Plans**. By certifying the document, it allows the DFEO to apply markups during the Post Audit Review (PAR). The markups applied by the DFEO are not bound by the digital signature, but "float on top" of the **Final As-Built Plans**.

When the responsible PE makes changes to the Contract Plans that reflect the as-built conditions of a project, the responsible PE is not considered a “successor engineer”. There is no requirement that the same PE who designs the project must perform the as-built services, therefore, a PE who only prepares, and digitally signs and seals the as-built drawings is not a “successor engineer” as discussed in **Rule 61G15-27.001, F.A.C.** and need not follow the provisions of that Rule.

For changes not made by the EOR, the proper statement of disclaimer is required on the **Final As-Built Plans**. The statement will be added to the **Final As-Built Signature Sheet(s)**. This language should note that, by signing and sealing the disclaimer, the responsible PE is only taking responsibility: (1) for the changes in the plans and not the entire set of plans; (2) and for the specific change(s) only shown in redline, not for the entire page.

- (1) Disclaimer to use when changes have been made:

“The above-named professional engineer shall be responsible for the following changes, indicated in redline revision, in accordance with Rule 61G15-23.004, F.A.C. This project was constructed in substantial compliance with these plans as provided by the Engineer of Record.”

- (2) If **Final As-Built Plan** sets have no changes, the responsible PE ~~shall~~ will digitally sign and seal the **Final As-Built Signature Sheet(s)** with a disclaimer that states:

“This project was constructed in substantial compliance with these plans as provided by the Engineer of Record. These plans reflect “as-built” conditions, and no changes were made to the plan sheets.”

If the RO chooses to use CADD to make changes, the requirements in this chapter, and the **CADD Manual** must be met. ~~The RO should u~~Use the cloud revision utility from the Bar Menu in MicroStation or other mark-up tools in other software. The **CADD Manual, Section 5.7** describes the process of generating the proper naming convention and standards for updating the CADD files electronically. If changes are performed other than by cloud revision, such as completely manipulating the native CADD file, all changes ~~must~~will conform to the same procedures and requirements outlined in the **CADD Manual, Chapters 2, 4, and 5** and the **FDM Chapters 130, 131, and 132**. After the native CADD file has been revised to reflect as-built conditions, provide a PDF version ~~shall~~ will ~~be provided~~ for submittal with the **Final As-Built Plans**.

(C) As-Built Drawings by Contractor and Revisions by Contractor or Specialty Engineer

As-Built Drawings by Contractor required by the **Specifications** for miscellaneous items (such as Intelligent Transportation Systems (ITS), signals, conduit, and lighting) and revisions to the Contract Plans made by the Contractor's EOR or a Specialty Engineer ~~shall~~must follow the criteria in the **Specifications** (including but not limited to **Section 611, 630, and 715**) and ~~the FDM for revisions~~. Submit As-built Drawings and revisions ~~will~~shall be submitted in PDF format. It is recommended that As-built Drawings required by the **Specifications** be entered into EDMS and the EDMS document number be referenced on the **Final As-Built Plans** in the applicable location. Revisions to the Contract Plan sheets should be inserted in the **Final As-Built Plans** per [CPAM Section 5.12.8\(B\)](#).

5.12.8 Final As-Built Plans Process

~~Update~~ ~~the Final As-Built Plans shall will be updated~~ with all additions, deletions, and changes clearly delineated to reflect the actual conditions of the project as the job progresses. Enter Quantities ~~should will be entered~~ within 30 days of pay item closeout. Delaying updates to the **Final As-Built Plans** increases the risk of errors and omissions.

[Attachment 5.12-1A](#) and [Attachment 5.12-1B](#) are flow charts of the Final As-Built Plans Process.

The **Final As-Built Plans** will be digitally certified, per [CPAM Section 5.12.5](#), to allow the DFEO personnel to make comments where appropriate. No pages ~~will~~shall be discarded from this set.

(A) Marking Conventions

~~The following procedure shall will be performed when m~~Makeing changes electronically to the **Final As-Built Plan** set(s) using the following marking conventions:

(1) Resident Level Responsibilities

~~All changes by project~~Project personnel ~~use will~~shall be made electronically on the Final As-Built Plan Set(s) with red line revisions. ~~It is recommended~~Cloud to cloud changes throughout the **Final As-Built Plan** ~~ssheets~~.

~~All changes by the~~ Quality Assurance project personnel ~~use will~~shall be made electronically in orange line revisions.

(2) District Level Responsibilities

~~All markups by the~~ Initial Reviewers during the District's Quality Control (QC) or Independent Assurance (IA) Review ~~will shall be made with use~~ **blue** line revisions.

~~All markups by the~~ Overviews during the Post Audit Review (PAR) ~~will shall be made with use~~ **green** line revision.

If a ~~c~~Consultants is hired, on behalf of the DFEO, ~~they will shall follow use~~ the appropriate marking conventions for the role they are supplementing. The function of the DFEO Initial Reviewer and Overviewer are detailed in the **Review and Administration Manual, Section 3.5**.

