Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

September 3, 2026

Daniel Holt, PE, PTOE
Director, Project Delivery
Director, Technical Services
FHWA
400 West Washington Street, Suite 4200
Orlando, FL 32801

Re: State Specifications Office
Section: 710
Proposed Specification: **7100300 Painted Pavement Markings**
Associated Specification: **7110201 Thermoplastic Pavement Markings**

Dear Mr. Holt:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Ryan Gray to allow for durable paint contrast markings placed with longitudinal solid white thermoplastic lines.

Please review and transmit your comments, if any, within two weeks (10 business days). Comments should be sent via email daniel.strickland@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at (850) 414-4130.

Sincerely,

Signature on File

Daniel Strickland, P.E.
State Specifications Engineer

DS/am
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

PAINTED PAVEMENT MARKINGS
(REV 6-23-26)

ARTICLE 710-3 is deleted and the following substituted:

710-3 Equipment.

Use equipment that will produce continuous uniform dimensions of pavement markings of varying widths and meet the following requirements:

1. Capable of traveling at a uniform, predetermined rate of speed, both uphill and downhill, in order to produce a uniform application of paint and capable of following straight lines and making normal curves in a true arc.

2. Capable of applying glass spheres to the surface of the completed white and yellow lines by an automatic sphere dispenser attached to the pavement marking machine such that the glass spheres are dispensed closely behind the installed line. Use a glass spheres dispenser equipped with an automatic cut-off control that is synchronized with the cut-off of the paint and applies the glass spheres in a manner such that the spheres appear uniform on the entire pavement markings surface. Prevent retroreflective elements from bonding with or adhering to black contrast pavement markings.

3. Capable of spraying the paint to the required thickness and width without thinning of the paint. Equip the paint tank with nozzles equipped with cut-off valves, which will apply broken or skip lines automatically.

SUBARTICLE 710-4.1 is deleted and the following substituted:

710-4.1 General: Remove existing pavement markings, such that scars or traces of removed markings will not conflict with new pavement markings, by a method approved by the Engineer.

Before applying pavement markings, remove any material that would adversely affect the bond of the pavement markings by a method approved by the Engineer.

Apply standard paint to dry surfaces only, and when the ambient air and surface temperature is at least 40ºF and rising.

Apply durable paint to dry surfaces only. Do not apply durable paint when the ambient air and surface temperature is below 50°F, relative humidity is above 80% or when the dew point is within 5°F of the ambient air temperature.

Do not apply painted pavement markings when winds are sufficient to cause spray dust.

Apply painted pavement markings~~,~~ having well defined edges. When required, apply painted pavement markings~~,~~ over existing pavement markings such that not more than 2 inches on either end and not more than 1 inch on either side is visible. Do not apply durable paint where thermoplastic markings will be applied. When applying durable paint contrast markings contiguous to previously installed longitudinal solid lines, shield or otherwise protect the lines from overspray.

When stencils are used to apply symbols and messages, the areas covered by the stencil reinforcing will not be required to be painted.

Mix the paint thoroughly prior to pouring into the painting machine. Apply paint to the pavement by spray or other means approved by the Engineer.

Conduct field testing in accordance with FM 5-541 Part A. Remove and replace painted pavement markings not meeting the requirements of this Section at no additional cost to the Department.

Apply all standard painted pavement markings prior to opening the road to traffic.

710-4.1.1 Painted Pavement Markings (Final Surface): On concrete surfaces or newly constructed asphalt, the painted pavement markings (final surface) will include one application of standard paint applied to the final surface, except as noted herein.

For center line and edge line rumble strip installations where the pavement marking is placed within the grinding, apply a second application of standard paint within 24 hours of each day's grinding operation.

Use durable paint for island nose pavement markings in accordance with Standard Plans Index 711-001.

Do not apply final surface paint where preformed thermoplastic is required in 711-4.2.3.

Do not apply final surface paint where permanent tape will be applied.

SUBARTICLE 710-4.2 is deleted and the following substituted:

710-4.2 Thickness: Apply standard paint to attain a minimum wet film thickness of 0.015 inches or 15 mils . Apply durable paint to attain a minimum wet film thickness of 0.025 inches or 25 mils. Measure, record, and certify on a Department approved form and submit to the Engineer, the thickness of ~~white and yellow~~ durable paint pavement markings in accordance with FM 5-541 Part A.

