

## **Turnpike Shop Drawing Review Process for Design Bid Build (Conventional) Projects**

### **General:**

The following pertains to the Turnpike's 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 Engineer (CEI), who forwards the certifications to the State Materials Engineers in Gainesville. These items do not need to be submitted to 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 Engineer (CEI) thru ProjectSolve<sup>SP</sup>. These items are cataloged in the Shop Drawing/Submittal Item List as Pre-Qualified "***Submittals***", which are routed directly to the Engineer (CEI) for review.

### ***Shop Drawing Item List:***

The Contractor is required to submit a Shop Drawing Item List to the 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 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

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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 the Turnpike Reviewers, since different disciplines review these components.

*If the description of the shop drawing you receive from your subcontractor is different from what you provided on your shop drawing list, please contact the Assistant Shop Drawing Coordinator to make the corresponding changes to the Shop Drawing list in ProjectSolve. We want to ensure to have accurate information in the title of the shop drawing.*

Reference the attached flow chart Figure 2A, which depicts the review coordination of the shop drawing item list with both Architect of Record and/or Engineer of Record and the Turnpike. 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 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 Turnpike Shop Drawing Review Office 45-day review time will likely not be met, notify the 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<sup>SP</sup>: (NOTE: Section only needed if no site with Team Directory)**

In order to obtain access to ProjectSolve<sup>SP</sup>, users need to acquire a log-in access. This is administered by Robert Laurence, Turnpike Network Systems Manager, via email robert.laurence@dot.state.fl.us or Joe Panella, Turnpike 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<sup>SP</sup>, 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) (if applicable), 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 **digital signature and engineering seal of the Specialty Engineer on the first page of the shop drawing.**

**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. It is acceptable for the Contractor to stamp the cover page of the calculations only. 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 internet website**, ProjectSolve<sup>SP</sup>. 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<sup>SP</sup> and submit it to the Architect of Record or Engineer of Record. ProjectSolve<sup>SP</sup> will provide a system generated email notification to the AOR or EOR that a shop drawing has been submitted for review. **Note: certain file naming 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" (plotted in 11" x 17" format). For plotting requirements and for Drawings being submitted in 11" x 17", please refer to *FDOT CADD Manual, Topic No. 625-050-001, Sections 5.10.2 and 7.10.2.*
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<sup>SP</sup>. 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/EOR or Department, if submissions of original samples are required.***

If original samples are required, the Contractor must provide the samples to the AOR/EOR for review, with a scanned copy, including the information provided in the previous paragraph, for review by the Department. 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<sup>SP</sup>, by uploading their transmittal letter and indicate in the "Comment" area on the shop drawing application page, that samples have been provided to the AOR/EOR via Overnight Courier Service. The AOR/EOR must confirm within ProjectSolve<sup>SP</sup> "Comment" area that they are in receipt of samples. The AOR/EOR may either retain the samples or forward them to the CEI, if required.

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 the first page of the shop drawing, as well as the cover sheet of any design calculations.***

**Prior to Contractor submitting the shop drawings in ProjectSolve<sup>SP</sup>, 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, which will be used for shop drawing review, 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 which will be 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 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. The 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 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<sup>SP</sup> generates a system email to the following: Contractor, Architect of Record or Engineer of Record, Engineer (CEI), Construction Project Manager, and Project Manager.

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**Turnpike 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: Karen Cree, Shop Drawing Coordinator**

Tel: 407.264.3405

Email: karen.cree@dot.state.fl.us

**Attn: Assistant Shop Drawing Coordinator**

Tel:

Email:

