

South Carolina Department of Transportation
Engineering Directive Memorandum

Number: 37

Primary Department: Preconstruction

Referrals: South Carolina Code of Laws of 1976, Section 40-22-270 and 24 South Carolina Code of Regulations 49-207

Subject: Standards for Sealing Engineering Documents

General Requirements for Sealing Documents

What documents must be sealed. Plans, specifications, and reports prepared by a South Carolina registered engineer (hereinafter referred to as P.E.) or prepared under his or her direct supervision must be stamped with seals when filed with a public authority or issued for use as a job site record document at construction projects in this State. See South Carolina Code of Laws of 1976, Section 40-22-270(3) and (4).

What the seal means. The seal and signature of a P.E. on a document constitutes a certification that the document was prepared by the P.E. or under his or her direct supervision, and in the case of prototypical documents, that the P.E. has reviewed the document in sufficient depth to fully coordinate and assume responsibility for plans prepared by another licensee. See 24 South Carolina Code of Regulations 49-207(C)(1).

How to seal. When sealing documents is required, each sheet of plans, drawings, documents, specifications, and reports for engineering practice shall be sealed and signed by the P.E. who prepared them or who was in responsible charge of their preparation. The signature and date when the document was prepared must be affixed under or across the face and beyond the circumference of the seal but in a manner that does not obliterate or render illegible the P.E.'s name and number. See 24 S.C. Code of Regs. 49-207(C)(2).

Exception for some bound volumes. Where more than one sheet is bound together in one volume, the P.E. who prepared the volume may seal, date, and sign only the title sheet or index sheet provided that the signed sheet clearly identifies all of the other sheets comprising the bound volume, and provided that any of the other sheets that were prepared by, or under the direction and control of, another P.E., be sealed, dated, and signed by the other P.E. This provision, however, does not apply to bound volumes of design drawings and/or construction plans. Such documents shall carry the required seals, date, and P.E.'s signature on each sheet of the bound volume. See 24 S.C. Code of Regs. 49-207(3).

Additions, deletions, and revisions. Additions, deletions or other revisions to sealed documents shall not be made, unless such changes are sealed, dated, and signed by the P.E. who made the revisions or under whose direction and control said revisions were made. See 24 S.C. Code of Regs. 49-207(4).

It is the intent of this directive to comply with the above statutes and regulations. The term “stamped with seal” or “sealed” throughout this document implies seal, date, and signature.

Procedures for Sealing SCDOT Documents

The following procedures shall be followed in order to comply with the above statutes and regulations:

1. *Construction plans.* Each plan sheet included in a set of construction plans prepared by a P.E. or prepared under the P.E.’s direct supervision must be stamped with seals. Plan sheets marked “For Information Only” do not require a seal.
2. *Standard drawings.* Each standard drawing must be stamped with a seal by the P.E. who prepared the standard drawing or under whose supervision the drawing was prepared.
3. *Bid proposals.* Only the table of contents page of the bid proposal must be sealed by the P.E. who prepared the bid proposal or under whose supervision the bid proposal was prepared. In the event the proposal includes construction plans, the P.E. responsible for those plans shall seal those pages within the document.
4. *Report referenced in plan sheets.* Any reports specifically referenced in the plans as supporting the design shall be signed and sealed.
5. *Revisions to sealed documents.* Plan sheets (or any other sealed document) revised after award of contract shall include a complete accounting and detail of the revisions and design changes. The P.E. responsible for the revisions shall seal each altered plan sheet (or any other sealed document). This information shall be documented and become a part of the final plans.

“Guidelines for Sealing Engineering Documents” provides additional guidance. These guidelines can be viewed on the Preconstruction website.

Submitted by: _____
Director of Preconstruction

Submitted by: _____
Director of Construction

Recommended by: _____
Deputy State Highway Engineer

Submitted by: _____
Director of Maintenance

Submitted by: _____
Director of Traffic Engineering

Recommended by: _____
Deputy State Highway Engineer

Approved by: _____
State Highway Engineer

Effective Date: _____

Original signed by State Highway Engineer Tony L. Chapman September 4, 2007. All original engineering directives maintained by State Highway Engineer's Office.

Guidelines for Sealing Engineering Documents

June 2007

The following provides guidance in complying with Engineering Directive Memorandum Number 37. The term “stamped with seal” or “seal (ed or ing)” throughout this document implies seal, date, and signature in accordance with 24 S.C.Code Regs. 49-207.

Who should seal plan sheets?

Right of way plans are “preliminary plans” and therefore, no seal is required. The Regional Production Engineer should sign the Title Sheet for right of way plans with no seal. The signature certifies that the plans are complete in accordance with the plan preparation guidelines of the Department and approved for right of way acquisition.

Construction plans prepared by a S. C. registered professional engineer (hereinafter referred to as “P.E.”) or prepared under the P.E.’s direct supervision must be stamped with seals. Only those plan sheets prepared and incorporated in a construction set of plans issued for use as a job site record document need to be sealed. Sheets on construction site documents that are marked “For Information Only” and the “Property Strip Map” sheets are exempt from this requirement.

