

Florida's Turnpike Enterprise (FTE) Shop Drawing Review Process for Design Build (Non-Conventional) Projects

General:

The information outlined within this document, depicts a portion of Florida's Turnpike Shop Drawing Review Processes which includes guidelines, protocols and requirements. For more detailed information, please reference the following documents:

Turnpike's Plan Preparation and Practices Handbook Volume I, Chapter 28:

http://www.floridasturnpike.com/design/prod_design/tppph/tppph.html

Plans Preparation Manual, Volume I, Chapter 28:

<http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm>

Material certifications, welding procedures, and concrete mix designs are typically submitted by the Design-Build Contractor to the Resident Engineer (CEI), who forwards the certifications to the State Materials Engineers in Gainesville. These items do not need to be submitted to the Department's Shop Drawing Review Office for review and approval by the Design-Build Engineer of Record (EOR).

For non-standard items, the Resident Engineer (CEI) will typically request approval by the Design-Build EOR regarding applicability. Material certifications for items on the Approved Product List (APL) are typically submitted by the Design-Build Contractor to the Resident Engineer (CEI) thru ProjectSolve^{SP}. These items are cataloged in the Shop Drawing/Submittal Item List as "Pre-Qualified *Submittals*", which are routed directly to the Resident Engineer (CEI) for review.

Scheduling of Shop Drawing Submissions:

The Contractor is required to schedule submissions such that a minimum of 45 calendar days is allowed for review by the Design-Build Architect of Record/Engineer of Record and the Department, for routine work. The Design-Build Firm will allow for a fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time by the Department for all shop drawings. Allowance must be made for potential resubmittals, and the Contractor normally is advised by the Department to consider a 75 or 90 calendar day total lead-time for submittals prior to the need for fabrication or construction work. Adherence to the Shop Drawing/Submittal Item List (Schedule) is intended to allow for the planning of resources and reduce the possibility of a large number of submissions being forwarded for review. When **voluminous shop drawings are submitted at one time** such that the combined EOR and the Shop Drawing Review Office **45-day review time will likely not be met**, notify the Resident Engineer (CEI).

Shop Drawing/Submittal Item List:

Prior to the submission of any shop drawings/submittals, the Contractor must **submit a Shop Drawing/Submittal Item List (Schedule)** to the Resident Engineer (CEI) **within 60 days** of the **start of construction operations**.

The list is to be submitted in electronic format (excel spreadsheet with specific format, which will be provided by the Resident Engineer (CEI) to Contractor).

For each planned submittal, define the following; description of item, structure identification number, bridge number, location, identify Toll Gantry Structures by site location, specification section numbers and roadway divisions. Note to Contractor: ensure that submission of the item list is provided in ample time as outlined in Standard Specifications to accommodate this flow. The Contractor must submit the list to the Resident Engineer (CEI).

Obtaining Access to ProjectSolve^{SP}:

In order to obtain access to ProjectSolve^{SP}, users need to acquire a log-in access. This is administered by Robert Laurence, Florida's Turnpike Enterprise Network Systems Manager, via email robert.laurence@dot.state.fl.us.

When submitting the request, indicate full name, title, email address and your association with the specific project. Also, indicate if you will be involved in the shop drawing submission process or if you require viewing access only. Upon issuance of your account, you will be provided instructions on how to log into the system.

Electronic Submission of Shop Drawings

1. Prior to submission of the shop drawing electronically, the Design-Build Contractor will consecutively number each sheet of the submittal and indicate the total number of sheets within the series (i.e., 1 of 12, 2 of 12.....12 of 12). Include on each sheet the following items as minimum requirement: FPID, Bridge Number(s), drawing title and number, title block showing the names of the fabricator or producer and the contractor for which the work is being done, initials of the person(s) responsible for the drawing, the date on which the drawing was prepared, the location of the item(s) within the project, the Design-Build Contractor's approval stamp with date and initials, and when applicable, the signature and engineering seal of the Specialty Engineer or Design-Build Contractor's Engineer of Record. A resubmittal will be requested when any of the required information is not included.

