

Zack Stewart
Northern District Commissioner

Wayne O. Burkes
Central District Commissioner

Ronnie Shows
Southern District Commissioner



Dr. Robert L. Robinson
Executive Director

James D. Quin
Deputy Executive Director/
Chief Engineer

Mississippi Department of Transportation / P.O. Box 1850 / Jackson, MS 39215-1850 / FAX (601) 359-7110

Roadway Design Division Memorandum

Date: December 11, 1995
To: Design Squad Leaders
From: Roadway Design Engineer
John Pickering *J.P.*
Subject: Bench Sections

When extremely deep cuts or high fills are encountered on a project, the Geotechnical Branch of Materials Division should be provided plans for their investigation and recommendations. Deep cuts and high fills are defined as follows:

- **Cut Sections** greater than 10 meters (32.8 feet), measured vertically from subgrade to the top of the backslope.
- **Fill sections** greater than 14 meters (45.9 feet), measured vertically from subgrade to the toe of the slope.

Whenever the above limits are reached, you are required to plot bench sections on your cross-sections through the entire cut or fill section before sending to the Geotechnical Branch. Typical bench sections (English and metric) are shown on the attached drawings.

The Geotechnical Branch should be provided the following plans as soon as available:

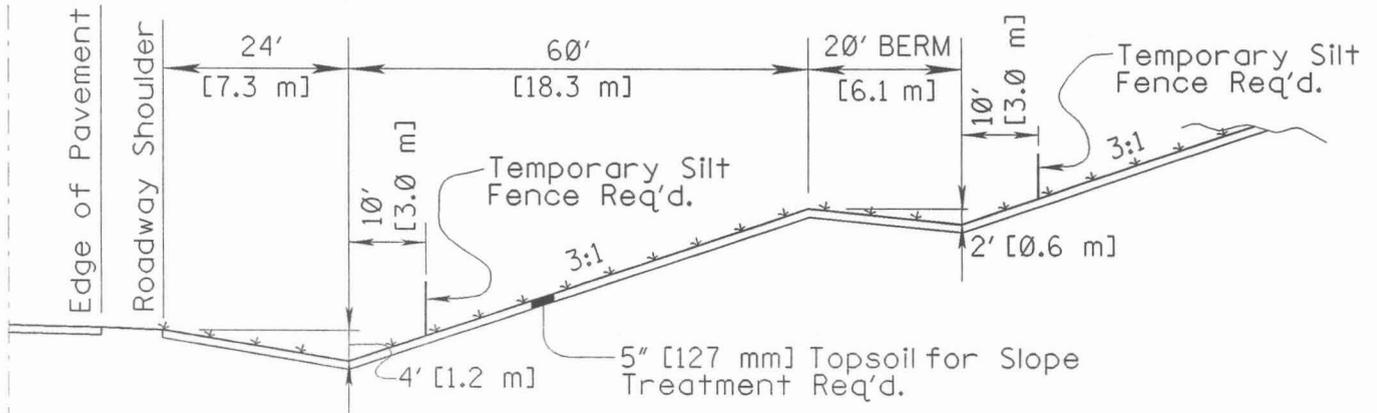
1. Title Sheet
2. Typical Bench Section(s) with station limits indicated.
3. Plan-Profile Sheet(s)
4. Cross-Section Sheets

The Geotechnical Branch will provide confirmation or alternate recommendations for the area(s).