NOTE 1: The use of layers to further differentiate markups/comments within the **Final As-Built Plans** PDF file(s) is encouraged, but not required. If layers are utilized, ensure layer names are appropriate for the type of mark up (i.e. position/name of personnel, such as Inspector, Contract Support Specialist, or PA) or type of review (IA, QA, QC, or PAR). (Also see requirement under [CPAM Section 5.12.8\(B\)\(2\)b](#).)

(B) Plan Set Sheets

If an entire plan sheet is revised, ~~the original plan sheet must shall have imprint VOID imprinted on it the original plan sheet~~ using **red** text ~~on it~~ and ~~insert~~ the new plan sheet ~~will shall be inserted after behind~~ the original, ~~(old) voided~~ sheet in the set of **Final As-Built Plans**, with exception of the **Key Sheet**. ~~Insert The the revised voided Key Sheet(s) in front of the voided will should follow the revised~~ **Key Sheet(s)**. All revised sheets will be defined on the **Key Sheet(s)** of the appropriate component.

(1) The Key Sheet

The **Key Sheet** of each component of **Final As-Built Plans** ~~must shall~~ show the following data (see [Attachment 5.12-2](#) for example **Key Sheet**):

- (a) ~~Line through or delete the "Contract Plans" preprinted line and imprint Final As-Built Plans will shall be~~ prominently ~~redlined in red~~ across the top of the

~~sheet in place of or above the "Contract Plans" preprinted line and those words will shall be lined through or completely deleted.~~

- (b) Display the following information ~~On~~ on the right side and near the lower corner, ~~the following information will shall be displayed~~ in red ink on the **Key Sheet**:
- (i) Name of Prime Contractor
 - (ii) Name of Prime Consultant Construction Engineering Inspection (CCEI) (If In-House Project, so state)
 - (iii) Name of District Secretary (at time of final acceptance)
 - (iv) Name of Resident Engineer
 - (v) Name of FDOT Project Manager
 - (vi) Name of Project Administrator
 - (vii) Date Work Started
 - (viii) Date of Final Acceptance
- (c) Display Aa complete **Component Index** of the documents (with corresponding EDMS document numbers) related to the plan component ~~will shall be shown~~ on the left side of the **Key Sheet**, **not to exclude the following**:
- (i) Additional plans, such as shop -drawings, etc.
 - (ii) Other As-Built Drawings, such as Jack & Bore, Boring Path Reports, Bore Logs, Plowing, or Signalization ~~will shall~~ be listed as well.
 - (iii) All project descriptions, Financial Project ID Numbers, length, etc., shown on the **Key Sheet** ~~will shall~~ be corrected to agree with the actual construction.

NOTE 2: It is the responsibility of the Resident Engineer to ensure Boring Path Reports meet the requirements of the **Specifications** prior to acceptance and payment.

(2) The Design and Final As-Built Signature Sheet

Insert **Final As-Built Signature Sheet(s)** in Eeach plan component ~~will have its own **Final As-Built Signature Sheet(s)** inserted~~ behind the respective **Key Sheet(s)**. [Attachment 5.12-3](#) is an example **Final As-Built Signature Sheet**. The **Final As-Built**

Signature Sheet can be downloaded from the State Construction As-Built Plans website at:

<http://www.fdot.gov/construction/eConstruction/AsBuiltPlans.shtm>.

If a Design Signature Sheet(s) is included in a plan component from the EOR, ~~do it will not be voided it~~ when inserting the **Final As-Built Signature Sheet**. ~~Index A~~ All changes made in the field, ~~which do not requireing~~ an engineering evaluation, ~~will be indexed~~ on the **Final As-Built Signature Sheet(s)**, ~~and d~~Digitally certified, and have it signed and sealed by the responsible PE. **Rule 61G15.23, F.A.C.** requires text to be included with a digital signature to indicate a document has been digitally signed and sealed, ~~and p~~Printed copies are not considered signed and sealed. The Department's recommended signature appearance to comply with this requirement is shown in [Attachment 5.12-3](#).

- (a) The responsible engineer must include the company name and address, for each component's **Final As-Built Signature Sheet(s)**.
- (b) Show A ~~all~~ changes to the **Final As-Built Plans** during construction for each component must ~~shall be shown~~ on the **Final As-Built Signature Sheet(s)** ~~for each component. The information shall will to~~ include:
 - (1) Sheet number on which the change is shown in the plans
 - (2) A brief description of the change

If more space than provided is needed, an additional page(s) can be added to the **Final As-Built Plans**.

- (c) ~~As the project progresses, Complete the review table on the Final As-Built Signature Sheet as the project progresses. -Ensure~~ each person applying markups or changes to the **Final As-Built Plans** and all reviewers ~~throughout the project shall print~~ enter his/her name followed by the applicable position/reviewer type, the change/review date, and his/her agency/company name on the **Final As-Built Signature Sheet**. This applies to all project personnel (SPE, PA, CSS, Inspectors), all QA/QC/IA reviewers (internal company reviews and Department reviews), and DFEO staff after final acceptance. If more space than provided is needed, an additional page can be added to the **Final As-Built Plans**.

