VIRGINIA DEPARTMENT OF TRANSPORTATION

TRAFFIC ENGINEERING DIVISION

MEMORANDUM

GENERAL SUBJECT: Administrative and Engineering		NUMBER: TE-362.1
		SUPERSEDES: TE-362
SPECIFIC SUBJECT:		DATE:
Sealing and Signing of Plans and Documents by Licensed Professional Engineers		June 4, 2009 Clarification Issued February 23, 2015
		SUNSET DATE: N/A
DIRECTED TO:	SIGNATURE:	
District Administrators	${\cal R}_{\!$	
Regional Operations Directors State Location & Design Engineer		

Changes are shaded.

This memorandum is effective for all RAAP projects starting with a December 2009 advertisement date. The effective date for No Plan RAAP, SAAP projects and for all technical documents requiring to be sealed and signed is July 1, 2009.

Chief Engineer Mr. Malcolm Kerley, P.E., formed a committee to transition VDOT into compliance with the Code of Virginia, §54.1-402.1. The committee had as one of its primary objectives the function of determining which Engineering-related Plans and Documents, referred hereafter as Products, are required to be sealed and signed by a licensed Professional Engineer, and which products are exempt (See Note A).

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 Warrant Studies use standard signal warrant study report (includes seal & signature box)
 - c) Traffic Impact Analysis conducted by VDOT insert seal & signature box in Attachment B into 1st page header of document
- 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 IIM 241.3; for both Construction and Maintenance projects preparer of TMP will seal & sign)

- *i)* Includes changing speed limit for Work Zones use form from TE Memorandum 350 (includes seal & signature box)
- 3) Traffic signal design and modification *insert seal* & *signature box in Attachment B into* 1st 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 accident analysis or corridor traffic safety studies (See Note B) - *insert seal* & *signature box in Attachment B into* 1st page header of document
- 5) Guardrail recommendations guardrail design use standard seal and signature blocks on plan sheets as shown in Attachment A.
- 6) Through Truck Restriction Studies and Recommendations (See Note C) use standard through truck restriction report (includes seal & signature box)
- 7) Operational / Capacity Analysis (See Note D) *insert seal* & *signature box in Attachment B into* 1st 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 1st 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. Products required to be sealed and signed may be signed by an exempted engineer through June 30, 2010.
- B. 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.
- C. Through truck restriction studies and recommendations respond, according to law, to a formal request by a local governing body to restrict a particular roadway to through truck traffic. Studies involve a review of crash and traffic data and the physical characteristics of both the roadway requested to be restricted to through truck traffic and the identified alternate route, as well as public comments received as required by law, and the criteria adopted by the Commonwealth Transportation Board (CTB). The study includes a recommendation to the CTB or designee to approve or deny the formal request for a through truck restriction on that particular roadway.
- D. 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.
- E. New <u>left turn</u> signal phasing and changes to <u>left-turn</u> 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 Region. 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 <u>left-turn</u> 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 were determined by this committee as those not requiring 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 *Guide for Local Administration of Virginia Department of Transportation Projects*. This document can be found on the Local Assistance Division webpage at: <u>http://www.virginiadot.org/business/local-assistance.asp</u>

cc: Mr. Mohammad Mirshahi, P.E., Deputy Chief Engineer Regional Ops Maintenance Managers Regional Traffic Engineers Regional Traffic Ops Managers Resident Administrators

Attachment A





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