115 Standard Plans and Standard Specifications

115.1 General

This chapter describes the relationship between the plans development process, the ***Standard Plans for Road and Bridge Construction (Standard Plans)***, and the ***Standard Specifications for Road and Bridge Construction (Standard Specifications)***.

115.1.1 Effective Dates

The ***Standard Plans*** are published annually and are effective based on construction letting dates. The effective dates for each version are provided on the ***Standard Plans*** website. Identify the governing version for each project in accordance with ***FDM 910***. See the ***Structures Detailing Manual*** for additional requirements for bridges.

The ***Standard Specifications*** are published annually and are effective based on construction letting dates.

Modification for Non-Conventional Projects:
Delete ***FDM 115.1.1*** and see the RFP for the governing ***Standard Plans*** and ***Standard Specifications***.

115.2 Standard Plans

The ***Standard Plans*** (formerly referred to as the ***Design Standards***) are standard construction details that are published as sets of Indexes. The ***Standard Plans*** provide consistent designs and details for the preparation of construction contract documents.

Standard Plans are developed with consideration for durability, maintainability, and broad applicability. However, they may not be suitable for use on all projects or site conditions. The Engineer of Record (EOR) must determine the appropriate application of Standard Plans for each project.

The ***Standard Plans*** comprise the latest and best practices of the Department as follows:

(1) Are in compliance with:

(a) Department criteria, policy, preferences, and specifications.

(b) ***AASHTO*** publications.

(c) Federal laws and regulations.

(d) ***BOE Manual***, Approved Products List, and Construction Specification consistency and coordination.

(2) Provide detail clarity and are based on proven designs with considerations for constructability and long-term maintenance.

(3) Reserve structural capacity; redundancy of design.

(4) Clarify material usage.

(5) Promote contractor familiarity.

(6) Standardize formwork for concrete components.

Incorporate the ***Standard Plans*** as appropriate unless a need to develop project-specific designs is documented. Place documentation in the Project Documentation folder; see ***FDM 111.7***.

The ***Standard Plans*** may be supplemented or amended by one or more of the following:

- ***Standard Plans Errata***
- ***Standard Plans Revisions***
- ***Standard Plans Interim Revisions***
- ***Developmental Standard Plans***
- ***Modifications to Standard Plans***
- ***Standard Plans Instructions***
- ***Data Tables***

115.2.1 Standard Plans Errata

The Errata process implements minor changes to the ***Standard Plans*** before the next regularly scheduled version is published (i.e., out-of-cycle). These changes do not affect cost or implementation of the Index (e.g., correcting editorial or typographical errors). Errata are published on the ***Standard Plans*** website next to the Index.

115.2.2 Standard Plans Revisions

Standard Plans revisions are implemented with the regularly scheduled annual version (i.e., in-cycle). These revisions may include additions, updates, corrections, clarifications, or deletions to the ***Standard Plans***. Documentation of ***Standard Plans*** revisions is posted in Revision History sheets on the ***Standard Plans*** website.

115.2.3 Standard Plans Interim Revisions

Standard Plans Interim Revisions (SPIR) are changes requiring implementation before the regularly scheduled version of the ***Standard Plans*** is published (i.e., out-of-cycle). The ***SPIR*** is posted on the website with the version of the ***Standard Plans*** that is specifically affected. Interim revisions are typically incorporated into the preceding annual publication.

SPIRs are made effective through the release of a ***Design Bulletin***, which includes the revised Index and implementation requirements. When a ***SPIR*** is applicable to a project, it must be referenced in accordance with ***FDM 910***.