(3) Typical Section Sheets

Mark A authorized changes to the typical section ~~must shall be marked~~ appropriately. Include D documentation for such changes ~~will shall be included~~ as a part of the **Final Estimates Documentation**. Some typical examples include:

- (a) Increase or decrease in thickness
- (b) Change in type of material
- (c) Substitution of pay items
- (d) Change in limits of work
- (e) Addition/Deletion of items of work
- (f) Other Geometric designs (such as varied cross slope)

(4) Summary of Pay Items/ Estimated Quantities Report

(a) The **Plan Summary Sheets** for each of the major groups of pay items are to be included in the **Final As-Built Plans**. Update P pay item quantities ~~must shall be updated~~ on the Summary of Pay Items in the appropriate **Pay Item Summary Box** as detailed in **CPAM Section 5.13**.

(b) The original **Estimated Quantities Report (EQR)** and all revisions must be entered into the Electronic Document Management System (EDMS). Reference all back up documentation on **Form 700- 050-10, Pay Item Summary and Certification**. For more information, see **CPAM 5.13**.

(5) Plan Sheets

The **Plan Sheet** details for all the major groups of plans become the permanent historical record of the construction project. Clearly delineate A all changes in construction that would constitute a conflict in this record ~~must shall be clearly delineated~~ on the **Final Plan Sheets**. Insert changes and cross out all incorrect data. The following changes must be noted:

- (a) Changes to the horizontal and vertical alignments as shown on the original Contract Plans
- (b) Stations or equations ~~that have been~~ introduced or revised during construction
- (c) Intersection and crossover details ~~that have~~ been modified or relocated

- (d) Inlets, manholes, box culverts, and end walls ~~that were~~ added, relocated, revised, or deleted
- (e) All sidewalk ~~that was~~ modified in thickness or otherwise, and all curb and gutter, and shoulder gutter ~~that was~~ added, revised, or deleted
- (f) All driveways ~~that were~~ not shown on the original Contract Plans; ~~or driveways were~~ shown on the original Contract Plans but ~~are no longer in existence~~ ~~removed~~; or driveways were modified in thickness or otherwise
- (g) All ditch locations and grades ~~that were~~ adjusted during construction
- (h) Changes in fencing items, including gate location
- (i) Sign locations changed and modified pavement markings ~~that were modified~~
- (j) All signal details ~~that~~ changed during construction
- (k) All Bridge, Approach Slab, and Lighting details ~~that are~~ different from the actual construction
- (l) Add Benchmarks (BM_s) set during construction and their descriptions ~~that were set during construction shall will be added~~ to the profile portion of the **Plan Sheets**
- (m) Reflect ~~All~~ Utility relocates and/or conflicts ~~shall will be reflected~~ on the **Utility Adjustment Sheets**

(6) Summary of Drainage Structures, Optional Materials Tabulation and Drainage Structure Sheets

Reflect ~~C~~ changes ~~will shall be made~~ on the **Final As-Built Plans** set, to reflect ~~include~~:

- (a) Plan lengths changed to reflect the actual construction length when an authorized field change is made or a plan error is noted
- (b) Show ~~C~~ changes in flow line elevations ~~shall will be shown~~ on the **Plan Profile Sheets**
- (c) Changes in stations or offset dimensions
- (d) Changes in size of structures
- (e) Added/Deleted structures

- (f) ~~Show the T~~type of pipe material and thickness used at each structure ~~will/shall be shown~~ on the **Drainage Structures Sheets** and the **Optional Materials Tabulation Sheets**. ~~Check T~~the as-built column ~~will be checked~~ to indicate what type of pipe material and thickness was used at each structure.
- (g) Types of inlets and manholes constructed ~~shall~~must be indicated
- (h) When the method of measurement is plan quantity for cross drain and storm sewer pipes, distinguish plan errors ~~shall must be distinguished~~ from field changes due to different tolerances being applicable.
- (i) **Lateral Ditch Sheets:** Delineate Aall adjustments in horizontal alignment of flow line grade ~~shall will be delineated~~ on the **Plan and Profile Sheets**. Adjust Tthe cross-section ~~shall will be adjusted~~ to reflect the change if a pay quantity adjustment is required.

(7) Cross-Section Sheets

The disposition of the **Cross-Section Sheets** ~~with regard to in relation to~~ a set of **Final As-Built Plans** depends on the method of payment set up for the earthwork items (refer to the **Special Provisions** of each Contract).

