Florida’s Turnpike Enterprise Shop Drawing Review Process
for Design Bid Build (Conventional) Projects

General:

The following pertains to Florida’s Turnpike Enterprise Shop Drawing Review Processes requirements. For more detailed information, please reference the following:

Turnpike’s Design Handbook (TDH), Part 2, 267
FDOT Design Manual (FDM), Part 2, 267

Pre-Qualified and Approved Product List (APL) “Submittals”:

Material certifications, welding procedures, paint procedures and concrete mix designs are typically submitted by the 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 Florida’s Turnpike Shop Drawing Review Office for review and approval by the Engineer of Record (EOR) regarding applicability. Material certifications for items on the Approved Product List (APL) are typically submitted by the Contractor to the Resident Engineer (CEI) thru ProjectSolve®. 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.

Shop Drawing Item List:

The Contractor is required to submit a Shop Drawing Item List to the Resident Engineer (CEI) within 60 days of the start of construction operations, and prior to the submission of any shop drawings.

The list is to be submitted utilizing the required excel spreadsheet format, which is provided by the Resident Engineer (CEI) to the Contractor.

For each planned shop drawing submission and when developing the shop drawing item list, define the following: description of item, structure identification number, bridge number, location, specification number and/or roadway division number.

If the project contains Express Lane Tolling components, identify these components by each site location, (i.e. building, gantry identification number, etc.) along with the respective specification number. Combining shop drawings for multiple sites is not acceptable.

For ITS, Roadway Lighting and Traffic components, which all share the same roadway division number, indicate specifically what the component applies to in the Shop Drawing-Submittal Item List, for example: 635 ITS Pull Box, 635 Roadway Lighting Pull Box or 635 Traffic Signal Pull Box. This will ensure shop drawings are distributed
to the proper Discipline Reviewer for the Engineer of Record and Florida’s Turnpike Reviewers, since different disciplines review these components.

Reference the attached flow chart which depicts the review coordination of the shop drawing item list. Note to Contractor: ensure that submission of the item list is provided in ample time as outlined in Standard Specifications to accommodate this flow.

**Scheduling of Shop Drawings:**

The Contractor is required to schedule submissions such that a minimum of 45 calendar days is allowed for review by the Architect of Record and/or Engineer of Record and the Florida’s Turnpike, for routine work. 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 submissions prior to the need for fabrication or construction work.

Adherence to the Shop Drawing Item List (Schedule) is intended to allow for the planning of resources and reduce the possibility of large amounts of submissions being forwarded for review. When *voluminous shop drawings are submitted at one time*, such that the combined AOR/EOR and the Shop Drawing Review Office 45-day review time will likely not be met, notify the Resident Engineer (CEI).

The Contractor must make submissions for approval with such promptness as to cause no delay in his fabrication and construction schedules. Only in emergency cases should special considerations be requested.

**Obtaining Access to ProjectSolve®:**

In order to obtain access to ProjectSolve®, 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 or Joe Panella, Florida’s Turnpike Enterprise Network Systems Specialist, joe.panella@dot.state.fl.us.

When submitting a request, indicate the FPID, full name, title, telephone number, cell phone number, email address and define association with the specific project. Indicate the role of involvement during the shop drawing submission process or if viewing access is required only. Upon issuance of account, the Network Systems Manager/or Specialist will provide instructions for logging into system.
Shop Drawings Submissions:

1. Prior to submission of shop drawings through ProjectSolve®, the Contractor, must consecutively number each sheet of the shop drawing and indicate the total number of sheets in the series (i.e., 1 of 12, 2 of 12…12 of 12). Include on each sheet the following items as a 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 Contractor’s approval stamp with date and initials, and when applicable, the signature and engineering seal of the Specialty Engineer. 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 shop drawing, indicating it has been reviewed for compliance with the contract plans and specifications. Any comments or markings provided by the Contractor or Subcontractor must be indicated in blue or black. In the case there is no place to incorporate stamping on the front page, and considering stamps required by others, insert blank pages and indicate the page number as back of page (i.e., back of page 1 of 6). Do not stamp over literature, dimensions or details.