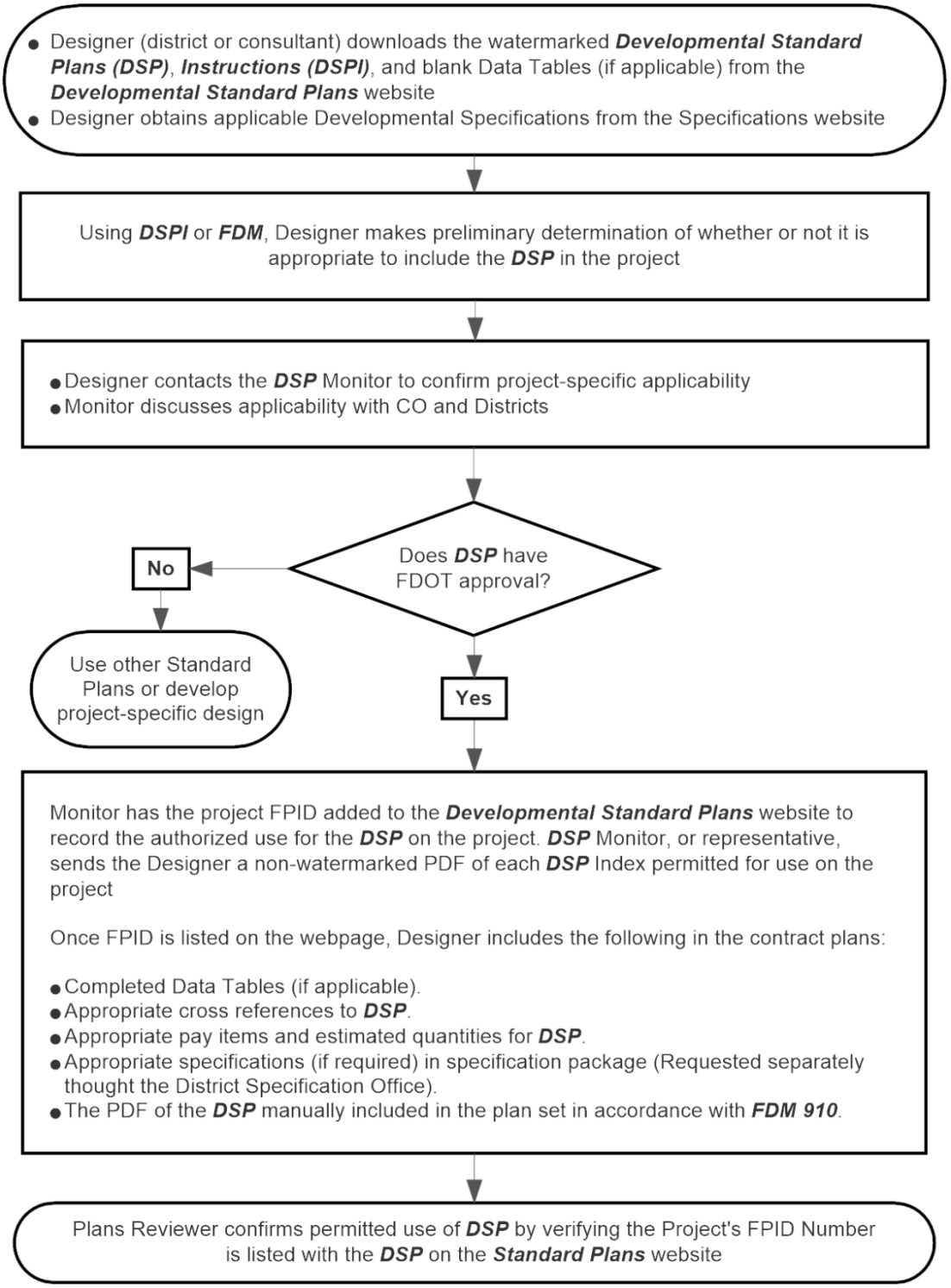
115.2.4 Developmental Standard Plans

Developmental Standard Plans integrate new or innovative concepts into the ***Standard Plans***. A Central Office Monitor is assigned to each ***Developmental Standard Plan***. The Central Office Monitor oversees the development of the Index, monitors the usage process, and makes changes as needed. The use of a ***Developmental Standard Plan*** requires the approval of the Central Office Monitor.

Developmental Standard Plans are typically released with a ***Design Bulletin*** or as part of criteria included within the ***FDM***.

Follow the process illustrated in ***Figure 115.2.1*** when seeking approval to use a Developmental Index. When a project-specific use has been approved by the Central Office Monitor, the project's FPID number is listed on the ***Developmental Standard Plans*** website with the appropriate Developmental Index. Include the Developmental Index in the project plans in accordance with ***FDM 910***.

Figure 115.2.1 Developmental Standard Plans Usage Process



115.2.5 Modifications to Standard Plans

Modifications to Standard Plans may be needed if the ***Standard Plans*** do not meet a project-specific need. When this occurs, modifications of a ***Standard Plan*** requires the approval of the District Design Engineer. To facilitate the process, CADD files are available on the ***Standard Plans*** website. When ***Modifications to Standard Plans*** are needed, they must be performed under the direct supervision of a Florida Licensed Professional Engineer using one of the following methods:

(1) **Method 1:** Produce a new project-specific drawing using the details within the CADD files as a guide or template. No reference to the related ***Standard Plan*** is called out in the plans. The details in the plans which were created from the CADD files cease to be a Standard and the engineer responsible for the modifications to the drawings becomes the EOR for the application of the entire design.

(2) **Method 2:** Modify the details and notes within the CADD files for the project-specific requirements. No reference to the related ***Standard Plan*** is called out in the plans. The plans must clearly depict evidence that modifications have been made to the original ***Standard Plan*** to avoid any confusion. It may be appropriate to place a plan note indicating that the details are based on modifications to the original ***Standard Plan***. The details in the plans which were created from the CADD file cease to be a Standard and the engineer responsible for the modifications to the drawings becomes the EOR for the application of the entire design, including the applicability and correctness of the unaltered portions of the CADD file.