- (a) **Excavation Borrow Pits, Excavation Subsoil, and Excavation Channel on Cubic Yard Basis:** Prepare and include Ffinal **Cross-Section Sheets** and volumetric computations ~~are to be prepared and included~~ in the **Final As-Built Plans**. ~~These sheets~~ are required to reflect the actual work accomplished and are the basis of final pay quantities. The original plan cross-sections ~~will/shall~~ remain a part of the **Final As-Built Plans**.
- (b) **Embankment, Regular Excavation, and Lateral Ditch Excavation on Cubic Yard Plan Quantity Basis:** The original design cross-sections are used as the basis for both plan and final pay quantities and to control grading operations. ~~They are to be r~~etained them as part of the **Final As-Built Plans**. Prepare Aadditional cross-sections to correct plan errors and/or to reflect field changes ~~are prepared~~ and added to the **Final As-Built Plans**. Detailed instructions pertaining to earthwork are included in **CPAM Section 5.16**.

(8) Final As-Built Bridge Plans

The Structures Designer and Facilities Engineers need ~~to have~~ accurate bridge records available for inspection, maintenance, rehabilitation, ~~and~~ emergency repair operations, and any future widening operations. ~~The following information R~~shall be record eda nd/or

~~reference the following information and/or referenced~~ on the proper matrices, plans sheets, log books, and forms for bridge projects:

- (a) ~~For each structure, a complete~~ As-Built load rating, ~~or a calculations, input files, output files and sealed~~ load rating summary ~~sheets or and a~~ letter from EOR ~~stating that confirming~~ the ~~Aas-B~~bid load ratings represent the ~~Aas-B~~built condition. Clearly list casting dates and stressing dates for all post-tensioned concrete components in the ~~Aas-B~~built load rating calculations. ~~Record~~ Load Ratings, based on ~~Aas-B~~built condition ~~shall will be recorded~~ on the appropriate forms and entered into EDMS in the appropriate group and document type with structure number identified.
- (b) ~~Record~~ Drill Shaft Inspection ~~r~~Records ~~shall will be recorded and~~, appropriately marked as permanent record, and entered into EDMS. Reference the EDMS number within the **Final As-Built Plans**.
- (c) ~~Record~~ Pile Driving Log Books/Pile Driving records, ~~shall will be recorded and~~ appropriately marked as permanent record, and entered into EDMS. Reference the EDMS number within the **Final As-Built Plans**.
- (d) ~~Document~~ All crack observations on the structures ~~shall will be documented~~ either through detailed sketches or "Crack Maps"; ~~it~~ is the responsibility of the CCEI Inspector to perform this inspection (as outlined in the **CPAM Section 10.3.5**).
- (e) ~~Enter~~ Shop Drawings ~~shall will be entered~~ into EDMS, ~~and~~. ~~r~~Reference the EDMS number within the **Final As-Built Plans**.
- (f) Engineer approved repairs due to Request for Corrections (RFC) ~~are~~ not included in the **Final As-Built Plans**. For further explanation see **CPAM Section 8.11**.

~~Enter~~ ~~T~~the above items ~~will should be stored into~~ EDMS in the appropriate directory, and ~~reference~~ the EDMS document number ~~will should be referenced~~ on the **Final As-Built Plans** in the applicable location. Original documents may be turned over to the District Structures and Maintenance Engineers for their use. Ensure all documents have been ~~Quality Control~~ reviewed for Quality Control to ensure correctness and legibility.

~~Update~~ ~~T~~the electronic design files for the Category II (see **FDM Chapter 121** for category definitions) bridge plans ~~will be updated~~ to reflect as-built conditions in the native CADD format. The Districts ~~may will have the~~ option to have the appropriate EOR or the CCEI consultant perform this CADD service. ~~Submit~~ ~~T~~the plans ~~will shall be submitted~~ with the **Final Estimates Documentation**. The EOR ~~must will shall~~ update the bridge load ratings

based on the as-built bridge plans or review load ratings submitted by the Contractor's EOR for contractor-initiated revisions per **CPAM Section 10.11**.

The RE will markup sheets requiring minor (non-engineering evaluation) as-built changes and show those changes on the **Final As-Built Signature Sheet(s)**. For major changes, the RE will send revisions back to the appropriate EOR as outlined in **FDM Chapter 131**. Any revisions made by value engineering decisions will be digitally signed and sealed by the Contractor's EOR. This may be a Cost Savings Initiative Proposal (CSIP) redesign or an original design of certain components including Shop Drawings. The Contractor's EOR will send the signed and sealed plan revisions back to the RE for inclusion into the **Final As-Built Plan** set.

Prior to submittal of the **Final Estimates Documentation**, the electronic as-built bridge plans will be secured with a digital certification.

(9) Final As-Built Lighting Plans

Lighting details may reside either throughout the roadway plan set or within a Lighting Plans component for more complex designs. These details include project-specific information for luminaires (i.e., light fixtures) that require revision if the original plans differ from the as-built condition. This information will assist maintenance personnel with replacing luminaires and matching the original installation's design properties.

Within the Lighting Data Table (defined in **Florida Design Manual, Chapter 943.4**), the following information must be changed to match as-built condition:

- (a) Luminaire Make/Model
- (b) Lumen Output
- (c) IES Distribution Pattern (1 through 5)
- (d) Correlated Color Temperature
- (e) Input Wattage
- (f) Input Voltage

The above changes require approval of the lighting EOR per **Standard Specifications Section 715**. If approved, these changes must be included in the As-Built Plans.