2. Submit Shop Drawings utilizing Florida’s Turnpike Enterprise internet website, ProjectSolve®. Assign a unique submittal number to the Shop Drawing.

3. Shop drawings must be submitted in .pdf, using 300 dpi resolution. The Contractor will upload the shop drawing to ProjectSolve®, and submit it to the Architect of Record or Engineer of Record. ProjectSolve® will provide a system generated email notification to the AOR or EOR that a shop drawing has been submitted for review. Note: certain file name conventions using special characters are not allowed, (examples: + % @ : & *, etc. and the use of underscore) and will cause the PDF file not to open nor be accessible.

   It is the responsibility of AOR or EOR to verify the Contractor’s shop drawing submission has been submitted in complete format.

   AOR or EOR reviews the shop drawing and electronically implements any comments and stamping in red. Stamp every sheet with a disposition (“APPROVED”, “APPROVED AS NOTED”, “RESUMIT” OR “NOT APPROVED”). The electronic stamp to include: firm name, reviewer full name, department and the date. The shop drawing must include one AOR or EOR disposition review stamp for each sheet. Multiple AOR or EOR disposition stamps on the same sheet are prohibited. Additional comments may be added where they apply, under the stamp or in an attached Memorandum.

4. Shop drawings must not be any larger than 11” x 17”.
5. If the shop drawing consists of samples, as outlined in the shop drawing item list, it is acceptable for the samples to be submitted electronically through ProjectSolve\textsuperscript{sp}. The electronic data must include the following; Manufacturer, Product Name and Product Number. The Contractor must stamp these pages. It will be at the discretion of AOR or EOR, if submissions of original samples are required.

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\textsuperscript{sp}, by uploading their transmittal letter and indicate within ProjectSolve\textsuperscript{sp}, the samples have been provided to the AOR or EOR via overnight courier service. The AOR or EOR must confirm within ProjectSolve\textsuperscript{sp}, they are in receipt of the samples.

Once reviewed, the AOR or EOR must forward any original samples directly to the Turnpike Shop Drawing Review Office for proper processing. AOR or EOR will retain one (1) copy for their files. After 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. **Requirements for Submission of Signed-Sealed Shop Drawings and Calculations:**

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 Contractor, a Specialty Engineer must digitally sign and seal each drawing, as well as the cover sheet of any design calculations.

Prior to Contractor submitting the shop drawings in ProjectSolve\textsuperscript{sp}, ensure the Specialty Engineers’ digital seal is acquired from one of the FDOT approved digital certificate authorities. If the digital seal does not comply, it will constitute the submission as incomplete. The shop drawing will be returned to the Contractor, as “Not Reviewed” and a resubmittal will be required.

So as not to invalidate the Specialty Engineers’ digital seal, when submitting the shop drawing, include the original, along with saved copy of the original submission with a new name, in .pdf format, as outlined under section titled **Shop Drawing Submissions**. The processed shop drawing will include both the Specialty Engineers’ original digital signed and sealed submission and the electronic copy used for the shop drawing review.
7. Contractor must not use shop drawings for obtaining clarification regarding contract plans or specification requirements.

At the time of each submission, the Contractor must give specific written notice, (as in a transmittal letter), along with an itemed list of all of variations/deviations the shop drawing may have from the requirements of the Contract Plans and Specifications. 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 AOR or EOR, or the Florida’s Turnpike approval comments as returned with the shop drawing to the Contractor.

Do not use shop drawings to modify the construction contract time, the contract amount, the design intent nor in any way reduce the maintainability, structural integrity or load-carrying capacity of the structure or its components. Such modifications are administered by revised plan sheets or specifications.

8. Florida's Turnpike will continue to review those shop drawings deemed “Critical” (ADA, Life Safety or Toll elements). Turnpike Review Staff will identify “Critical” items from the Contractor’s shop drawing item list.

