

## ORIGINATION FORM

**THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR** (The person who receives or originates the issue and needs to forward the issue for action.)

**Specification:** SECTION 786 *VEHICLE DETECTION AND DATA COLLECTION*

**Subject:** 786-2.5.2, 786-4, 786-10.3

**Origination date:** October 8, 2008

**Originator:** Gene Glotzbach

**Office/Phone:** Traffic Engineering and Operations, ITS Section

**Problem statement:** *786-2.5.2 The design wind forces are not current. 786-4 The article incorrectly specifies that Sections 641, 649, and Article 785-3 must be met but it should be or and the wind load design requirements are covered elsewhere. 786-10.3 The first paragraph of this article is a repeat of text in Article 786-4.*

**Proposed solution:** Clarification of the Design Requirements. *786-2.5.2 The design wind forces are clarified and Volume 9 of the Structures Manual is referenced. 786-4 The article clarifies that one of the sections are to be satisfied depending on the type of pole used and the wind load design requirements are deleted. 786-10.3 The repeated text is deleted.*

**Information source:** Structures Design Office

**Recommended Usage Note:**

**Estimated fiscal impact, if implemented:** None

**Implementation of these changes, if and when approved, will begin with the July 2009 letting.**

### For State Specifications Office Use Only

**Begin date:** November 25, 2008

**File Number:** 7860205

**Scheduled completion date:** February 22, 2008

**Implementation date:** July 2009 maybe January 2010 due to time

**Implementation team member:** Frances

Usage Note: 786 items

Notes:

1. This is a revision to a supplemental.



## *Florida Department of Transportation*

**CHARLIE CRIST**  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

**STEPHANIE KOPELOUSOS**  
SECRETARY

### **M E M O R A N D U M**

**DATE:** December 9, 2008

**TO:** Specification Review Distribution List

**FROM:** Rudy Powell, Jr., P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: 7860205 Intelligent Transportation Systems –  
Vehicle Detection and Data Collection

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Gene Glotzbach for clarification of design requirements.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at ST986RP or rudy.powell@dot.state.fl.us. Comments received after January 6, 2009 may not be considered. Your input is encouraged.

RP/ft  
Attachment

## INTELLIGENT TRANSPORTATION SYSTEMS – VEHICLE DETECTION AND DATA COLLECTION.

(REV 4-1-08) (FA 4-3-08) (1-09)

SUBARTICLE 786-2.5.2 (of the Supplemental Specifications) is deleted and following substituted:

**786-2.5.2 Wind Loads:** ~~Verify~~ *Ensure* that the detection system, mounting hardware, and any related material that is exposed to the environment can withstand *150 mph sustained* wind speeds ~~and are in accordance with~~ *meet the requirements of the Structures Manual, Volume 9 and as shown in the Plans Preparation Manual, Volume I, Chapter 29* ~~Volume I, tables 29.1 and 29.2.~~

~~Ensure that enclosures are capable of withstanding 150 mph wind speeds loads as specified in and are in accordance with the Plans Preparation Manual, Volume I, Chapter Section 29, and the Structures Manual Volume 9. designed in accordance with the AASHTO 1994 Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (25-year reoccurrence).~~

ARTICLE 786-4 (of the Supplemental Specifications) is deleted and following substituted:

### **786-4 Installation.**

Install, configure and demonstrate a fully functional vehicle detection system, as shown in the plans. Connect all field hardware and TMC components to the existing communication network, and provide all materials specified in the Contract Documents. Install all equipment according to the manufacturer's recommendations or as directed by the Engineer.

Ensure that the MVDS, the VVDS and AVDS can be mounted on existing poles or sign structures, or on new poles, for a side-fire configuration. Utilize prestressed concrete or steel poles that comply with Section 641, Section 649, ~~and or~~ 785-3, as appropriate. ~~Ensure that poles can withstand sustained wind loads and gust factors according to the Plans Preparation Manual (PPM) and the Design Standards.~~ The support structure and network communication infrastructure shall be paid for under separate pay items.

SUBARTICLE 786-10.3 (of the Supplemental Specifications) is deleted and following substituted:

**786-10.3 Installation of AVDS:** ~~Ensure that the AVDS can be mounted on existing poles or sign structures, or on new poles, for a side fire configuration. Utilize prestressed concrete or steel poles that comply with Section 641 and Section 649, respectively, and that can withstand sustained wind loads and gust factors according to the PPM and the Design Standards. The support structure and network communication infrastructure shall be paid for under separate pay items.~~

Verify that the acoustic detector setback distance and mounting height for the side-fire mounted configuration is set to produce the required detection accuracy from the lanes that need to be covered, according to the manufacturer's recommendations. A 25- to 40-foot

mounting height shall produce the degree of accuracy these specifications require. From a side-fire mounted position, taking into account the necessary clear zone, the detector's required location for the production of data to the specified accuracy shall not exceed 40 feet.

Ensure that the acoustic detector is programmed so all lanes have detection zones generating data that meets the accuracy specifications.