Attachment

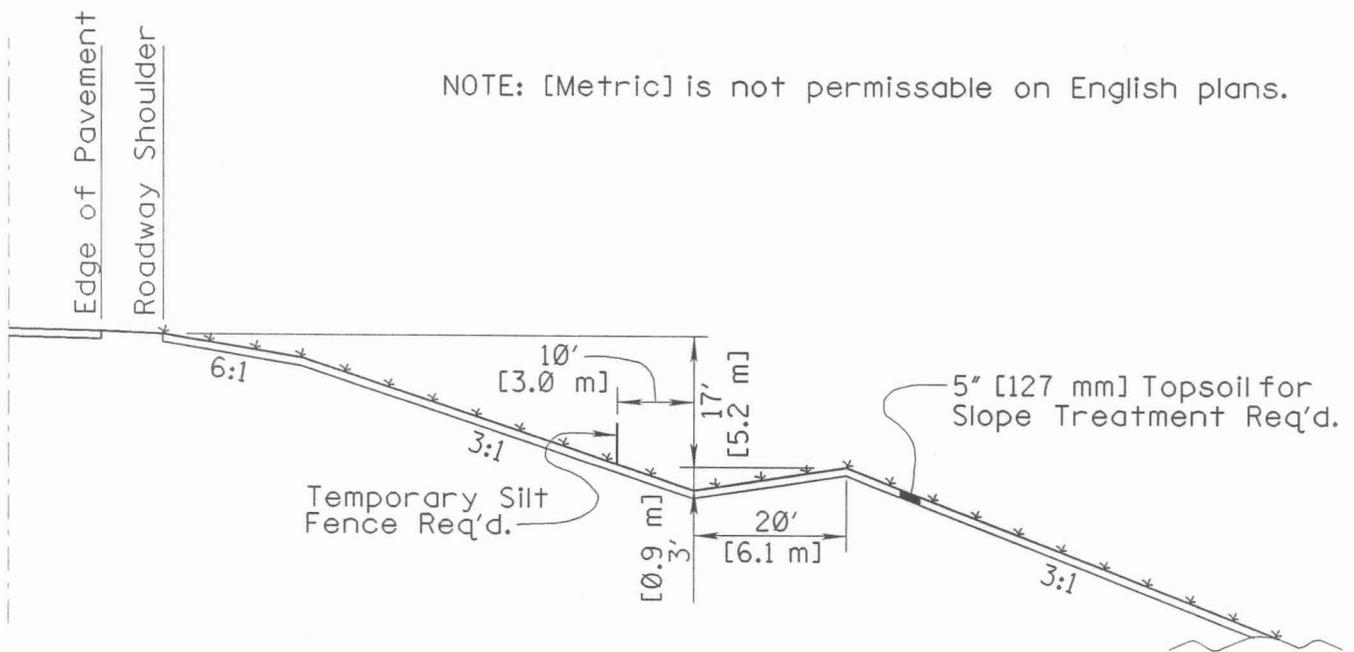
pc: Asst. Roadway Design Division Engineer
Section Engineers
Quality Control Engineer
Geotechnical Branch
Active Consultants
Central File
Design Memo File





