

Fabrication Library

ELECTRONIC SUBMISSION STANDARDS



2019

BUREAU OF STRUCTURES | WISCONSIN DEPARTMENT OF TRANSPORTATION

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Accessing the Fabrication Library for Electronic Submittals

Requesting Access

To request access, complete this form:

<https://wisconsindot.gov/dtsdManuals/strct/fabrication/acc-req-frm-2017.doc>

Send completed form to: DOTDLStructuresFabrication@dot.wi.gov

Once your access request form is accepted, you will receive further instructions, including a link to the Fabrication Library.

Opening the Fabrication Library Home Page

To open/view the Fabrication Library Home Page, use the following link on your preferred internet browser: <https://wigov.sharepoint.com/sites/dot-dtsd/scr/SitePages/Home.aspx>

Questions? Contact: DOTDLStructuresFabrication@dot.wi.gov

Roles

Fabricator: Company assembling the structural components shown on the shop drawing details

Contractor: Prime contractor

Project Leader/Manager: Region project engineer administering the contract or consultant engineer administering the contract on behalf of WisDOT.






Bureau of Structures: Central WisDOT Office







Electronic Submittal Processes

Shop Drawings

References

-  [How to upload a document?](#)
-  [How to edit document properties?](#)
-  [How to check-in a checked-out document?](#)
-  [How to update review status for Project Manager/Leader?](#)
-  [How to add review comments?](#)

Parties Involved

-  Fabricator
-  Contractor
-  Project Leader or Manager
-  Bureau of Structures (BOS)

- 1) The Fabricator (or the detailer contracted by the Fabricator) produces the shop drawing set.
- 2) The Fabricator completes a Quality Control (QC) review of the shop drawings, including the review items listed in the applicable Contractor's Certificate of Quality Control DT Form [CCQC DT Form]. The Fabricator should resolve all errors, omissions or constructability issues before signing the DT Form.

Structure/Component	[CCQC DT Form]
Steel Bridges	DT2333*
Sign Structures	DT2326
Fabricated Bridge Components	DT2327
<i>Railings, Steel Bearing Assemblies, Steel Diaphragm, Expansion Devices</i>	
Prestressed Concrete Girders	DT2328
Retaining Walls	DT2329
Noise Walls	<i>None (TBD)</i>
Pedestrian Steel Bridges	<i>None (TBD)</i>
Box Culverts	<i>None (TBD)</i>

* QC Review by a Professional Engineer is required. PE may be contracted by the Fabricator or Contractor.

- 3) By completing and signing this form the Fabricator confirms the constructability of the components (as detailed in the shop drawings) and the conformance of the shop drawing set to the contract plans.

All deviations from the contract plans must be resolved and noted on the shop drawings before submitting the shop drawings to the Fabrication Library. Additional information needed to complete all shop drawing details must be requested through the RFI process.
- 4) The Fabricator forwards the [\[CCQC DT Form\]](#) and the shop drawing set to the Contractor for review.
- 5) The Contractor verifies that a complete QC review of the shop drawing set has been completed by the Fabricator and/or may also complete their own review. The Contractor should work with the Fabricator and the Project Leader or Manager to resolve all errors, omissions or constructability issues before signing the DT Form.

- 6) After confirming that all errors and RFIs have been resolved, the Contractor signs the [\[CCQC DT Form\]](#). By completing and signing this form the Contractor validates both the constructability of the components as detailed in the shop drawings, and- the conformance of the shop drawing set to the contract plans.
- 7) The Fabricator or Contractor uploads the shop drawing set to the corresponding Fabricator Folder in the Fabrication Library.

Note: WisDOT does not dictate which party (Fabricator or Contractor) completes the upload. This should be determined by the Fabricator/Contractor team.

The shop drawing file must meet the following requirements:

- Format: PDF (unlocked)
 - Do not use any of the following symbols in the filename: ~ " # % & * : < > ? / \ { | }
 - Limit the filename length to 180 characters (including spaces)
 - Must be legible in a computer monitor
 - Size: 11" x 17" - for shop drawing sheets
 - Size: 8.5" x 11" - for DT Forms
 - First page of the PDF must be the [\[CCQC DT Form\]](#)
 - Upload one set of shop drawings for each Structure ID
 - Revisions must be uploaded as part of a complete set of shop drawings. All changes must be listed on the first sheet of the shop drawing set and each change marked on the corresponding detail sheet.
 - Revised shop drawings sets must include a new [\[CCQC DT Form\]](#).
- 8) When uploaded and checked in, the Shop Drawing Status is marked as: *Received – Acceptance Pending*.
 - 9) Bureau of Structures (BOS) reviewer is notified of the upload. The project leader or manager is notified of the upload, provided he or she has signed up for system notifications.
 - 10) The Fabricator and Contractor are notified of the review and acceptance status of the shop drawing through the Fabrication Library. This is accomplished through the Project Management Review status and BOS Review status options.
 - 11) Review of the shop drawing set by the project leader or manager is to be completed at the discretion of the project leader or manager. However, even if no review is to be completed, the shop drawing status in the Fabrication Library requires input from the project leader/manager.