5.12.9 Design-Build Final As-Built Plans

Provide Design-Build **Final As-Built Plans** meeting the requirements of the Request for Proposal (RFP) and Design-Build Specifications shall ~~will be provided~~ to the Department

~~meeting the requirements of the Request for Proposal (RFP) and Design-Build Specifications.~~ It is not necessary to apply a digital signature to each page of the Release for Construction Plans; one signature will suffice for the entire document. Any required changes to the **Final As-Built Plans** by the Department ~~must~~**shall** meet the requirements found within **this section of CPAM**. The responsible Engineer ~~will~~**shall** also insert the **Final As-Built Signature Sheet**, apply the appropriate statement of disclaimer per **CPAM Section 5.12.7(B)**, and sign and seal the **Final As-Built Plans**.

5.12.10 Changes after Submittal of Final Estimates Documentation

(A) Resident Level Responsibilities

It will be the ROs responsibility to make any changes, required due to findings by the DFEO during the Post Audit Review (PAR), that modify the **Final As-Built Plans**. All changes will be made in accordance with this Manual.

Exception to the above: Updates to an item's quantity by the DFEO after submittal of the **Final Estimates Documentation**, with no corresponding modifications to the Plans, will not require changes or new digital signature by the RO.

5.12.11 As-Built Data Collection

(A) Final Quality Control Roadway Report (QCRR)

~~Asphalt As-Built Pavement Data will be collected on Form 675-030-20A, Contractor's Quality Control Roadway Report (QCRR) - Automated Version. The Project Administrator (PA) is responsible for submitting the final QCRR (Form 675-030-20A, Asphalt Roadway – Daily Report of Quality Control) in Excel via email to the State Materials Office by email as a record of the as-built pavement data at to the following email address: SM-MACQCRRUpload@dot.state.fl.us -after Final Acceptance.~~

~~The Resident Office PA is responsible for ensuring errors found on the QCRR, after final acceptance, are corrected by the Contractor. The final QCRR is to be replaced with the corrected version in EDMS and resubmitted to the State Materials Office explaining the form has been revised.~~

(B) Intelligent Transportation System Facility Management (ITSFM)

~~The PA is responsible for obtaining Feature Import Templates (as required in Specifications 611-2.3) should be submitted by from the Contractor to the Project~~

~~Administrator (PA) for review, and acceptance, and submittal. The PA will submit the Feature Import Templates~~ to the District Traffic Operations with the As-Built Plans for entry into the Department's ITSFM system. ~~and e~~ Enter applicable correspondence in EDMS.

(C) Approved Product List (APL)

The PA is responsible for ensuring all APL data is entered into the Materials Acceptance and Certification (MAC) System and the information is complete and accurate. It is required that APL data be entered at the time of installation. APL data is required to be entered into the MAC prior to approval of each monthly estimate. Please contact the [Product Evaluation Office](#) for more information on required APL tracking.

5.12.12 Final As-Built Plans Handling Process

(A) District Level Responsibilities

After the final close-out/PARs, ~~the DFEO will~~ ensure all required documents are included in the electronic files in EDMS.