Stamp and initial each drawing, page, cut sheet, etc. of the submittal, indicating it has been reviewed for compliance with the contract plans and specifications. **Any comments or markings provided by the Design-Build Contractor or subcontractor must be indicated in blue or black.** In the case there is no place for the stamp on the front page, please stamp the back side of each sheet, or insert a blank page, indicate the page number (i.e., back of page 1 of 6).

2. Submit Shop Drawing/Submittals electronically by utilizing **Florida's Turnpike Enterprise Construction Management's internet website**, ProjectSolve^{SP}. Assign a **unique submittal number** to the Shop Drawing.
3. **Shop drawings must be submitted in .pdf, using 300 dpi resolution and in 8-bit up to 24-bit color.** The Contractor will upload the shop drawing to ProjectSolve^{SP}, and submit it to the Architect of Record/Engineer of Record (AOR/EOR). ProjectSolve^{SP} will generate a system email notification to the AOR/EOR that a shop drawing has been submitted for their review; the Resident Engineer (CEI), is also copied on the email notification.

Design-Build AOR/EOR receives shop drawing from Design-Build Contractor, "electronically". It is the responsibility of Design-Build AOR/EOR to verify the Design-Build Contractor's shop drawing submission has been submitted in complete format. Failure to do so will constitute the submission as incomplete and FTE will route shop drawing back to Design-Build AOR/EOR to coordinate corrections.

Design-Build AOR/EOR reviews the shop drawing and notes comments in red, and stamps every sheet with the disposition ("APPROVED", APPROVED AS NOTED", "RESUBMIT" OR "NOT APPROVED"), include initials and date. Each item must have one disposition review stamp, multiple dispositions on the same sheet is prohibited. Additional comments may be added where they apply, under the stamp or in an attached Memorandum. **Please note: Stamping must be incorporated in red and include reviewer's initials, date and code disposition.**

4. Shop drawings must not be any larger than 11" x 17" (plotted in 11" x 17" format). For plotting requirements, please refer to *FDOT CADD Manual*.
5. If the shop drawing consists of samples, as outlined in the shop drawing item list, it is acceptable for the data to be submitted electronically through ProjectSolve^{SP}. Data must include the following; Manufacturer, Product Name and Product Number. These pages must be stamped. It will be at the discretion of the Department, if submissions of original samples are required. The Contractor will coordinate with Florida's Turnpike Enterprise Architectural Department prior to the submission.

If original samples are required, the Contractor must submit three (3) samples for proper processing, in addition to the number of samples needed by the Contractor. The Contractor is required to stamp the samples, include the FPID and their Shop Drawing Submittal Number. Initiate the shop drawing review process through ProjectSolve^{SP}, by uploading their transmittal letter and indicate in the "Comment" area on the shop drawing module page, indicating samples have been forwarded to the AOR/EOR via Overnight Courier Service. The AOR/EOR must confirm in ProjectSolve^{SP} "Comment" area that they are in receipt of samples.

AOR/EOR must forward any original samples directly to the Turnpike Shop Drawing Review Office for proper processing. AOR/EOR will retain one (1) copy for their files. Once the shop drawing has been processed, Florida's Turnpike Enterprise Shop Drawing Review Office will distribute allotted number of samples: one (1) to the Resident Engineer (CEI) and Florida's Turnpike Enterprise Shop Drawing Review Office will retain one (1) for their files. Any remaining samples will be provided to the Contractor.

6. ***Stamping Requirements for Signed/Sealed Calculations and Shop Drawings:***

For Contractor-Originated Design or for items which require design and drawing preparation of components, systems or installation methods and equipment for specific temporary portions of the project work or for special items of the permanent work not fully detailed in the plans and required to be furnished by the Design-Build Contractor, a Specialty Engineer must sign and seal each drawing, as well as the cover sheet of any design calculations.