(3) **Method 3:** If the required modifications are minor (e.g., modifications to reinforcing, changes to specific sectional details, or accommodations for unique design elements), use the CADD file to create details showing the modifications to the ***Standard Plans*** on a separate sheet in the plans. Include a reference to the related ***Standard Plans*** in the Index of Sheets. Place the modified details in the plans on a sheet entitled, *"Modifications to Standard Plans, Index ### - ###"*. The engineer responsible for the modifications to the ***Standard Plan*** becomes the EOR for the details on this sheet and for effects the modification has on other components within the ***Standard Plans***. Modifications affecting toll site envelopes must be coordinated with the applicable tolling authority in accordance with ***FDM 280***.

115.2.6 Standard Plans Instructions

The ***Standard Plans Instructions (SPIs)*** provide instructions for incorporating the ***Standard Plans*** into the Contract Plans. ***SPIs*** include design criteria, usage limitations, plan content requirements, and pay item information. ***SPIs*** may also provide examples and sample drawings.

Instructions are organized by ***Standard Plans*** Index number and included on the ***Standard Plans*** website adjacent to the associated Index. Some instructions apply to an entire series of Indexes. Instructions for the Indexes in each respective series are included in the instructions for the lead Index of the series.

It is the responsibility of the EOR using these instructions to determine the applicability of an Index in the design of a project. The inappropriate use of and adherence to these instructions does not exempt the engineer from the responsibility of developing an appropriate design.

115.2.7 Data Tables

Many ***Standard Plans*** require Data Tables that must be completed and included in the plans. The Data Tables provide information that supplements or completes individual ***Standard Plans***. The Data Tables are presented as CADD Cells and are included with the FDOT CADD Software. Modifications of these tables are discouraged.

Current Data Tables can be found on the ***Standard Plans website*** (under "Supporting Documents") when they are not available in the FDOT CADD Software.

Data Tables include a "Table Date" in the upper right corner of each table and may include a "Notes Date" for each set of corresponding notes. The "Table Date" or "Notes Date" reflect the latest modification of the CADD cell and are not to be changed or deleted. Compare the "Table Date" or "Notes Date" with the ***SPI*** to confirm that the current Data Table is being used.

115.2.8 Local Agency Standards and Details

Local agency standards are permitted on off-system projects for items requested by the local maintaining agencies that differ from the Department's ***Standard Plans***. Use only local agency standards developed by a Florida Licensed Professional Engineer. Usage of local agency standards requires approval of the District Design Engineer.

Use one of the following methods to incorporate local agency standards and details into the Contract Plans:

(1) Include as ***Modifications to Standards Plans***, as described above.

(2) Add project-specific details and notes based on the local agency standards into the Contract Plans. The engineer responsible for including these details and notes in the Contract Plans becomes the EOR for the application of the entire design. This option should only be used for items completely independent of the Department's ***Standard Plans***.

(3) Attach the local agency standards (without modification) in the Contract Plans. Only include the standard(s) specific to the project. Insert the local agency standards into the Contract Plans in accordance with the requirements for ***Developmental Standard Plans*** provided in ***FDM 910***. Reference the agency standards where required using plan notes or callouts.

Consider the need for a Modified Special Provision or Technical Special Provision where the local agency standards conflict with, or are not addressed by, the FDOT ***Standard Specifications***. Coordinate the need for project-specific pay items with the District Specifications Office.

115.3 Standard Specifications

The governing Specifications for a project include the ***Standard Specifications*** and any revisions thereto. These revisions typically take the form of Special Provisions, Supplemental Specifications, Modified Special Provisions (MSPs), Technical Special Provisions (TSPs), and Developmental Specifications. Revisions to the ***Standard Specifications*** are compiled into the Specifications Package, which is part of the contract documents.

The process of compiling and formatting the Specifications Package is described in the Department's ***Specification Package Preparation Procedure*** (***Topic No.: 630-010-005***) and the ***Specifications Handbook***. These documents also include the definitions of the various components and an explanation of the roles and responsibilities of the different individuals involved (e.g., EOR, District, Central Office).

The governing ***Standard Specifications*** for every project must be identified in the plans in accordance with ***FDM 910***.

These publications are available on the State Specification Office website at: ***https://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm***.

115.4 Approved Products List (APL) for Local Agency

The local agency may request to use a limited list of products that are a subset of the Department's ***APL***. When requested, include ***Standard Specification 6-1.3.1.1*** in the Specifications Package. The Local Agency List will be posted on a separate tab in ***Product Application Tracking & History (PATH)*** and be maintained by the Product Evaluation Office, with coordination between the local agency and the responsible offices.