



South Carolina  
Department of Transportation

**INSTRUCTIONAL BULLETIN NO. 2006-7**

**SUBJECT:** Design Field Reviews  
**EFFECTIVE DATE:** July 27, 2006  
**SUPERSEDES:** Instructional Bulletin No. 2005-6, "Design Field Review Title Sheet"  
**RE:** Project Development Process (Rev. 7-18-06)

During the early development of a project, the geometric design is selected and placed on the plans. The project templates are shown on the cross sections providing the footprint of the proposed roadway. Prior to sending the plans to Hydraulic Engineering, a field review will be held to verify the geometry of the new design.

According to the Project Development Process, a Design Field Review will be held to determine if the vertical and horizontal alignment, as indicated on the plans, meets the scope of the project. The review team should closely examine the existing conditions of the project alignment and make modifications as needed. The team will insure that the design indicated will become the final geometric design used on the project. This is when the project is first reviewed for the 13 controlling design criteria.

The review team should be composed of those with specific interest in the geometry of the roadway. A review of the other features of the project will be held at a later time; such as, hydrology and erosion control. The team should include, but is not limited to, representatives from Project Management, District Engineering, Utility Coordination, Right of Way, Environmental and Road Design. It is the responsibility of the Road Design Group to set-up the Design Field Review and lead the team through the project on location.

A revised Design Field Review Title Sheet (copy attached) has been prepared and is named: dftrs5.dgn.

This title sheet should be used for all Design Field Reviews (DFR). Prior to the field review, the DFR plans will be taken to Engineering Reproductions Services (ERS) to be scanned and made available through Project Viewer. When notifying the review team, the Design Group will advise that the plans are available on Project Viewer. Upon returning from the DFR, the Road Design Group will have the marked-up DFR plans scanned by ERS making them available through Project Viewer.

Approved:   
 E. S. Eargle  
 Road Design Engineer

ESE:afg  
Attachment

cc:

Mark C. Lester, Prog. Dev. Engineer West	Mitchell Metts, Bridge Design Engineer
Charles Smoak, Hydraulic Engineer	Al Barwick, CRM Manager
Matt Lifsey, Prog. Dev. Engineer East	Traffic Engineering