**ProjectSolve<sup>SP</sup> Administrators**

Robert Laurence, Network Systems Manager

Florida's Turnpike, Pompano Operations Building

Email: robert.laurence@dot.state.fl.us

Joe Panella, Network Systems Specialist

Florida's Turnpike, Pompano Operations Building

Email: joe.panella@dot.state.fl.us

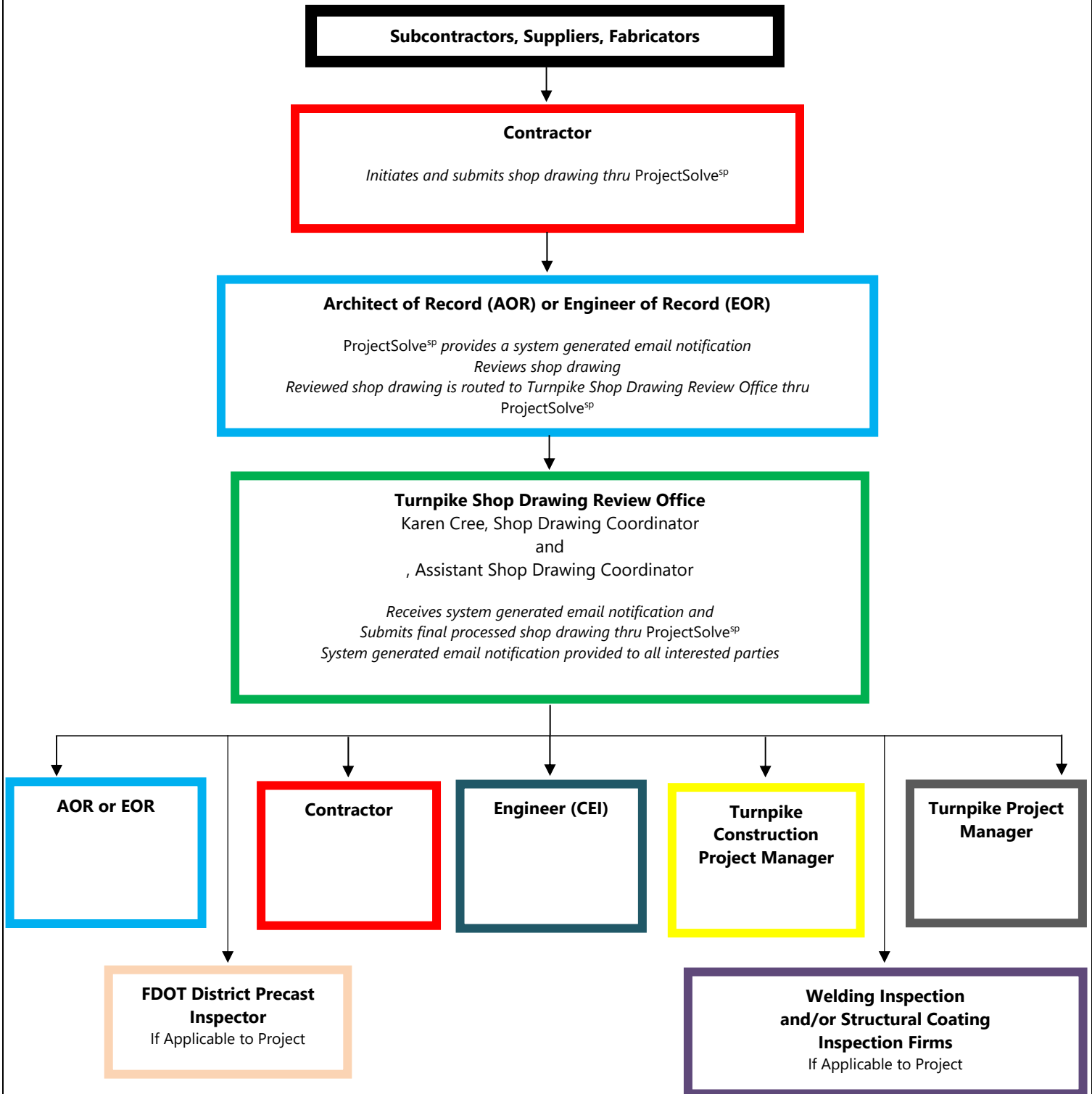
**ProjectSolve<sup>SP</sup> – Florida's Turnpike Shop Drawing Website**

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, Engineer (CEI), Project Managers, Construction Project 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.