After review, the Project Management Review status must be changed to one of the following options: Accepted, Accepted with corrections as noted or Revise & Resubmit and review comments must be added to the pdf (see [How to add review comments?](#) guide). When no review is to take place, the Project Management Review status on the Fabrication Library must be changed to Accepted.

In the interest of quality and efficiency any QA reviews by BOS and the project leader/manager should be completed within 10 business days from the time a complete shop drawing set (including the completed & signed [\[CCQC DT Form\]](#)) is uploaded to the Fabrication Library.

- 12) BOS only reviews a percentage of all shop drawing sets. Shop drawing sets that have received no QA review by BOS are accepted with no comments; stamped accepted with no reviewer name.




Shop drawing sets, reviewed by BOS, are stamped on the first drawing sheet, with the name of the reviewer and date of review

Per Wisconsin Standard Specification 105.2.1 (4) Control of Work | General: "The department's review does not relieve the contractor of the responsibility for obtaining satisfactory results, for the accuracy of dimensions and details, or for conformity of these drawings with the contract. The contractor may begin work on associated items without the department's review."



- 13) Accepted shop drawings may be released for fabrication.

Welding Procedure Specifications (WPS)

References

-  [How to upload a document?](#)
-  [How to edit document properties?](#)
-  [How to check-in a checked-out document?](#)






Parties Involved

-  Fabricator
-  Bureau of Structures (BOS)





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- 1) Fabricator uploads WPS and related Procedure Qualification Records (PQR) to the Fabrication Library.
 - 2) BOS reviewer is notified of the upload. All WPS/PQRs will be reviewed and require acceptance from BOS before welding or welding repair of any component can proceed.
 - 3) No Project Leader/Manager review is required.
 - 4) When fabrication uses a WPS which has already been uploaded, accepted and is available in the Fabrication Library, the fabricator need not upload the WPS again. However, if the WPS has been revised, and a new, updated version is available, the fabricator must upload the newer version. Hold for review and approval of updated WPSs before proceeding with welding operations.

Other Fabrication Documents

References

-  [How to upload a document?](#)
-  [How to edit document properties?](#)
-  [How to check-in a checked-out document?](#)
-  [How to update an Excel Fabrication Status Report?](#)
-  [How to download a document?](#)

Parties Involved

-  Fabricator
-  Contractor
-  Project Leader or Manager
-  Bureau of Structures (BOS)

Calculations

- 1) Fabricator uploads calculations to the Fabrication Library. Calculations must be uploaded the same day as the corresponding shop drawing set.
- 2) No department review status will be posted. Any comments will be included in the shop drawing review comments.

Mill Certifications

- 1) Fabricator uploads mill certifications to the Fabrication Library.
- 2) Project Leader/Manager should review all Mill Certifications before the material is incorporated into the structure; preferably before assembly at the fabrication shop. No review status is posted in the Fabrication Library.
Project Leaders/Managers: for any concerns contact the fabricator, contractor or BOS as applicable.

Storage and Shipping Plan

- 1) Fabricator uploads storage and shipping plan to the Fabrication Library.
- 2) No department review status is posted in the Fabrication Library. Any comments would be communicated to the Project Leader/Manager and Fabricator.

Welded Wire Fabric (WWF) Alternate

- 1) Fabricator uploads WWF alternate drawing to the Fabrication Library.
- 2) BOS reviewer is notified of the upload. All WWF alternates will be reviewed and require acceptance from BOS before the shop drawing set can be submitted and before fabrication can begin.
- 3) No Project Leader/Manager review is required.

Fabrication Status Report

Update fabrication status report through the Fabrication Library. Update weekly for duration of each project.

Erection Plan

- 1) Contractor uploads erection plan to the Fabrication Library.
- 2) No department review status is posted in the Fabrication Library. Any comments would be communicated to the Project Leader/Manager and Contractor.

Final Fabrication Package

Fabricator uploads final fabrication package to the Fabrication Library. No review status is posted on the Fabrication Library.

Welder Qualification Record

Fabricator uploads welder qualification record to the Fabrication Library. No review status is posted on the Fabrication Library.

Butt-Welding Log

Fabricator uploads butt-welding log to the Fabrication Library. No review status is posted on the Fabrication Library.

High-Strength Steel Bolt Test Results

Fabricator uploads HS Steel Bolt test results to the Fabrication Library. No review status is posted on the Fabrication Library.

Paint/Coating Inspection Reports and/or specifications




Fabricator uploads paint report and/or specifications to the Fabrication Library. No review status is posted on the Fabrication Library.

Meeting Minutes




Fabricator, Contractor, Project Leader/Manager or BOS uploads meeting minutes to the Fabrication Library. No review status is posted on the Fabrication Library.