SUBARTICLE 710-4.5 is deleted and the following substituted:

710-4.5 Glass Spheres: Apply glass spheres on all white and yellow pavement markings immediately and uniformly following the paint application. The rate of application shall be based on the manufacturer's recommendation.

For longitudinal durable paint markings, apply a double drop of Type 1 and Type 3 glass spheres. For transverse durable paint markings, apply a single drop of Type 3 glass spheres.

The rate of application shall be based on the manufacturer's recommendation.

SUBARTICLE 710-5.1 is deleted and the following substituted:

710-5.1 Dimensions:

710-5.1.1 Longitudinal Lines: Apply painted skip line segments with no more than plus or minus 12 inches variance, so that over-tolerance and under-tolerance lengths between skip line and the gap will approximately balance. Apply longitudinal white and yellow lines at least 2 inches from construction joints of portland cement concrete pavement.

710-5.1.2 Transverse Markings, Gore Markings, Arrows, and Messages: Apply paint in multiple passes when the marking cannot be completed in one pass, with an overall line width allowable tolerance of plus or minus 1 inch.

710-5.1.3 Contrast Lines: Use black paint to provide contrast on concrete or light asphalt pavement, when specified by the Engineer. Apply black ~~paint in 10 foot segments following each longitudinal skip line.~~paint contrast markings to longitudinal white dotted, skip, and solid lines in accordance with the Plans and Standard Plans, Index 711-001. Use durable paint for contrast markings contiguous to hot-applied thermoplastic pavement markings.

SUBARTICLE 710-5.2 is deleted and the following substituted:

710-5.2 Alignment: Apply painted pavement markings that will not deviate more than 1 inch from the stringline on tangents and curves one degree or less. Apply painted pavement markings that will not deviate more than 2 inches from the stringline on curves greater than one degree. Apply painted edge markings uniformly, not less than 2 inches or more than 4 inches from the edge of pavement, without noticeable breaks or deviations in alignment or width. Apply painted contrast markings in close conformity with the primary marking's alignment and pattern, ensuring no overlaps or gaps between colors exceed 1/8 inch.

Remove and replace at no additional cost to the Department, pavement markings that deviate more than the above stated requirements.

SUBARTICLE 710-11.1 is deleted and the following substituted:

710-11.1 General: Price and payment will be full compensation for all work specified in this Section, including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Durable paint contrast markings placed with standard thermoplastic markings will be paid in accordance with Section 711.

Final payment will be withheld until all deficiencies are corrected.

PAINTED PAVEMENT MARKINGS
(REV 6-23-26)

ARTICLE 710-3 is deleted and the following substituted:

710-3 Equipment.

Use equipment that will produce continuous uniform dimensions of pavement markings of varying widths and meet the following requirements:

1. Capable of traveling at a uniform, predetermined rate of speed, both uphill and downhill, in order to produce a uniform application of paint and capable of following straight lines and making normal curves in a true arc.

2. Capable of applying glass spheres to the surface of the completed white and yellow lines by an automatic sphere dispenser attached to the pavement marking machine such that the glass spheres are dispensed closely behind the installed line. Use a glass spheres dispenser equipped with an automatic cut-off control that is synchronized with the cut-off of the paint and applies the glass spheres in a manner such that the spheres appear uniform on the entire pavement markings surface. Prevent retroreflective elements from bonding with or adhering to black contrast pavement markings.

3. Capable of spraying the paint to the required thickness and width without thinning of the paint. Equip the paint tank with nozzles equipped with cut-off valves, which will apply broken or skip lines automatically.

SUBARTICLE 710-4.1 is deleted and the following substituted:

710-4.1 General: Remove existing pavement markings, such that scars or traces of removed markings will not conflict with new pavement markings, by a method approved by the Engineer.

Before applying pavement markings, remove any material that would adversely affect the bond of the pavement markings by a method approved by the Engineer.

Apply standard paint to dry surfaces only, and when the ambient air and surface temperature is at least 40ºF and rising.

