

290-RICR-20-00-3

TITLE 290 - DEPARTMENT OF TRANSPORTATION

CHAPTER 20 - GOVERNMENT AND UTILITIES

SUBCHAPTER 00 - N/A

PART 3 - Rules and Regulations Concerning Approval and Operation of Automated Traffic Violation Monitoring Systems

3.1 Authority and Purpose

- A. These Rules and Regulations are promulgated pursuant to R.I. Gen. Laws § 31-41.2-3, as amended, which authorizes the installation and operation of automated traffic violation monitoring systems within the State of Rhode Island, and in accordance with the Administrative Procedures Act, R.I. Gen. Laws § 42-35-1 *et seq.*
- B. The purpose of these Rules and Regulations is to establish a procedure for the approval and operation of automated traffic violation monitoring systems installed within the State of Rhode Island, pursuant to R.I. Gen. Laws § 31-41.2-3, as amended.

3.2 Incorporated Materials

- A. These regulations hereby adopt and incorporate by reference the "Manual on Uniform Traffic Control Devices" (2009) published by the Federal Highway Administration (23 C.F.R. Part 655, Subpart F), not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- B. These regulations hereby adopt and incorporate by reference the Institute of Traffic Engineers' "Traffic Engineering Handbook" (2016), not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

3.3 Definitions

- A. Except as otherwise indicated, the following definitions shall apply:
 - 1. "Actuated" means a traffic signal furnished with vehicle detection equipment that operates with variable green times depending on the presence of traffic.
 - 2. "Approved list" means index of automated traffic violation monitoring systems whose Technical specifications the Department has previously

evaluated and approved in accordance with § 3.7 of this Part. The Department shall maintain the approved list on its website and in the Office of the State Traffic Engineer, 2 Capitol Hill, Providence, RI 02903.

3. "Automated traffic violation monitoring system" means an apparatus that monitors, and detects violations of traffic control signals and has one or more motor vehicle sensors which produces images of motor vehicles being operated in violation of traffic signal laws.
4. "Certify" means attest to be true and accurate by a registered professional engineer licensed in the State of Rhode Island. A document must be approved, stamped and signed by such professional engineer to be considered certified.
5. "Department" means the Rhode Island Department of Transportation.
6. "Director" means the Director of the Rhode Island Department of Transportation or his designee.
7. "Engineering study" means a certified report stating that the Traffic signal and intersection at issue have been inspected and are free from deficiencies in accordance with § 3.6 of this Part.
8. "Final agency decision" means the decision of the Director of the Rhode Island Department of Transportation, as indicated by written correspondence approving or disapproving installation of an automated traffic violation monitoring system.
9. "Photo enforcement sign" means a warning sign that notifies motorists in advance of an intersection that an Automated traffic violation monitoring system is in use at that location. Photo enforcement signs must comply with the minimum size requirements of the detail as shown in § 3.8(E)(3) of this Part.
10. "Physical alteration permit" means a written permission authorizing construction on land dedicated to state highway use, granted pursuant to the Rhode Island Department of Transportation "Rules and Regulations Concerning Permission for Use of State Highway Rights-of-Way".
11. "Roadway" means that portion of a highway improved, designed, and/or ordinarily used for vehicular travel. In the event a highway includes two (2) or more separate roadways, the term roadway refers to the roadway separately and not the roadways collectively.
12. "State highway intersection" means any roadway intersection within the State of Rhode Island that is controlled by a Department-maintained traffic signal

13. "State highway right-of-way" means land and space acquired for or dedicated to state highway use.
14. "Technical specifications" means a description of the technical components of a proposed Automated traffic violation monitoring system.
15. "Traffic signal" means a signal that uses red, green, and yellow lights to control traffic at an intersection.
16. "Utility permit" means a written departmental permission authorizing general maintenance and repairs performed within the State highway right-of-way.

