

**PAVEMENT MARKING/MARKER DESIGNER / REVIEWER CHECKLIST**

The following checklist provides both the pavement marking/marker designer and the TE/L&D Manager guidelines for preparing marking/marker plans during the different phases of design. The checklist is designed to correlate with the Concurrent Engineering Process discussed in the [TEDM Section I – General, Chapter 2](#).

Project Name: _____
Project No: _____ UPC / PPMS No: _____
TE/L&D Manager: _____
Marking/Markers Designer: _____
Advertisement Date: _____

**SCOPING TEAM MEETING****DATE OF MEETING:** \_\_\_\_\_

➤ *The following actions should take place prior to or during the Scoping Team Meeting.*

- 1) Ensure that the limits of survey will accommodate the marking/marker design.
- 2) Evaluate the conceptual roadway typical section(s) to evaluate the need for special details for Marking/Markers.
- 3) Identify the limits of survey needed to adequately accommodate transitions between new and existing roadways, including side street termini.
- 4) Identify other design elements that require early coordination with the marking/marker design, (traffic signals, signs, etc.).
- 5) Determine the agency and contact person that will own and maintain the pavement marking/markers.
- 6) Determine the agency and contact person that will be responsible for the pavement marking/marker design and plans.
- 7) Prepare project budget estimate.

**Scoping review completed by:** \_\_\_\_\_**Dated reviewed:** \_\_\_\_\_

**PRELIMINARY FIELD INSPECTION TEAM MEETING**      **DATE OF MEETING:** \_\_\_\_\_

➤ *The following actions should take place prior to or during the Preliminary Field Inspection Team Meeting.*

- 1) Send the Pavement Marking/Marker Design Questionnaire to the agency responsible for maintaining marking/markers (District, Residency, Municipality, etc). [\[Appendix IIIB-1\]](#)

Sent To: \_\_\_\_\_ Date Sent: \_\_\_\_\_

- 2) Evaluate the roadway geometry and typical sections to ensure that appropriate transitioning is provided for tie-ins to existing roadway.
- 3) Update project budget estimate.

**Pre-F.I. review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_

**PUBLIC HEARING TEAM MEETING**      **DATE OF MEETING:** \_\_\_\_\_

➤ *The following actions should take place prior to or during the Public Hearing Team Meeting.*

- 1) Perform a pavement marking inventory at all of the projects termini to identify existing tie-ins.
- 2) Develop marking/marker base plans.
- 3) Develop conceptual marking/marker plans to the extent that major overhead and guide sign placements can be determined.
- 4) Verify roadway geometry and typical sections will accommodate appropriate transitioning for tie-ins to existing roadway.
- 5) Ensure coordination of all TCD plans.
- 6) Update project budget estimate.

**Public Hearing review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_

**FIELD INSPECTION TEAM MEETING**

**DATE OF MEETING:** \_\_\_\_\_

- *The following actions should take place prior to or during the Field Inspection Team Meeting.*

**Marking/Marker Plan General Overview**

- 1) Address public hearing comments.

**Marking/Marker Plan Coordination Issues**

- 1) Update conceptual marking/marker design plans with most current roadway design plans.
- 2) Update conceptual marking/marker design plans to assist locating major overhead and guide sign, if necessary.

**Construction Cost Estimate**

- 1) Update project budget estimate

**F.I. review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_

**80% PLAN SUBMITTAL****DATE OF SUBMISSION:** \_\_\_\_\_

- *Advance to preliminary marking/marker design plans for review by Maintaining Jurisdiction, Residency, District and Central Office. Plans are approximately 80% complete such that the reviewer can provide guidance.*

**80% DESIGN ELEMENTS****Marking/Marker Plan Set General Overview****Stand alone Marking/Marker Plans**

- 1) Provide Title Sheet - includes latest design standard and specifications.
- 2) Provide Location Map.
- 3) Provide Revision Data Sheet.
- 4) Provide Survey & Alignment Data Sheets, if applicable.
- 5) Provide Maintenance of Traffic Sheets, if applicable.

**Requirements for all Marking/Marker Plans**

- 1) Use Sheet Cell from the VDOT Cell Libraries.
- 2) Incorporate design guidance provided in Marking/marker Questionnaire. [\[Appendix IIIB-1\]](#)
- 3) Provide Index of Sheets.
- 4) Provide Insertable Sheets.
- 5) Provide General Notes Sheet.
- 6) Show Project Data on plan sheets, (Project No., Series and Page No., etc.).
- 7) Show Scale, North Arrow, Match Lines, etc.

