

VIRGINIA DEPARTMENT OF TRANSPORTATION

*TRAFFIC ENGINEERING DIVISION*

INSTRUCTIONAL & INFORMATIONAL MEMORANDUM

<b>GENERAL SUBJECT:</b> Administrative and Engineering	<b>NUMBER:</b> IIM-TE-362.2
	<b>SUPERSEDES:</b> TE-362.1
<b>SPECIFIC SUBJECT:</b> Sealing and Signing of Traffic Engineering Plans and Documents by Licensed Professional Engineers	<b>DATE:</b> July 5, 2017
	<b>SUNSET DATE:</b> N/A
<b>APPROVAL:</b>  /original signed by/ Raymond J. Khoury, P.E. State Traffic Engineer Richmond, VA July 5, 2017	

Changes are shaded.

**CURRENT REVISIONS:**

- Removed language regarding 2009 effective dates
- Removed language regarding signing (without sealing) by exempt engineers. This exemption expired on June 30, 2010.
- Changed “signal warrant studies” to “signal justification reports”, consistent with IIM-TE-387.
- Clarified existing requirement that red light photo enforcement Engineering Safety Analyses be signed and sealed.
- Other minor revisions as shown in shading.

This memorandum defines the requirements for signing and sealing of traffic engineering-related Plans and Documents (hereinafter referred to as “Products”) by licensed professional engineers, as per §54.1-402.1 of the Code of Virginia and the regulations of the Department of Professional and Occupational Regulations (DPOR).

The following Traffic Engineering Products are to be sealed and signed:

- 1) Traffic Engineering Studies and Recommendations
  - a) Speed Limit Studies – use standard speed study report (includes seal & signature box)
  - b) Signal Justification Reports
  - c) Traffic Impact Analysis conducted by VDOT - insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document
  - d) Red Light Running Photo Enforcement Engineering Safety Analysis - insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document. See VDOT’s [photo red website](#) for more information.

- 2) Advertised Construction Plans – *use standard seal and signature blocks on plan sheets as shown in Attachment A.*
  - a) Traffic Control Device Plans
    - i) Pavement Marking Plans
    - ii) Sign Plans
    - iii) Traffic Signal Plans
    - iv) Roadway Lighting Plans
  - b) Transportation Management Plans (per the latest effective revision of IIM-LD-241/IIM-TE-351; for both Construction and Maintenance projects – preparer of TMP will seal & sign)
    - i) Includes changing speed limit for Work Zones – *use form from the latest effective revision to TE Memorandum 350 (includes seal & signature box)*
- 3) Traffic signal design and modification – *insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document*
  - a) New signal phasing and changes to signal phasing (See Note E)
  - b) New clearance timing and changes to clearance (yellow and all-red) timing
- 4) Safety studies requiring detailed engineering and/or detailed crash analysis or corridor traffic safety studies (See Note A) - *insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document*
- 5) Guardrail recommendations - guardrail design - *use standard seal and signature blocks on plan sheets as shown in Attachment A.*
- 6) Studies and Recommendations for Through Truck Restrictions, Other Truck/Vehicle Restrictions, and Truck Routings (See Note B) – *use standard through truck restriction report for Through Truck Studies as per § 46.2-809 (includes seal & signature box)*
- 7) Operational / Capacity Analysis (See Note D) - *insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document*
- 8) Traffic Control Device-related additions or modifications to the Road and Bridge Specifications and Road and Bridge Standards - *insert seal & signature box in Attachment B into 1<sup>st</sup> page header of document detailing the new or modified standard. Note that traffic control device standards, specifications, and insertable sheets in effect on July 1, 2009 are grandfathered and not sealed.*

**Notes:**

- A. A review of crash data and the physical characteristics of the roadway that includes an evaluation of potential engineering countermeasures (physical roadway improvements and/or use of traffic control devices) to reduce the potential for crashes at that location or along that section of road. The resulting product (may be a simple design sketch) shall be sealed and signed.
- B. Through truck restrictions, other truck/vehicle restrictions, and truck routing studies involve a review of crash and traffic data and the physical characteristics of the roadway to be restricted or recommended for routing to truck or vehicle traffic, and where appropriate include the consideration of criteria adopted by the Commonwealth Transportation Board (CTB) or federal requirements for designated (STAA) truck routes. The study includes a recommendation to the CTB or Commissioner of Highways or other authority to approve or deny the proposed truck/vehicle restriction or designated (STAA) truck route on that particular roadway.

- C. A review of the volume and types of traffic and the physical characteristics of the roadway that includes capacity analysis or traffic flow simulation and considers potential roadway or traffic control improvements to improve traffic flow through the location or section of roadway.
- D. New left turn signal phasing and changes to left-turn signal phasing requires a sealed and signed Engineering Assessment that documents the engineer's rationale for selecting the left-turn phase mode. This Engineering Assessment is independent of the sealed and signed traffic signal plans. The Engineering Assessment may include an evaluation of intersection geometry, crash data, traffic volumes, and/or other features impacting safety and operations at or near the signalized intersection. The content and requirements of the Engineering Assessment are at the discretion of the VDOT **District**. Traffic Engineering Division's "Guidance for Determination and Documentation of Left Turn Phasing Mode" document and Left-Turn Phase Selection Engineering Assessment Workbook may be used to document left turn phasing decisions in a clear and consistent manner. This Engineering Assessment requirement is limited to left-turn signal phasing, and is not applicable to right-turn signal phasing, pedestrian phasing, and phase sequencing (i.e. lead, lag, lead/lag, etc.).