Quality Assurance (QA) Inspection Reports

References

-  [How to upload a quality assurance \(QA\) inspection report?](#)
-  [How to edit document properties?](#)
-  [How to check-in a checked-out document?](#)

Parties Involved

-  QA Inspector
-  Project Leader or Manager
-  Bureau of Structures

QA Inspection Report

- 1) Uploaded by the QA Inspector or QA Inspection Firm representative.

The inspection report must meet the following requirements:

- Format: PDF (unlocked)
- Do not use any of the following symbols in the filename: ~ " # % & * : < > ? / \ { | }
- Limit the filename length to 180 characters (including spaces)
- Must be legible in a computer monitor

Forms and corresponding specifications

Download Fabrication DT Forms here: <https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/strct/fab-cnstr.aspx>

Document	Specification	Electronic Submittal Method
Primary Members – Steel Bridge (Highway)		
Shop Drawings	STD. SPEC. 105.2.2,506.3.2	Fabrication Library
DT2333 Contractor's Certificate of Quality Control	STD. SPEC. 506.3.2	Fabrication Library
Certified Mill Test Reports (CMTR)	STD. SPEC. 506.3.21	Instead of 2 hard copies, submit CMTR to the Fabrication Library
Welding Procedure Specification (WPS)	STD. SPEC. 506.3.19.2, 506.3.19.3	Fabrication Library
DT2172 Weekly Fabrication Status Report	STD. SPEC. 506.3.1.1	Fabrication Library
NDE Reports	As-requested by the engineer	Fabrication Library
High-Strength Bolt Test Reports	As-requested by the engineer	Fabrication Library
Paint Thickness Record	As-requested by the engineer	Fabrication Library
QA Inspection Report	Inspection Contract	Fabrication Library (Inspection)
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov
Primary Members – Prestressed Concrete Bridge (Highway)		
Shop Drawings	STD. SPEC. 105.2.2,503.3.1	Fabrication Library
Welded Wire Fabric (WWF) Alternate	STD. Detail Drawings	Fabrication Library
DT2328 Contractor's Certificate of Quality Control	STD. SPEC. 105.2.2,503.3.1	Fabrication Library
DT2336 Weekly Fabrication Status Report	STD. SPEC. 105.2.2,503.3.1	Fabrication Library
QA Inspection Report	Inspection Contract	Fabrication Library (Inspection)
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov
Prefabricated Steel Truss Bridge (Pedestrian)		
Shop Drawings	Special Provisions	Fabrication Library
Welding Procedure Specification (WPS)	STD. SPEC. 506.3.19.2, 506.3.19.3	Fabrication Library
Certified Mill Test Reports (CMTR)	STD. SPEC. 506.3.21	Instead of 2 hard copies, submit CMTR to the Fabrication Library
DT2335 Weekly Fabrication Status Report	Special Provisions	Fabrication Library
NDE Reports	As-requested by the engineer	Fabrication Library
High-Strength Bolt Test Reports	As-requested by the engineer	Fabrication Library
Paint Thickness Record	As-requested by the engineer	Fabrication Library
QA Inspection Report	Inspection Contract	Fabrication Library (Inspection)
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov

Retaining Walls		
Shop Drawings	Standard Special Provisions	Fabrication Library
DT2329 Contractor's Certificate of Quality Control	Standard Special Provisions	Fabrication Library
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov
Sign Structures		
Shop Drawings	STD. SPEC. 105.2.2, 532.3.2.1	Fabrication Library
DT2326 Contractor's Certificate of Quality Control	STD. SPEC. 532.3.2.1	Fabrication Library
Certified Mill Test Reports (CMTR)	As-requested by the engineer	Fabrication Library
Welding Procedure Specification (WPS)	Included in Fabricator QCP Plan	Email to Fabrication Unit Supervisor kristin.revello@dot.wi.gov
DT2334 Weekly Fabrication Status Report	STD. SPEC. 532.2.2	Fabrication Library
QA Inspection Report	Inspection Contract	Fabrication Library (Inspection)
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov
Fabricated Bridge Components		
Shop Drawings	STD. SPEC. 105.2.2,506.3.2	Fabrication Library
DT2327 Contractor's Certificate of Quality Control	STD. SPEC. 506.3.2	Fabrication Library
Certified Mill Test Reports (CMTR)	As-requested by the engineer	Fabrication Library
Welding Procedure Specification (WPS)	Included in Fabricator QCP Plan	Email to Fabrication Unit Supervisor kristin.revello@dot.wi.gov
DT2334 Weekly Fabrication Status Report	STD. SPEC. 506.3.1.2	Fabrication Library
QA Inspection Report	Inspection Contract	Fabrication Library
RFI/NCR/DIN	STD. SPEC. 104.4	Email to Project Leader/Manager Cc: DOTDLStructuresFabrication@dot.wi.gov