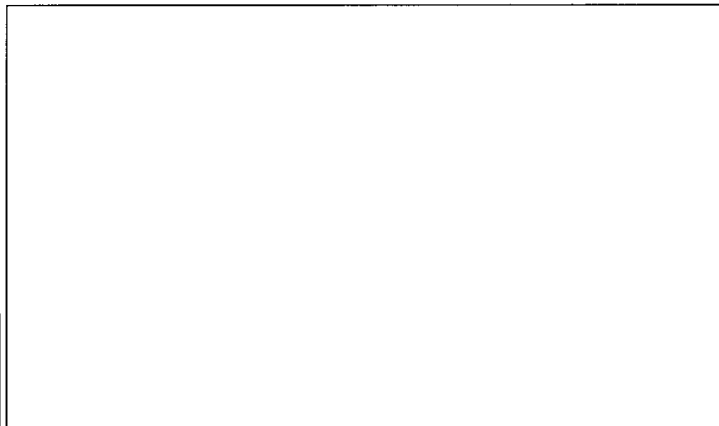


**REVIEW OF THE 13 CONTROLLING DESIGN CRITERIA**  
(ELIMINATE ALL DESIGN EXCEPTIONS WHERE PRACTICAL)

	OK	FURTHER REVIEW NEEDED (Please Check One)
1. DESIGN SPEED (HDM 11) _____	<input type="checkbox"/>	<input type="checkbox"/>
2. HORIZONTAL ALIGNMENT (HDM 11) _____	<input type="checkbox"/>	<input type="checkbox"/>
3. VERTICAL ALIGNMENT (HDM 12) _____	<input type="checkbox"/>	<input type="checkbox"/>
4. VERTICAL CLEARANCE (HDM 19) _____	<input type="checkbox"/>	<input type="checkbox"/>
5. GRADE (HDM 12) _____	<input type="checkbox"/>	<input type="checkbox"/>
6. SUPERELEVATION (HDM 11) _____	<input type="checkbox"/>	<input type="checkbox"/>
7. CROSS SLOPE (HDM 13) _____	<input type="checkbox"/>	<input type="checkbox"/>
8. LANE WIDTH (HDM 13) _____	<input type="checkbox"/>	<input type="checkbox"/>
9. SHOULDER WIDTH (HDM INDEX) _____	<input type="checkbox"/>	<input type="checkbox"/>
10. STOPPING SITE DISTANCE (HDM 10) _____	<input type="checkbox"/>	<input type="checkbox"/>
11. HORIZONTAL CLEARANCE (HDM 11) _____	<input type="checkbox"/>	<input type="checkbox"/>
12. BRIDGE WIDTH (HDM 13) _____	<input type="checkbox"/>	<input type="checkbox"/>
13. STRUCTURAL CAPACITY (HDM 1) _____	<input type="checkbox"/>	<input type="checkbox"/>

**DESIGN FIELD REVIEW**

\_\_\_\_\_ COUNTY  
RTE./RD. \_\_\_\_\_  
FILE \_\_\_\_\_ PROJ. \_\_\_\_\_  
FROM: \_\_\_\_\_ TO: \_\_\_\_\_



**RIGHT OF WAY RECOMMENDATIONS:**

NEW R/W WIDTH: \_\_\_\_\_ TOTAL SEE PLANS: Y / N  
 SLOPES OBTAIN PERMISSION: Y / N  
 SLOPES COVER WITH RIGHT OF WAY: Y / N  
 CONTROL OF ACCESS Y / N  
 COMMENTS: \_\_\_\_\_

**DESIGN CRITERIA:**

TYPICAL SECTION \_\_\_\_\_ THRUOUT  
 \_\_\_\_\_ STA. \_\_\_\_\_ TO STA. \_\_\_\_\_  
 \_\_\_\_\_ STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

PAVEMENT DESIGN TO BE DETERMINED BY:  
 OFFICE OF MATERIALS AND RESEARCH  
 ONLINE CALCULATOR  
 FIELD REVIEW (CIRCLE ONE)

DESIGN SPEED: \_\_\_\_\_ MPH  
 INTERSECTION "THROAT" WIDTH \_\_\_\_\_ FT RADIUS \_\_\_\_\_ FT

**BRIDGE REPLACEMENT:**  
 SKETCH ON THE PLANS THE LOCATION OF THE BRIDGE CONSTRUCTION

BRIDGE ACCESS LINES (GIVE DIMENSIONS WHERE NEEDED)  
 ADDITIONAL GEOTECHNICAL WORK REQUIRED: Y / N  
 ROAD TO BE CLOSED OR STAGED (CIRCLE ONE)

**VIDEO/PHOTOS:**

WERE VIDEOS TAKEN OF PROJECT? Y / N  
 WERE PHOTOS TAKEN OF PROJECT? Y / N

**WALLS**  
 MARK ON PLANS THE LOCATION OF PROPOSED WALLS

**RAILROAD**  
 RAILROAD INVOLVEMENT Y / N

NOTES AND/OR COMMENTS:  
 \_\_\_\_\_  
 \_\_\_\_\_

THE PURPOSE OF THE DESIGN FIELD REVIEW IS TO DETERMINE IF THE VERTICAL AND HORIZONTAL ALIGNMENT AS INDICATED ON THE PLANS MEETS THE SCOPE OF THE PROJECT. THE REVIEW TEAM SHOULD CLOSELY EXAMINE THE EXISTING CONDITIONS AND MAKE MODIFICATIONS AS NEEDED. THE TEAM WILL INSURE THAT THE DESIGN INDICATED WILL BECOME THE FINAL GEOMETRIC DESIGN USED ON THIS PROJECT.



AustinME  
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20-JUL-2006