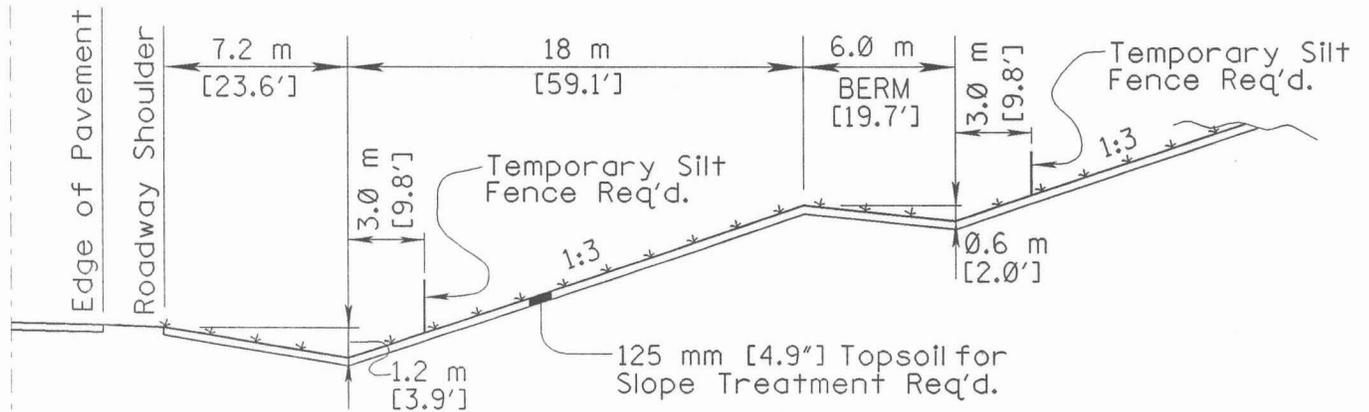
DETAIL OF BENCH IN A CUT SECTION

NOTE: [Metric] is not permissible on English plans.



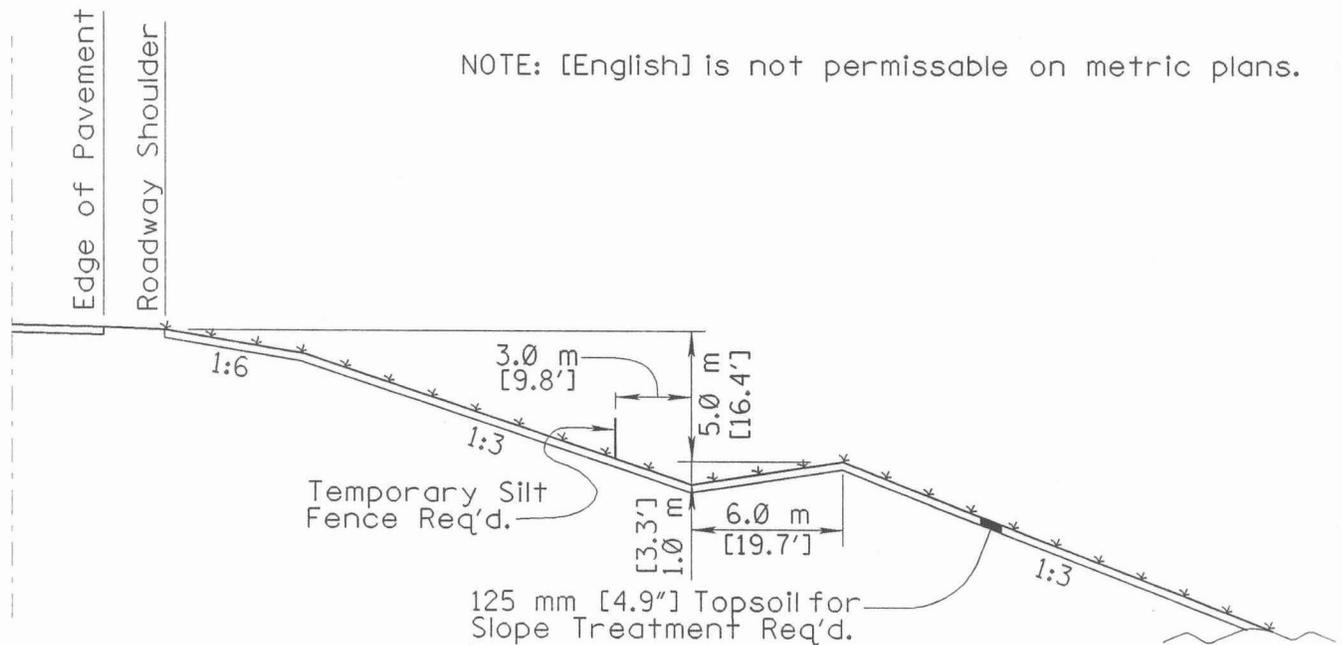
DETAIL OF BENCH IN A FILL SECTION

EXAMPLE OF BENCH SECTIONS (English)



DETAIL OF BENCH IN A CUT SECTION

NOTE: [English] is not permissible on metric plans.



DETAIL OF BENCH IN A FILL SECTION

EXAMPLE OF BENCH SECTIONS (Metric)