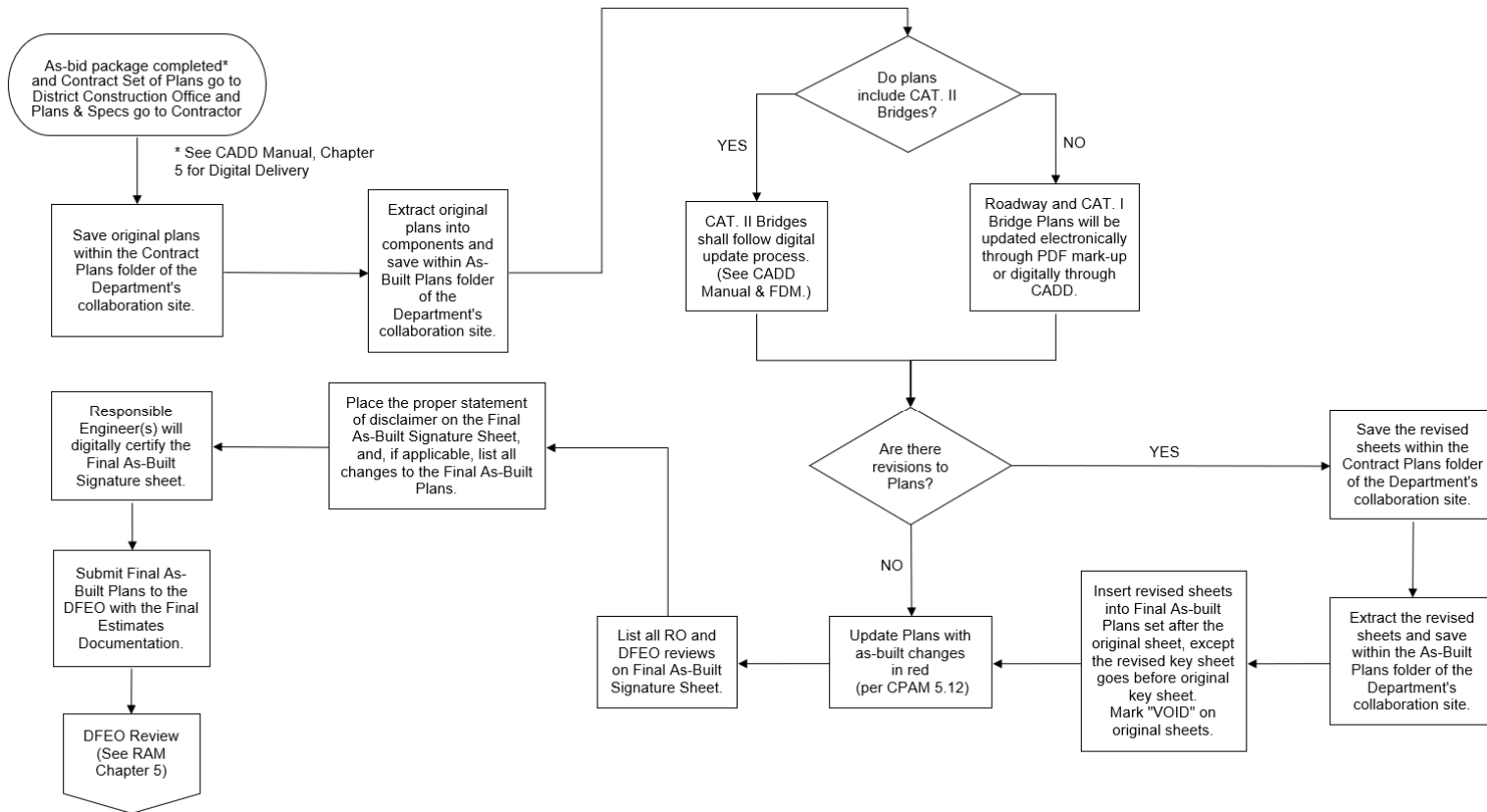
~~Keep P~~ projects pending litigation ~~will be kept~~ available until they are finalized.

~~Adhere to T~~ the Department's procedure for Record Retention ~~shall will be adhered to~~ as outlined in the *Records Management Procedure, Topic No. 050-020-025*.