3.4 Automated Traffic Violation Monitoring Systems Approval Process

- A. Municipalities that seek to install Automated traffic violation monitoring systems on any roadways within the State of Rhode Island must obtain approval from the Director according to the procedure delineated below.
- B. A municipality must submit:
 1. an Engineering study for each intersection under consideration, and
 2. Technical specifications for the proposed Automated traffic violation monitoring system to:

Rhode Island Department of Transportation

Office of the Chief Engineer

2 Capitol Hill Providence, RI 02903
- C. A municipality that proposes installation of an Automated traffic violation monitoring system that appears on the Department's Approved list need not submit Technical specifications for that system. The municipality shall specify for the Department the proposed system and indicate that the system appears on the Department's Approved list.
- D. In cases where a municipality seeks to install an Automated traffic violation monitoring system at a State highway intersection, the municipality must also obtain a Physical alteration permit pursuant to the Rhode Island Department of Transportation "Rules and Regulations Concerning Permission for Use of State Highway Rights-of-Way".
- E. The Department will evaluate the municipalities' submissions according to the criteria described in §§ 3.6 and 3.7 of this Part and, where relevant, the Rhode

Island Department of Transportation “Rules and Regulations Concerning Permission for Use of State Highway Rights-of-Way”. Additionally, where a municipality operates an approved Automated traffic violation monitoring system within its jurisdiction and seeks to install additional systems, the Department will consider whether the municipality has complied with the annual reporting requirements described in § 3.8(C) of this Part.

- F. The Director will not approve installation of an Automated traffic violation monitoring system if:
 - 1. The Engineering study does not meet the criteria described in § 3.6 of this Part;
 - 2. the proposed Automated traffic violation monitoring system does not comply with the criteria described in § 3.7 of this Part; or
 - 3. the municipality has failed to comply with the annual reporting requirements described in § 3.8(C) of this Part with respect to any existing systems within its jurisdiction. Furthermore, where a municipality seeks to install an Automated traffic violation monitoring system at a State highway intersection, the Department will not authorize installation of such system even if approved until the municipality obtains a Physical alteration permit.
- G. Throughout the approval process, the municipality has the responsibility to respond in a timely manner to Department requests for information or documentation.
- H. Upon review of the Engineering study and the Technical specifications for a proposed Automated traffic violation monitoring system, the Department will issue a Final agency decision:
 - 1. Approving installation of the proposed system;
 - 2. Approving installation of the proposed system subject to compliance with the Rhode Island Department of Transportation “Rules and Regulations Concerning Permission for Use of State Highway Rights-of-Way”, and receipt of a Physical alteration permit; or
 - 3. Disapproving installation of the proposed system.
- I. The Department will send the Final agency decision via first-class mail.
- J. The Department reserves the right to install and operate Automated traffic violation monitoring systems at State highway intersections.

3.5 Costs

- A. In cases where a municipality installs an Automated traffic violation monitoring system approved by the Director, the municipality shall incur all costs associated with the installation, maintenance and operation of such system.
- B. In cases where a municipality seeks a Physical alteration permit to install an Automated traffic violation monitoring system at a State highway intersection, the Department will waive the Physical alteration permit application fee.
- C. In cases where the Department installs automated traffic violation monitoring systems at State highway intersections, the Department shall incur all costs associated with the installation, maintenance and operation of such automated traffic violation monitoring systems.

3.6 Engineering Study

- A. Prior to the installation of an Automated traffic violation monitoring system at any intersection, a registered professional engineer licensed in the State of Rhode Island shall perform an Engineering study and prepare a report Certifying that the Traffic signal and intersection under consideration have been inspected and are free from all deficiencies that may contribute to unintentional red light running behavior. At a minimum, such professional engineer shall Certify the following with regard to the Traffic signal and/or intersection under consideration:
 - 1. The intersection meets Traffic signal warrants as outlined in the Manual on Uniform Traffic Control Devices (2009), incorporated above.
 - 2. The yellow times conform to yellow times recommended by the Institute of Transportation Engineers Traffic Control Devices Handbook.
 - 3. The yellow times have been adjusted for eighty-fifth percentile (85%) speed and steep grades approaching signal.
 - 4. The all-red clearance intervals have been set to a minimum of one second alternatively, if the Traffic signal controller does not have all-red clearance capability, the yellow time must provide not only an appropriate change interval, but also an appropriate clearance interval, as specified in the Traffic Engineering Handbook (2016) and the Manual on Uniform Traffic Control Devices (2009) (23 C.F.R. Part 655, Subpart F), incorporated above.
 - 5. The Traffic signal faces are free from all obstructions and are visible for the appropriate distance, as specified in the Traffic Engineering Handbook (2016) and the Manual on Uniform Traffic Control Devices (2009) (23 C.F.R. Part 655, Subpart F), incorporated above.