Apply durable paint to dry surfaces only. Do not apply durable paint when the ambient air and surface temperature is below 50°F, relative humidity is above 80% or when the dew point is within 5°F of the ambient air temperature.

Do not apply painted pavement markings when winds are sufficient to cause spray dust.

Apply painted pavement markings having well defined edges. When required, apply painted pavement markings over existing pavement markings such that not more than 2 inches on either end and not more than 1 inch on either side is visible. Do not apply durable paint where thermoplastic markings will be applied. When applying durable paint contrast markings contiguous to previously installed longitudinal solid lines, shield or otherwise protect the lines from overspray.

When stencils are used to apply symbols and messages, the areas covered by the stencil reinforcing will not be required to be painted.

Mix the paint thoroughly prior to pouring into the painting machine. Apply paint to the pavement by spray or other means approved by the Engineer.

Conduct field testing in accordance with FM 5-541 Part A. Remove and replace painted pavement markings not meeting the requirements of this Section at no additional cost to the Department.

Apply all standard painted pavement markings prior to opening the road to traffic.

710-4.1.1 Painted Pavement Markings (Final Surface): On concrete surfaces or newly constructed asphalt, the painted pavement markings (final surface) will include one application of standard paint applied to the final surface, except as noted herein.

For center line and edge line rumble strip installations where the pavement marking is placed within the grinding, apply a second application of standard paint within 24 hours of each day's grinding operation.

Use durable paint for island nose pavement markings in accordance with Standard Plans Index 711-001.

Do not apply final surface paint where preformed thermoplastic is required in 711-4.2.3.

Do not apply final surface paint where permanent tape will be applied.

SUBARTICLE 710-4.2 is deleted and the following substituted:

710-4.2 Thickness: Apply standard paint to attain a minimum wet film thickness of 0.015 inches or 15 mils . Apply durable paint to attain a minimum wet film thickness of 0.025 inches or 25 mils. Measure, record, and certify on a Department approved form and submit to the Engineer, the thickness of durable paint pavement markings in accordance with FM 5-541 Part A.

SUBARTICLE 710-4.5 is deleted and the following substituted:

710-4.5 Glass Spheres: Apply glass spheres on all white and yellow pavement markings immediately and uniformly following the paint application. The rate of application shall be based on the manufacturer's recommendation.

For longitudinal durable paint markings, apply a double drop of Type 1 and Type 3 glass spheres. For transverse durable paint markings, apply a single drop of Type 3 glass spheres.

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710-5.1 Dimensions:

710-5.1.1 Longitudinal Lines: Apply painted skip line segments with no more than plus or minus 12 inches variance, so that over-tolerance and under-tolerance lengths between skip line and the gap will approximately balance. Apply longitudinal white and yellow lines at least 2 inches from construction joints of portland cement concrete pavement.

710-5.1.2 Transverse Markings, Gore Markings, Arrows, and Messages: Apply paint in multiple passes when the marking cannot be completed in one pass, with an overall line width allowable tolerance of plus or minus 1 inch.

710-5.1.3 Contrast Lines: Use black paint to provide contrast on concrete or light asphalt pavement, when specified by the Engineer. Apply black paint contrast markings to longitudinal white dotted, skip, and solid lines in accordance with the Plans and Standard Plans, Index 711-001. Use durable paint for contrast markings contiguous to hot-applied thermoplastic pavement markings.

SUBARTICLE 710-5.2 is deleted and the following substituted:

710-5.2 Alignment: Apply painted pavement markings that will not deviate more than 1 inch from the stringline on tangents and curves one degree or less. Apply painted pavement markings that will not deviate more than 2 inches from the stringline on curves greater than one degree. Apply painted edge markings uniformly, not less than 2 inches or more than 4 inches from the edge of pavement, without noticeable breaks or deviations in alignment or width. Apply painted contrast markings in close conformity with the primary marking's alignment and pattern, ensuring no overlaps or gaps between colors exceed 1/8 inch.

Remove and replace at no additional cost to the Department, pavement markings that deviate more than the above stated requirements.

SUBARTICLE 710-11.1 is deleted and the following substituted:

710-11.1 General: Price and payment will be full compensation for all work specified in this Section, including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Durable paint contrast markings placed with standard thermoplastic markings will be paid in accordance with Section 711.

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