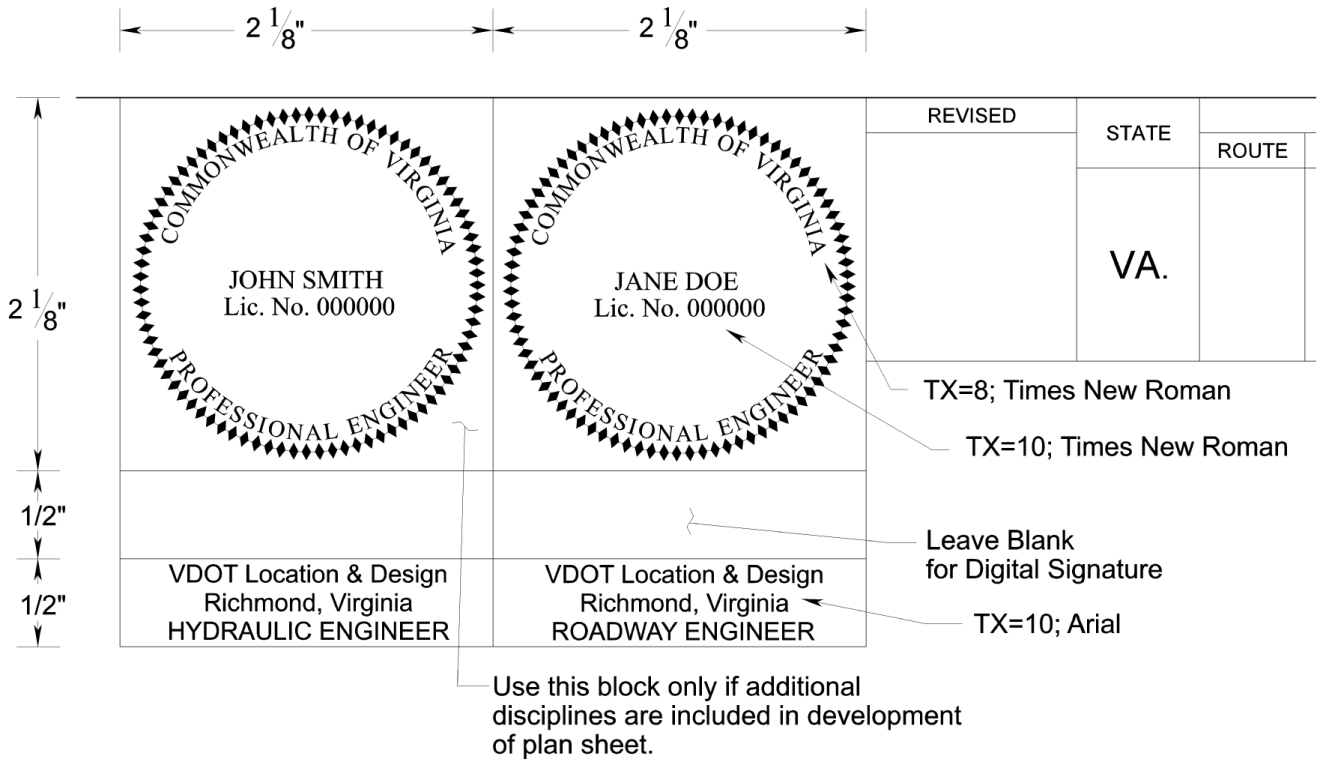
The following Traffic Engineering Products **do not require** sealing and signing:

1. Pedestrian / Bicycle Facility studies
2. Street Lighting Warrant studies
3. Investigations and field reviews resulting in sign and/or pavement marking installation following established policy and standards, i.e. warning signs, guide signs, route shields, edgeline, centerline, pavement messages, etc.
4. Planning level studies (i.e. Feasibility Studies, Small Urban Plans, State Highway Plans, Regional Long-Range Plans, Corridor Studies)
5. Temporary Traffic Control plans that only reference the Work Area Protection Manual.
6. Signal timings for minimum and maximum green, and changes to cycle lengths, splits, and offsets.
7. Road Safety Assessment reports.

For locally administered projects, please refer to the [Locally Administered Projects Manual](#).

# Attachment A

The upper right corner next to the project information block is the preferred location of the blocks for sealing and signing.



Drawing/Example not to scale.

Note: Signature Blocks are not part of the sheet cell. They are separate cells that can be placed inside the sheet cell. The edit test command can be used to modify text as needed.

While the preferred orientation horizontal, these blocks may be placed vertically, or in an alternate location if necessary.

## INTERIOR PLAN SHEETS UPPER RIGHT CORNER – VDOT IN-HOUSE & CONSULTANT PLANS SEALING AND SIGNING OF PLANS

## Attachment B

This seal & signature block should be placed on the first page of traffic engineering reports and studies not having a standard report template, preferably in the upper right corner. The electronic seal is placed in the upper box and the electronic signature with date stamp is placed in the center box using VDOT's electronic signature software. Before placing the electronic signature, edit the bottom box to indicate the office location of the signer, e.g. Richmond, Virginia; Salem, Virginia; etc.

VDOT - Traffic Engineering [Office Location] Traffic Engineer