The appropriate P.E. (or Regional Production Engineer for Preconstruction) who designed the plan sheet or under whose direct supervision the plan sheet was designed will be responsible for sealing the plan sheet. Two or more seals may be required per plan sheet where multiple sections of engineering are involved in the design. If more than one P.E. is involved in the design on a single plan sheet, each P.E. shall seal the plan sheet adding their job title beneath their names.

Plan Sheets:

Based on interpretation of the statutes and regulations, the following engineering sheets/drawings for all construction projects managed by Preconstruction, Maintenance, Traffic Engineering, or any other engineering office of the Department shall be sealed by the P.E. as listed below:

| <u>Sheet No.</u> | <u>Description</u> | <u>Responsible</u> |
|------------------|---|---|
| 1, 1A, etc. | Title Sheet | Regional Production Engineer * |
| IL1, IL2, etc | Index/ Layout Sheet | No Seal |
| 2, 2A, etc. | Summary of Estimated Quantities, Removal and Disposal Items, Moving Items, Reset/New Fences, etc. | Regional Production Engineer * |
| 3, 3A, etc. | Typical Sections and Miscellaneous Details (not covered by <i>Standard Drawings</i>) | Pavement Design Engineer & Regional Production Engineer * |
| 4, 4A, etc. | Right of Way Data Sheets | No Seal |
| 4, 4A, etc. | Property Strip Map Sheets | No Seal |
| 5, 5A, etc. | General Construction Sheets (e.g., Reference Data Sheets, Utility Data Sheets, Drainage Data Sheets, Plan Sheet Layout) | Regional Production Engineer * |
| 6, 7, 8, etc. | Plan and Profile Sheets (e.g., mainline, side roads, ramps) | Regional Production Engineer * & ** |
| 6A, 7A, 8A, etc. | Profile Sheets | Regional Production Engineer * |
| D1, D2, D3, etc. | Drainage Plan Sheets | Regional Production Engineer * or ** |
| DR1, DR2, etc | Drainage Reference Sheets | Regional Production Engineer * or ** |
| 12, 13, 14, etc. | Details of Plan Sheets, Geometric and Grading Plan for Intersections and Interchanges, Top of Curb Elevations (if not shown on Plan and Profile Sheets) | Regional Production Engineer * & ** |
| TC1, TC2, etc. | Traffic Control and Construction Phasing, Detour Plan and Profile Sheets | Traffic Engineer |
| E1, E2, etc | Electrical and Lighting Plans | Traffic Engineer or Consultant |
| L1, L2, etc. | Landscaping Plans | Landscape Architect |
| PM1, PM2, etc. | Pavement Marking Plans | Traffic Engineer |
| SN1, SN2, etc. | Signing Plans | Traffic Engineer |
| TS1, TS2, etc. | Traffic Signal Plans | Traffic Engineer |
| S1, S2, etc. | Roadway Structure Plans (e.g., retaining walls, box culverts) | Regional Production. Engineer* |
| EC1, EC2, etc | Erosion Control Data Sheets | Regional Production Engineer* or ** |
| U1, U2, etc. | Utility Relocation Sheets (For Information Only) | No Seal |
| X1, X2, etc. | Cross Sections | Regional Production Engineer * |
| BR1, BR2, etc. | Bridge Plans | Regional Production Engineer * |
| UC1, UC2, etc. | Utility Construction Sheets | Utility Co. or their Consultant |
| “No Sheet No.” | “For Information Only” Sheets | No Seal |

* For Preconstruction - Regional Production Engineer or other designated engineer
For other engineering sections – as designated

** Projects with hydraulic design performed by an engineering section other than the responsible engineer for the project may have the plan sheets involving the hydraulic design and the “Notice of Intent” signed by the responsible Hydraulic Engineer who is in a Regional Production Group or a Consultant.

The above applies to all construction projects prepared by or for the Department.

Standard Drawings:

The appropriate P.E. in responsible charge of the development and maintenance shall seal each sheet of the standard drawings.

Bid Proposal:

The appropriate P.E. in responsible charge of the development of Bid Proposals shall seal only the Table of Contents page(s) of the Bid Proposal. Under the seal, sign and date as follows:

_____ (date)
I certify that this document was
compiled under my direct supervision.

In the event the proposal includes construction plans, then the P.E. responsible for those plans shall seal those pages within the document. Resurfacing plans prepared in the District will have each sheet sealed by the responsible engineer prior to submitting to the Director of Maintenance Office. These plan sheets are typically included in the bid proposal.

Plans Revised After Award of Contract:

On occasion, it may be necessary to make design changes to the plans during construction. Plan sheets (or any other “job site record document” with a seal) revised after award of contract shall include a complete accounting and detail of the revisions and design changes. The P.E. responsible for the revisions shall seal each altered plan sheet (or any other “job site record document” with a seal). This information shall be documented and become a part of the final plans.

Studies/Reports:

All studies/reports prepared by a P.E. or prepared under the P.E.’s direct supervision and supporting the design shown on the plan sheets shall be sealed. This also applies to studies/reports prepared to support design changes during construction.