Where steel stamps are used for identification purposes, they shall be of the "mini-stress" or "stressless" type.

**863.071 Fabricator Documentation Responsibility.** The fabricator shall keep and maintain documentation records for each project bid line number concerning;

- 1. Fabricator approval
- 2. Shop drawing approval
- 3. Material test reports
- 4 Welding qualifications
- 5. Quality control inspection
- 6. Non Destructive Testing of welds

This documentation shall be made available for auditing, inspection and copying upon the Department's request. The documentation shall be archived for at least a five (5) year period from the date of final shipment from the fabrication shop.

Documentation systems are the fabricator's responsibility to establish. Quality control documentation shall include all material quality checks, dimensional checks, weld quality inspection, coating inspection checks, etc. to document both to the fabricator and to the Department that all fabrication has been thoroughly inspected and meets the specification requirements. Evaluation of the fabricator's performance by Departmental personnel, using forms defined in Appendix II, will include validation of the fabricator's actual records of inspection. This validation is intended to assure that rating of an individual component will reflect the overall quality of all components.

When establishing documentation records, processes and procedures the fabricator shall review the QA rating forms (Appendix II) which define the Department's QA requirements. The fabricator must establish sufficient QC requirements to perform quality fabrication. The QCFS shall provide a letter of acceptance for each QA inspection check point with a listing of each main member piece marks, dates of QC acceptance and specific check point data as noted on the QA rating forms.

863.08 Shop Drawing and Submittal Process. Structural steel and other metal structural elements which are to be assembled, main and secondary bridge structural steel or main bridge rehabilitation steel, finger joints, modular joints and non-standard joint sealing devices, pot bearings, spherical bearings and non-standard bearing devises and other similar items requiring either shop or field fabrication shall be detailed on shop drawings by the Contractor or Fabricator in accordance with AASHTO "Standard Specifications for Highway Bridges" and this supplemental specification.

Deviation from the contract plans or these shop drawings will not be permitted without the written order or consent of the OSE. Requests for such deviation or change shall be submitted in writing.

The Contractor's shop drawing submission shall include; a written acceptance letter and four copies of these drawings, unless additional copies are requested. The Contractor shall also furnish the fabricator's QCFS with one additional set of these drawings before the pre-fabrication meeting 863.081.

The Contractor shall accept these shop drawings and forward a submission to OSE. The submission shall be received by OSE, seven days before the pre-fabrication meeting, 863.081(levels 1 thru 6) or prior to the start of fabrication (miscellaneous level).

The pre fabrication meeting shall not be scheduled until the drawings have been received by OSE(levels 1 thru 6). Fabrication can begin after the prefabrication meeting is complete (levels 1 thru 6) or after receipt of these drawings (miscellaneous level).

The shop drawings shall be prepared by or under direct supervisory control of an Ohio registered professional engineer having personal professional knowledge of AASHTO Standard Specifications for Highway Bridges, AWS Bridge Welding Code D1.5 and Supplemental Specification 863. Each drawing of the four copies shall bear his or her signature and registration number or his or her Ohio Professional Engineer seal. The submitted shop drawings shall be free of all questions and comments.

The written acceptance from the Contractor shall document acceptance of the shop drawings including confirmation of field verification as required and descriptions of issues resolved between the Contractor, the Engineer, the Fabricator or the Department.

By accepting these shop drawings, the Contractor represents to the Department that all materials, field measurements, construction requirements, contract requirements, performance criteria and similar data have been verified. The Contractor further represents that these drawings have been coordinated and verified with the details of the work to be performed by other fabricators and entities on the project. No allowance for additional cost or delays will be made to the Contractor for incorrect fabrication as a result of failure to coordinate or perform this acceptance.

When changes on these shop drawings are requested by the Department, or the Contractor makes changes in addition to those expressly requested, the shop drawings shall be accepted as above with suitable revision marks to identify the changes.

For changes in location, addition or elimination of splices, acceptance shall be obtained prior to ordering material. After acceptance by the OSE, such plans shall be taken as supplemental to, but in no sense a substitute for, the contract. The QCFS shall be responsible for having documentation of any revised drawings or changes listed above

The prints shall be made from tracings, neatly and accurately drawn on sheets 559 mm x 864 mm (22 x 34 inches).

Shop drawings shall show details, dimensions, size of materials, match mark diagrams for