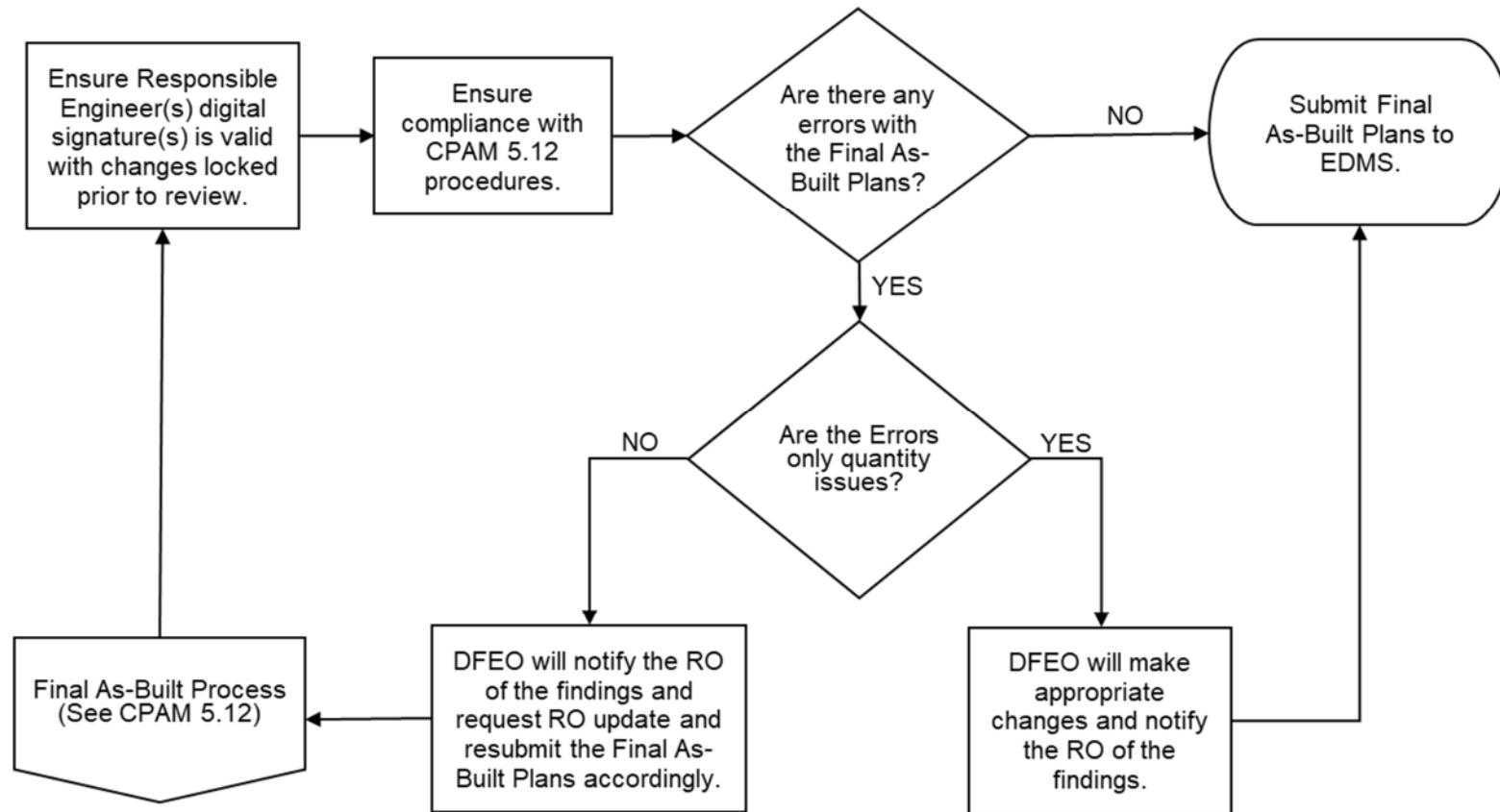
5.12.13 Attachments

- [Attachment 5.12-1A](#) Final As-Built Plans Process (Resident Office)
- [Attachment 5.12-1B](#) Final As-Built Plans Process (District Final Estimates Office)
- [Attachment 5.12-2](#) Key Sheet
- [Attachment 5.12-3](#) Final As-Built Signature Sheet

Attachment 5.12-1A FINAL AS-BUILT PLANS PROCESS Resident Office



Attachment 5.12-1B FINAL AS-BUILT PLANS PROCESS District Final Estimate Office



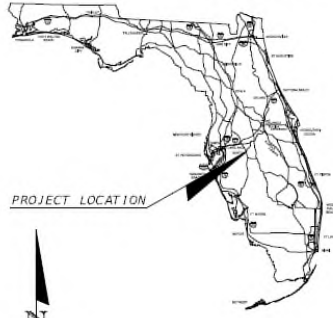
Attachment 5.12-2 KEY SHEET

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION

FINAL AS-BUILT PLANS
CONTRACT PLANS

FINANCIAL PROJECT ID 431278-1-52-01
 (FEDERAL FUNDS)
 POLK COUNTY (16030 AND 16030-301)
 STATE ROAD NO. 35/555

CONSTRUCTION CONTRACT NO. T1623



PROJECT LOCATION

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS
 SIGNING AND PAVEMENT MARKING PLANS
 SIGNALIZATION PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-3	SIGNATURE SHEET
4	SUMMARY OF PAY ITEMS
5	TYPICAL SECTION
6	TYPICAL SECTION DETAILS
50-1 - 50-47	SUMMARY OF QUANTITIES
7 - 8	SUMMARY OF DRAINAGE STRUCTURES
9	OPTIONAL MATERIALS TABULATION
10 - 11	BENCHMARKS
12 - 13	REFERENCE POINTS
14	PROJECT NOTES
15 - 40	ROADWAY PLAN
41 - 42	DRAINAGE STRUCTURES
43 - 44	DRAINAGE DETAILS
45 - 47	DRIVEWAY CROSS SECTIONS
48 - 50	STORMWATER POLLUTION PREVENTION PLAN
51 - 65	TEMPORARY TRAFFIC CONTROL PLAN
66 - 67	SUMMARY OF VERIFIED UTILITIES
68 - 71	POTENTIAL CONTAMINATION SITES

LIST OF REVISED INDEX DRAWINGS

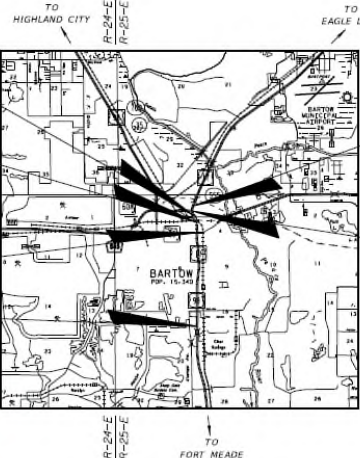
INDEX NO.	SHEET NO.
600	1+2 OF 12
619	1+2 OF 2
11200	2 OF 3
11860	4 OF 8
17302	1 OF 1
17346	1+2 AND 13-14
17347	1+5 OF 5
17727	2 OF 2
17841	1 OF 1

RAILROAD CROSSING NO. 624492-H
 (SR 35/ SR 555)
 CSX TRANSPORTATION, INC.
 400P SV 451.17
 STA. 668+00.00 @ SURVEY SR 35/ SR 555

COMPONENT INDEX

JACK AND BORE AS-BUILT DRAWINGS EDMS DOC # _____
 SIGN SHOP DRAWINGS EDMS DOC # _____

GOVERNING STANDARDS AND SPECIFICATIONS:
 Florida Department of Transportation, 2013 Design Standards and revised Index Drawings as appended herein, and July 2015 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents.
 For Design Standards click on the "Design Standards" link at the following web site:
<http://www.dot.state.fl.us/rddesign/>
 For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:
<http://www.dot.state.fl.us/specificationsoffice/>