Prior to the Design-Build Contractor uploading shop drawings to ProjectSolve^{SP}, ensure the seal (rubber ink stamped or embossed) is a legible image. Failure to do so will constitute the submission as incomplete and shop drawing will be submitted back to the Design-Build AOR/EOR to coordinate corrections with the Design-Build Contractor.

It is acceptable for the Design-Build Contractor and the Design-Build AOR/EOR to stamp the cover page of the calculations only. Each sheet of the shop drawing must be stamped.

7. Design-Build Firm must not use shop drawings for obtaining clarification regarding contract plans or specification requirements.

At the time of each submission, the Design-Build Contractor must have provided specific written notice, along with an itemized list of all deviations/variations from the Contract Plans and Specifications, in a transmittal letter along with the Shop/Erection Drawing submission. In addition, the drawings must contain a specific notation which explicitly and prominently calls out any deviations.

Approval of Shop/Erection Drawing will not constitute nor be considered grounds for approval of a variation in which the project requirements are affected unless specifically indicated as such and noted on the shop drawing, by the Design-Build AOR/EOR and/or the Department's approval comments as returned with the shop drawing submittal to the Design-Build Contractor.

Design-Build Firm's request for contract change in time, scope, cost, design, material or product type, specification requirements and/or remedial design for correction construction/fabrication deficiencies, will not be submitted as a shop drawing, but must be submitted in proper format to the Resident Engineer (CEI) for further handling and processing.

8. The Department will overview all shop drawings. Upon review of these shop drawings, the Department's reviewer will indicate the disposition by stamping the sheets, sign and date shop drawing.

The Florida's Turnpike Enterprise Shop Drawing Review Office will route the shop drawing to the Resident Engineer (CEI), who must stamp the drawings, electronically, "Released for Construction" or "Released for Construction As Noted", initial and date. Shop drawings which are stamped "Resubmit", by the Design-Build AOR/EOR will not be routed to the Engineer (CEI) for stamping.

Resident Engineer (CEI) will route the shop drawing back to the Florida's Turnpike Enterprise Shop Drawing Review Office for final processing back to the Design-Build Contractor. Once processed, ProjectSolve^{SP} will send a system generated email to the following parties: Resident Engineer (CEI), Construction Project Manager, Project Manager and Design-Build Architect of Record/Engineer of Record.

Florida's Turnpike Enterprise Shop Drawing Review Office

(Address for Courier Services)

Florida's Turnpike Enterprise Headquarters

Shop Drawing Review Office – Transportation Development, Room 3115

MP 263, Florida's Turnpike

(Building 5315 Turkey Lake Service Plaza)

Ocoee, FL 34761

(Address for U.S. Mail)

Florida's Turnpike Enterprise Headquarters

Shop Drawing Review Office – Transportation Development, Room 3115 (Building 5315)

P.O. Box 613069

Ocoee, FL 34761

Tel: 407.532.3999

Fax: 407.822.5821

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ProjectSolve^{SP} Administrator

Robert Laurence, Network Systems Manager
Florida's Turnpike Enterprise, Pompano Operations Building
Tel: 954.934.1146
Email: robert.laurence@dot.state.fl.us

ProjectSolve^{SP} - Florida's Turnpike Enterprise Shop Drawing Website

Shop Drawings can be tracked daily by utilizing ProjectSolve^{SP}.

The purpose of ProjectSolve^{SP} is to provide the Design-Build Contractor, Resident Engineer (CEI), Design-Build AOR/EOR, Project Managers, Construction Managers and Turnpike Management with up-to-date information/latest status of the Construction Project, whether it be related to shop drawings, RFIs, correspondence or MOT Notifications for every ongoing/active construction contract. It will serve as a tracking tool for project related documents and assist in expediting the construction process.

Visit the following website for Florida's Turnpike Enterprise general shop drawing requirements and useful information.

http://design.floridasturnpike.com/prod_design/shopdrawings/shopdrawings.html

Florida's Turnpike Enterprise (FTE) Shop Drawing Routing Chart for Design Build (Non-Conventional)