Upon completion of review, the Florida's Turnpike reviewer will indicate electronically, any comments in green, the disposition on every sheet, and include the full name, department and date for final processing back to Contractor. The approval or disapproval of shop drawings by the Turnpike is indicated by one of the following designations: “REVIEWED” (approved, no further action required), “FURNISH AS NOTED” (approved as noted, make corrections noted, no further submission is required), “FURNISH AS NOTED/SUBMIT SPECIFIC ITEM” (approved as noted, approval is contingent upon submission of additional information for review and approval), “REJECTED” (not approved, do not resubmit the concept or component as submitted), “REJECTED/SUBMIT SPECIFIC ITEM” (not approved, submit additional information for review and approval), “REVISE/RESUBMIT” (resubmit with corrections), “NOT REVIEWED” (no review required), “SUBMIT SPECIFIC ITEM” (submit additional information for review and approval), “NOT REVIEWED/SUBMIT SPECIFIC ITEM” (not reviewed, submit additional information for proper review and approval).

Once processed, ProjectSolve® generates a system email to the following: Contractor, Architect of Record or Engineer of Record, Resident Engineer (CEI), Construction Project Manager, and Project Manager.
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
Attn: Shop Drawing Coordinator
Tel:
Email:

Attn: Assistant Shop Drawing Coordinator
Tel:
Email:

ProjectSolve<sup>sp</sup> Administrators
Robert Laurence, Network Systems Manager
Florida’s Turnpike Enterprise, Pompano Operations Building
Email: robert.laurence@dot.state.fl.us

Joe Panella, Network Systems Specialist
Florida’s Turnpike Enterprise, Pompano Operations Building
Email: joe.panella@dot.state.fl.us

ProjectSolve<sup>sp</sup> - Florida’s Turnpike Enterprise Shop Drawing Website

Shop Drawings can be tracked daily by utilizing ProjectSolve<sup>sp</sup>. The purpose of ProjectSolve<sup>sp</sup> is to provide the Contractor, AOR or EOR, Resident Engineer (CEI), Project Managers, Construction Managers and Florida’s 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 serves as a tracking tool for project related documents and assist in expediting the construction process.

Visit the following webpage for Florida’s Turnpike Enterprise general shop drawing requirements and useful information.  [http://www.floridasturnpike.com/design.html](http://www.floridasturnpike.com/design.html)
Florida’s Turnpike Enterprise (FTE) Flow Chart for Shop Drawing Item List
“Critical” Review Coordination
Design Bid Build (Conventional) Projects

Contractor
Submits Shop Drawing Item List to Resident Engineer (CEI)

Resident Engineer (CEI)
Submits Shop Drawing Item List to FTE Shop Drawing Review Office

Florida’s Turnpike Enterprise Shop Drawing Review Office (FTE)
List is provided to the AOR or EOR for review/verification of technical components required

Architect of Record (AOR) or Engineer of Record (EOR)
Verifies list and coordinates any deficiencies with the Resident Engineer (CEI) and/or Contractor.
Once list is verified, AOR or EOR forwards to FTE Shop Drawing Review Office and copies FTE Project Manager

Florida’s Turnpike Enterprise Shop Drawing Review Office (FTE)
Provides list to FTE Discipline Reviewers to determine those items deemed “Critical”, which require review

FTE Discipline Reviewers
“Critical” items are identified.
List is returned to the FTE Shop Drawing Review Office

ProjectSolve® Administrator
Imports shop drawing item list into ProjectSolve®
A confirmation email is provided to project team members
Florida’s Turnpike Enterprise (FTE) Shop Drawing Routing Chart for Design Bid Build (Conventional) Projects

Subcontractors, Suppliers, Fabricators

Contractor

*Initiates and submits shop drawing thru ProjectSolve™*

Architect of Record (AOR) or Engineer of Record (EOR)

ProjectSolve™ provides a system generated email notification

Reviews shop drawing

Reviewed shop drawing is routed to FTE Shop Drawing Review Office thru ProjectSolve™

Florida’s Turnpike Enterprise (FTE)
Shop Drawing Review Office

Shop Drawing Coordinator
And
Assistant Shop Drawing Coordinator

*Receives system generated email notification*

*Submits final processed shop drawing thru ProjectSolve™*

System generated email notification provided to all interested parties

AOR or EOR

Contractor

Resident Engineer (CEI)

FTE Construction Project Manager

FTE Project Manager

FDOT District Precast Inspector

If Applicable to Project

Welding Inspection and/or Structural Coating Inspection Firms

If Applicable to Project