TO HIGHLAND CITY
 TO EAGLE LAKE
 TO LAKE WALES
 TO FORT MEADE
 TO MULBERRY

END EXCEPTION
 STA. 668+44.33
 MP 0.323

BEGIN EXCEPTION
 STA. 666+02.69
 MP 0.269

END PROJECT (16030000)
 STA. 684+38.74
 MP 18.532

BEGIN PROJECT (16030000)
 STA. 548+37.23
 MP 15.959

STA. 651+81.09
 MP 17.918 END (16030000)
 MP 0.000 BEGIN (16030301)

STA. 678+63.33 =
 STA. 98+16.05
 MP 0.508 END (16030301)
 MP 18.423 BEGIN (16030000)

ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:
 ANDRA G. DIGGS II, P.E.
 FLORIDA DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE OFFICE
 801 N. BROADWAY AVENUE
 BARTON, FL 33830-3809

PLANS PREPARED BY:
 FLORIDA DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE OFFICE
 801 N. BROADWAY AVENUE
 BARTON, FL 33830-3809
 (863) 519-2300

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

NAME OF PRIME CONTRACTOR: _____
 NAME OF PRIME CONSULTANT: _____
 DISTRICT SECRETARY: _____
 RESIDENT ENGINEER: _____
 FDOT PROJECT MANAGER: _____
 PROJECT ADMINISTRATOR: _____
 DATE WORK STARTED: _____
 DATE WORK FINAL ACCEPTED: _____

ROADWAY PLANS
 ENGINEER OF RECORD: MELISSA W. GRIMES, P. E.
 P.E. NO.: 72156

FISCAL YEAR	SHEET NO.
16	1

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY	13,433.36	2.544
BRIDGES	0.000	0.000
NET LENGTH OF PROJECT	13,433.36	2.544
EXCEPTIONS	168.15	0.032
GROSS LENGTH OF PROJECT	13,601.51	2.576

FDOT PROJECT MANAGER: M. WAYNE SHELTON

KEY SHEET REVISIONS

DATE	DESCRIPTION

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE STORED AND SEALED UNDER RULE 6103-21-003, F.A.C.

Attachment 5.12-3 FINAL AS-BUILT SIGNATURE SHEET

Ashley W Anderson
Digitally signed by Ashley W Anderson
 Date: 2019.10.07 09:38:21 -04'00'

STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 123456

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY Ashley Anderson, PE ON THE DATE INDICATED HERE

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE STREET
 TALLAHASSEE, FL 32303
 ASHLEY ANDERSON, P. E. NO. 99999

This project was constructed in substantial compliance with these plans as provided by the Engineer of Record. These plans reflect "as-built" conditions and no changes were made to the plan sheets.

Digital Signature

**Signature Appearance
 (including Engineer Name and Address)**

Statement of Disclaimer

List of Responsible Sheets

Reviewer Information

Ashley W Anderson
Digitally signed by Ashley W Anderson
 Date: 2020.02.12 12:36:26 -05'00'

STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 99999

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY Ashley Anderson, PE ON THE DATE INDICATED HERE

PRINTED COPIES OF THE DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ROADWAY ENGINEERS, INC.
 123 MAIN STREET
 TALLAHASSEE, FL 32303
 ASHLEY ANDERSON, P. E. NO. 99999

The above named professional engineer shall be responsible for the following changes, indicated in redline revision, in accordance with Rule 61G15-23.004, F.A.C. This project was constructed in substantial compliance with these plans as provided by the Engineer of Record.

ROADWAY PLANS

SHEET NO.	DESCRIPTION OF CHANGE
1	PROJECT DETAILS
4-6	BASE THICKNESS CHANGED
SQ1-25	ADDED FINAL QUANTITIES
34	AS-BUILT OPTIONAL MATERIALS INDICATED
66	SIDEWALK REALIGNMENT

SIGNING & PAVEMENT MARKING PLANS

S2-S4 ADDED FINAL QUANTITIES

NO CHANGES

WITH CHANGES

Date	Name	Position (Title)	Review Type, If Applicable
RESIDENT OFFICE			
10/25/2017	Jane Doe	30% Review	QA
10/16/2018	John Doe	60% Review	QA
10/31/2019	Joe Smith	60% Review	QA
	Jimmy Smith	Inspector	
	Jill Brown	Contract Support Specialist	
	Ashley Anderson	Senior Project Engineer	
DISTRICT OFFICE			
11/06/2018	Peter Piper	IA Review (Jill Brown)	
11/06/2019	Peter Piper	60% Review	QC OTHER

REVISIONS				ROADWAY ENGINEERS, INC.	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	123 MAIN STREET TALLAHASSEE, FL 32303	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					999	LEON	123456-1-02-01	FINAL "AS-BUILT" SIGNATURE SHEET
								2A