6. The horizontal and vertical locations of the Traffic signal face meet the requirements of the Manual on Uniform Traffic Control Devices (2009) (23 C.F.R. Part 655, Subpart F), incorporated above.
7. Traffic signage in the surrounding area is visible, legible, and does not require motorists to divert attention from the roadway.
8. The stop line is clearly visible and located at the appropriate location as specified in the Manual on Uniform Traffic Control Devices (2009) (23 C.F.R. Part 655, Subpart F), incorporated above.
9. Traffic signal timing is optimized to current traffic conditions so as not to frustrate motorists and encourage red light running.
10. Traffic signal is functioning properly and, if Actuated, all detectors are working properly so as not to cause additional delay.
11. Parking is prohibited for a distance of at least thirty feet (30') from the intersection approach.

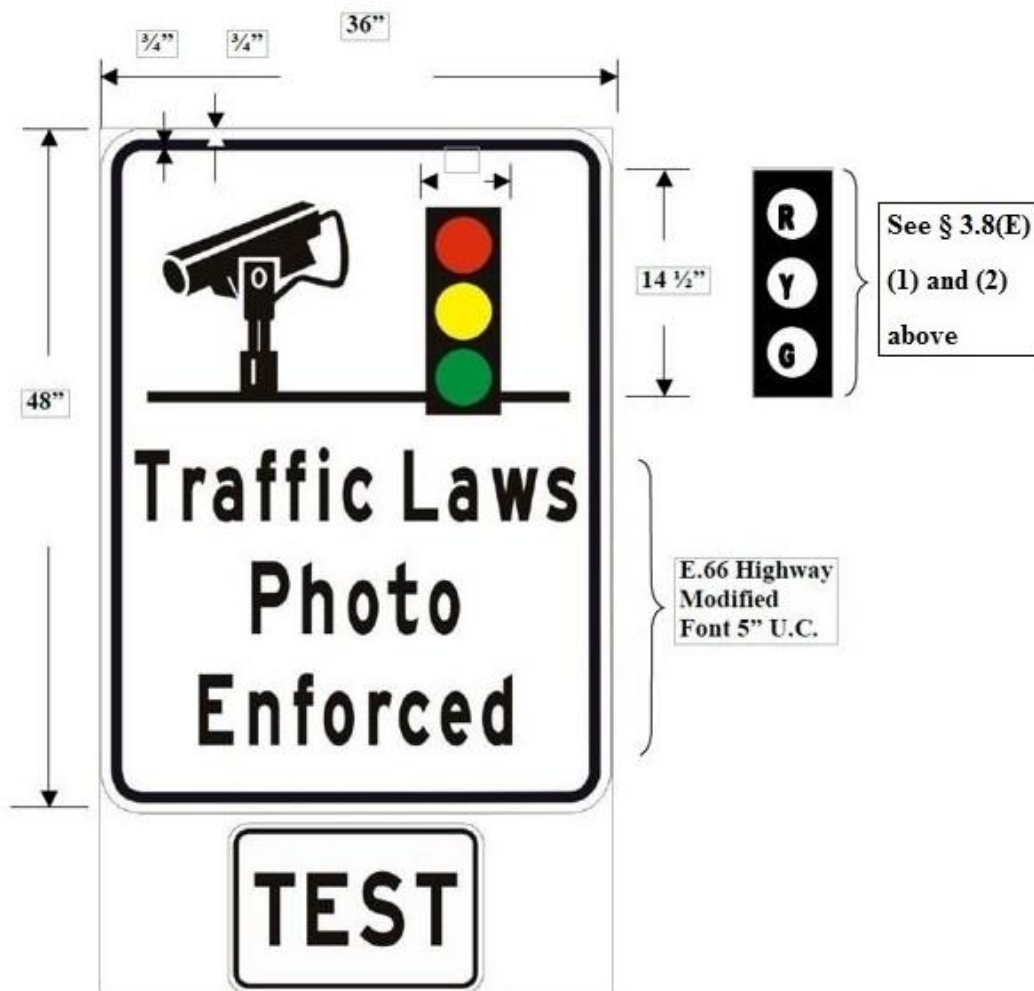
3.7 Performance Criteria

- A. The Technical specifications for any Automated traffic violation monitoring system to be installed on roadways within the State of Rhode Island must demonstrate that the system operates consistent with the criteria specified herein.
- B. At a minimum, Automated traffic violation monitoring systems must:
 1. Provide a recorded image that clearly depicts both:
 - a. A Traffic signal displaying a red indication, and
 - b. A vehicle approaching the stop line of an intersection while the Traffic signal displays a red indication.
 2. Provide a recorded image that clearly depicts both:
 - a. A Traffic signal displaying a red indication, and
 - b. A vehicle traveling beyond the stop line of an intersection while the Traffic signal displays a red indication.
 3. Provide a recorded image that clearly and discernibly depicts the rear license plate information for a vehicle that has traveled beyond the stop line of an intersection during a red indication. This recorded image may be derived from either image required in §§ 3.7(B)(1) or (2) of this Part, above.

4. Provide a minimum delay or “grace” time (enforcement threshold) of 0.2 seconds before photographing the violating vehicle.
 5. Include a data bar in each recorded image that discloses:
 - a. The month, day, and year that the image was recorded;
 - b. the actual time that the image was recorded, using military time and carried out to the tenth of a second (00:00);
 - c. the location where the image was recorded, described either in words or using a unique location code number;
 - d. the lane number where the traffic signal violation occurred;
 - e. the actual yellow time for the traffic signal where the image was recorded, displayed in seconds and carried out to the tenth of a second (00:00); and
 - f. the delay or “grace” time (enforcement threshold) displayed in seconds and carried out to the tenth of a second (00:00).
