

**990 TEMPORARY TRAFFIC CONTROL DEVICE MATERIALS.
(REV 12-11-06) (FA 2-9-07) (7-07)**

ARTICLES 990-10 and 990-11 (Pages 900-902) are deleted and the following substituted.

990-10 Temporary Traffic Control Signals.

990-10.1 General: Meet the physical display and operational requirements of conventional traffic signal described in the MUTCD for portable traffic signals. The standard includes but is not limited to the following:

- (1) Use signal heads having three 12 inches vehicular signal indications (Red, Yellow and Green). Ensure there are two signal heads for each direction of traffic.
- (2) The traffic signal heads on this device will be approved by the Department.
- (3) Department approved traffic signal lamps will be installed in each section with the filament opening in an upright position. Other Department approved lighting sources will be installed in each section in accordance with the manufacturer's permanent directional marking(s), that is, an "Up Arrow", the word "UP" or "TOP," for correct indexing and orientation within a signal housing.
- (4) The masts supporting the traffic signal heads will be manufactured with the lowest point of the vehicular signal head as follows:
 - (a) Eight feet above finished grade at the point of their installation for "pedestal" type application or
 - (b) Seventeen to 19 feet above pavement grade at the center of roadway for "overhead" type application.
- (5) The yellow clearance interval will be programmed three seconds or more. Under no condition can the yellow clearance interval be manually controlled. It must be timed internally by the controller as per Department specifications.
- (6) The green interval must display a minimum of five seconds before being advanced to the yellow clearance interval.
- (7) The controller will allow for a variable all red clearance interval from 0 to 999 seconds.
- (8) Portable traffic control signals will be either manually controlled or traffic actuated. Indicator lights for monitoring the signal operation of each approach will be supplied and visible from within the work zone area.
- (9) When the portable traffic control signals are radio actuated the following will apply:
 - (a) The transmitter will be FCC Type accepted and not exceed 1 watt output per FCC, Part 90.17. The manufacturer must comply with all "Specific limitations" noted in FCC Part 90.17.
 - (b) The Controller will force the traffic signal to display red toward the traffic approach in case of radio failure or interference.
- (10) The trailer and supports will be painted construction/maintenance orange enamel in accordance with the MUTCD color.
- (11) The device will meet NEMA environmental standard. The test report certified by an independent laboratory will be provided.

(12) Ensure the certification number is engraved or labeled permanently on equipment.

(13) Ensure the device has an external, visible, water resistant label with the following information: "Certification of this device by the Florida Department of Transportation allows for its use in Construction Zones Only."