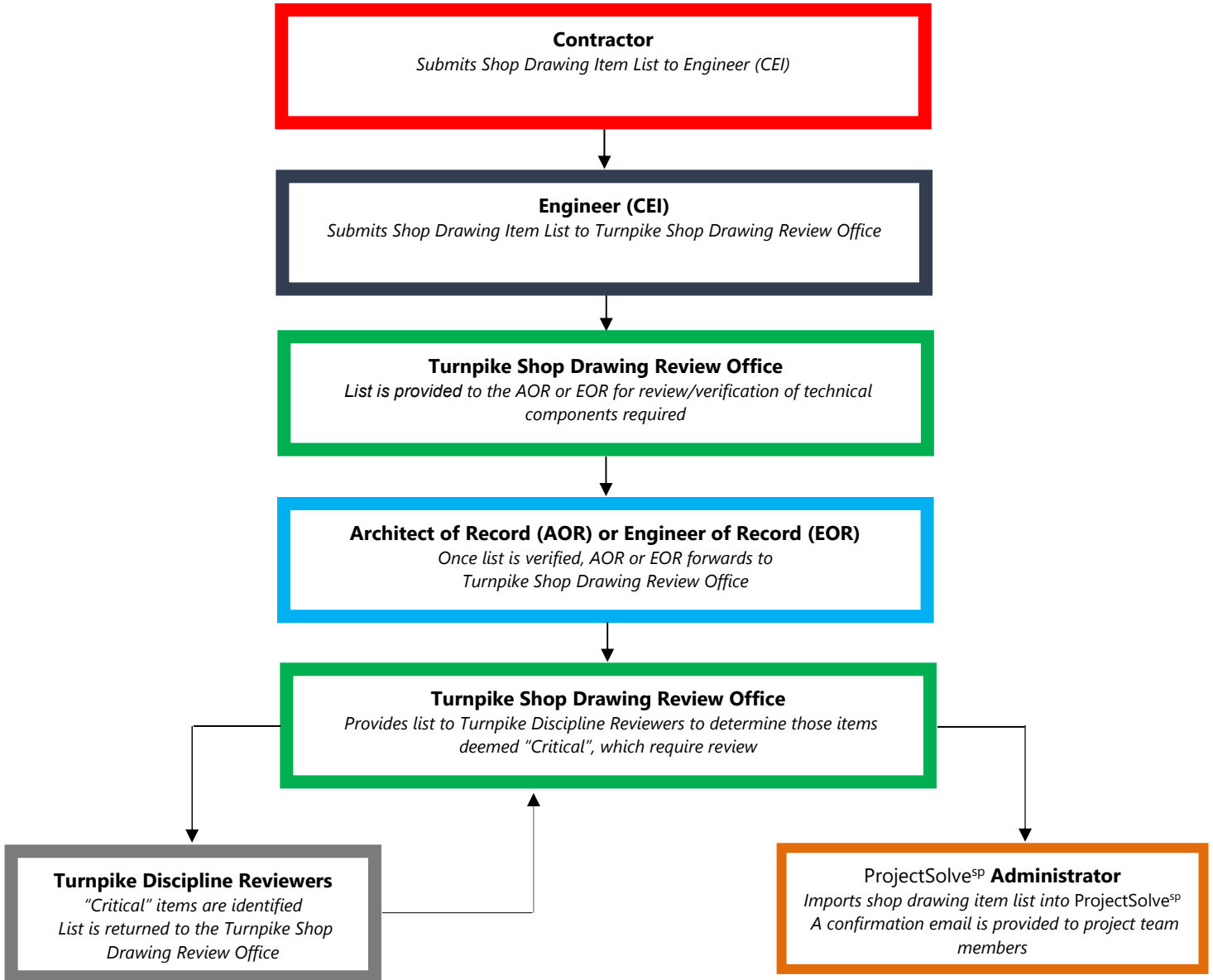
Visit the following webpage for Florida's Turnpike general shop drawing requirements and useful information.

<http://www.floridasturnpike.com/design.html>

**Figure 1 - Turnpike Shop Drawing Flow Chart for Reviews by Consultant Architect of Record (AOR) or Engineer of Record (EOR) *without* Turnpike Review for Design Bid Build (Conventional) Projects**



**Figure 2A - Turnpike Flow Chart for Shop Drawing Item List  
Review Coordination with Turnpike  
Design Bid Build (Conventional) Projects**





**Figure 2B - Turnpike Shop Drawing Flow Chart for Reviews by Consultant Architect of Record (AOR) or Engineer of Record (EOR) with Turnpike Review for Design Bid Build (Conventional) Projects**