 - g. Data bars embedded in the recorded image pursuant to § 3.7(B)(2) of this Part, above, must also disclose:
 - (1) The time elapsed between the image required in § 3.7(B)(1) of this Part and the image required in § 3.7(B)(2) of this Part, above; and
 - (2) the time elapsed—taken directly from the traffic signal controller and displayed in seconds and carried out to the tenth of a second (00:00)—between the beginning of the red indication and the actual time that the image required in § 3.7(B)(2) of this Part, above, was recorded.
 6. Verify and state that the yellow time for the Traffic signal where images are being recorded conforms to the Engineering study submitted for that intersection.
 7. Demonstrate the ability to achieve a minimum efficiency standard of seventy (70) citations issued for every one hundred (100) violations captured, or seventy percent (70%).
- C. Once the Department evaluates the Technical specifications for a particular automated traffic violation monitoring system and determines that the system operates consistent with the criteria specified above, the Department will include that particular system on its approved list.

3.8 Operation of Automated Traffic Violation Monitoring Systems

- A. A municipality or private corporation or other entity must obtain a Utility permit from the Department prior to performing any maintenance or repair work within the State highway right-of-way, The Rhode Island Department of Transportation “Rules and Regulations for Accommodating Utility Facilities within Public Freeway Rights-of-Way”.
- B. Recorded images produced by an automated traffic violation monitoring system must be handled in accordance with R.I. Gen. Laws § 31-41.2-8.
- C. Annual reports must be submitted to the Department in accordance with R.I. Gen. Laws § 31-41.2-9. Reports must be submitted by March 30th.
- D. Where a municipality fails to submit a copy of its annual report(s) to the Department, the Director will not approve installation of additional Automated traffic violation monitoring systems within that jurisdiction.
- E. A Photo enforcement sign shall be placed within a distance of between one hundred fifty feet (150’) and three hundred feet (300’) in advance of any intersection where an Automated traffic violation monitoring system is operating. The Photo enforcement sign shall comply with the minimum size requirements of the detail as shown below.
 - 1. A Cut File may be obtained from the Department’s Maintenance Division Sign Section. The Borders, Legend, and Symbols shall be black.
 - 2. The Background Sign Sheeting shall be White Type III B. Signal Head shall be Red, Yellow, Green Type III B.
 - 3. Image of the Photo enforcement sign is shown below:



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PART 3 - CONCERNING APPROVAL AND OPERATION OF AUTOMATED TRAFFIC VIOLATION MONITORING SYSTEMS (290-RICR-20-00-3)

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