**Marking/Marker Plan Coordination Issues****Roadway Plans**

- 1) Verify roadway geometry and typical sections will accommodate appropriate transitioning for lane drops, tie-ins to existing roadway, etc.
- 2) Update pavement marking/marker plan base sheets with most current roadway design plan sheets.
- 3) Reference associated roadway plan sheets in the reference box on pavement marking/marker plan sheet, (Series No. and Page No.). [\[Appendix IIIA-3\]](#)

**Sign Plans**

- 1) Coordinate pavement marking/marker layout as they relate to sign placement (e.g. stop bars, lane drops or exit only lanes, transitioning out lanes, railroad crossings, and school zones).
- 2) Reference associated sign plan sheets in the reference box on pavement marking/marker plan sheet, (Series No. and Page No.). [\[Appendix IIIA-3\]](#)

**Traffic Signal Plans**

- 1) Coordinate pavement marking/marker layout as they relate to the traffic signal operations and design.
- 2) Reference associated traffic signal plan sheets in the reference box on pavement marking/marker plan sheet, (Series No. and Page No.). [\[Appendix IIIA-3\]](#)

**80% PLAN SUBMITTAL (CONTINUED)**

**Pavement Marking/Marker Plan Layout**

- 1) Call out pavement marking type, widths and color.
- 2) Show a pavement marking typical section on plan sheet, if necessary.
- 3) Ensure all notes and legends are correct.

**Construction Cost Estimate**

- 1) Show all Standard and Non-Standard Pay Items in the Summary of Quantities sheet.
- 2) Unit quantities do not need to be shown on Summary of Quantities sheet for this submittal.
- 3) Prepare construction cost estimate.

**Submit Plan To: (If Applicable)**

**Contact Person**

**Date Sent**

Municipality	_____	_____
VDOT, Residency	_____	_____
VDOT, District Traffic Engineering	_____	_____
VDOT, CO – Traffic Engineering (L&D)	_____	_____
VDOT, CO – Traffic Engineering Division	_____	_____
VDOT, Scheduling and Construction	_____	_____
FHWA	_____	_____

**80% review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_

**QC PLAN SUBMITTAL****DATE OF SUBMISSION:** \_\_\_\_\_

➤ *Advance the plans to Constructability Review.*

**Respond / Incorporate Review Comments From:**

- 1) Municipality (if applicable)
- 2) VDOT, Residency
- 3) VDOT, District Traffic Engineering
- 4) VDOT, CO – Traffic Engineering (L&D)
- 5) VDOT, CO – Traffic Engineering Division
- 7) VDOT, Scheduling and Construction
- 8) FHWA

**Constructability Check**

- 1) Ensure lane transitions are adequate at all project limit termini.
- 2) Ensure all signs and pavement markings are properly coordinated?

**Plan Sheets**

- 1) Finalize General Notes and Plan Notes.
- 2) Ensure plan sheet call-outs are consistent with Legend and Summary of Quantities pay items, and Transport pay items.
- 3) Verify each pay item is clearly identified.
- 4) Perform quantity take-offs and verify each pay item in the project is accounted for in the Summary of Quantities.

**Plan Detail Sheets**

- 1) Pavement marking/marker detail sheets.
- 2) Insertable sheets.

**Summary of Quantities / Special Provisions**

- 1) Finalize Summary of Quantities. [[Appendix IIIA-1](#)]
- 2) Cross check measurement and payment for each pay item matches the VDOT standard items or non-standard items as discussed in the Specifications, Special Provisions and/or Special Provision Copied Notes. [[Sec. I, Chapter 3, 3.8](#)]
- 3) Discuss in detail the Special Provisions and Special Provision Copied Notes with Traffic Engineering Division Specifications Section.

**Construction Cost Estimate**

- 1) Verify TRNS·PORT quantities match Summary of Quantities sheet.
- 2) Develop costs estimates per unit price for non-standard pay items and review with TE/L&D Manager.

**QC PLAN SUBMITTAL (CONTINUED)**

**Plan Set Submitted**

- 1) Title Sheet (Stand alone project)
- 2) Location Map (Stand alone project)
- 3) Index of Sheets
- 4) Revision Data Sheet (Stand alone project)
- 5) Survey and Alignment (Stand alone project)
- 6) Maintenance of Traffic (Stand alone project)
- 7) General Notes
- 8) Insertable Sheets
- 9) Summary of Quantities Sheet
- 10) Plan Detail Sheets
- 11) Plan Sheets

**Special Provisions Submitted**

- 1) Special Provisions: \_\_\_\_\_
- 2) Non-Standard Items: \_\_\_\_\_

**Up-Load Plans to Falcon in TIF format.**

**Date complete:** \_\_\_\_\_

- 1) Create Plan Index in Excel format.

**QA review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_

**PRE-ADVERTISEMENT CONFERENCE**

**DATE OF MEETING:** \_\_\_\_\_

➤ *Advancing 100% design plans and specifications to construction plan set.*

**Respond / Incorporate Review Comments From:**

- 1) Municipality (if applicable)
- 2) VDOT, Residency
- 3) VDOT, District Traffic Engineering
- 4) VDOT, CO – Traffic Engineering (L&D)
- 5) VDOT, CO – Traffic Engineering Division
- 7) VDOT, Scheduling and Construction
- 8) FHWA

**Update Plans on Falcon.** **Date complete:** \_\_\_\_\_

**Up-Load Plans to Falcon in TIF format.** **Date complete:** \_\_\_\_\_

- 1) Update Plan Index.

**Revise Special Provisions.** **Date complete:** \_\_\_\_\_

**Update TRNS-PORT Cost Estimate.** **Date complete:** \_\_\_\_\_

- 1) Verify updated TRNS-PORT quantities match Summary of Quantities sheet.

**PAC review completed by:** \_\_\_\_\_

**Dated reviewed:** \_\_\_\_\_