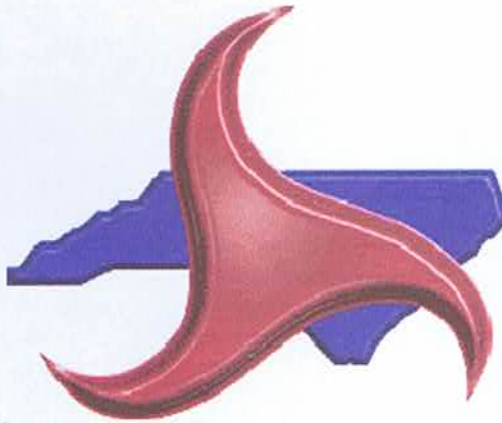


Bridge Design Speed Investigation

460098

Structure #98 on SR 1135 (McBryde Mill Road) over branch Raft Swamp

Hoke County



Document Prepared By:

Ramey Kemp & Associates, Inc.
8307 University Executive Park Drive, Suite 260
Charlotte, NC 28262

May 18, 2012

Principal Investigator & Project Manager

Jacob D. Carpenter, PE
Regional Manager



Bridge and Approach Investigation Checklist

Project 17BP.8.R.44

Description Bridge #98 over branch Raft Swamp

Route SR 1135 (McBryde Mill Road)

Division 8

County Hoke

Existing Speed Limit 55 ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 60

Speed Data Observed estimated speeds between 50-60 mph.

Ball Bank Speed Study 50 mph: NB - 9, SB - 5
55 mph: NB - 10, WB - 8 - Bridge speed good at 55 mph per BBI
60 mph: NB - 13, SB - 10

Warning Signs at Bridge 2 Bridge end delineators (2 missing)
[2 Weight limit signs missing/laying on ground (18 ton SV, 26 ton TTST)]

Roadside Development Wooded, Residential

ADT History 250 vpd (2009)

Pedestrian/Bicycle Traffic Minimal expected

Bridge and Approach Digital Photos Attached

Approach Lane Width 9.5 ft

Approach Shoulder Width 0.5-1 ft paved, 8 ft+ grass
Shoulder Type paved + grass

Lane Width (existing bridge) 9.5 ft

Shoulder width (existing bridge) 5 ft East side, 4 ft West side (~28 ft total)

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 1135 is classified as a local rural facility in the Statewide Functional Classification System. 2-lane cross-section recommended.

Crash History and Safety Considerations Crash analysis completed for 2/1/2002 to 1/31/2012. No collisions reported during study period.

Comments Slight curve north of bridge.

Reasonable Bridge Speed 55 mph

Investigated by: Jacob D. Carpenter, PE

Reviewed by: 

County: Hoke

Route: SR 1135 (McBryde Mill Road)

Date: 3/28/12

Northbound



Northbound

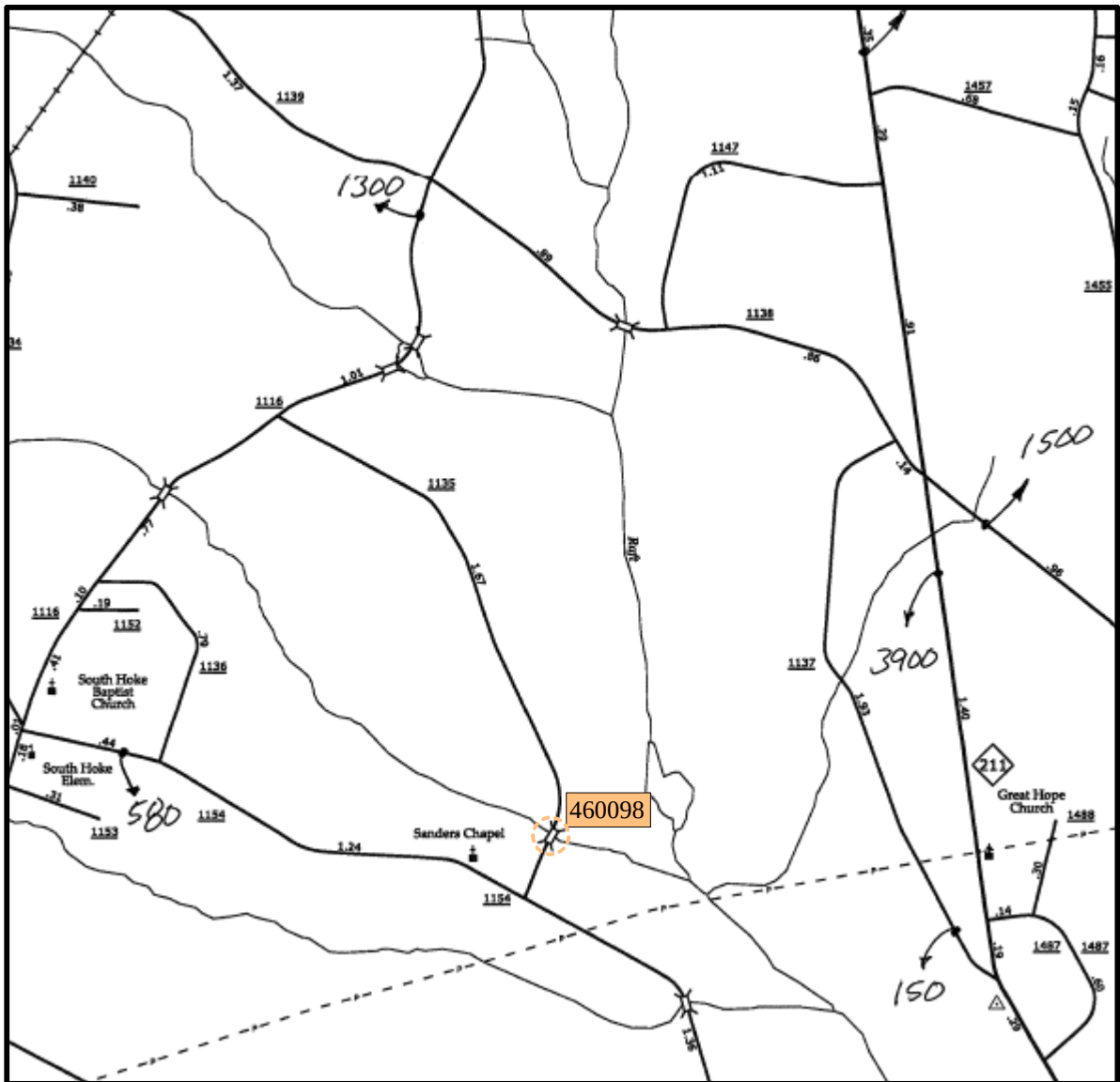


Southbound



Southbound





Bridge Location Map - Bridge #460098

Bridge Approach Speed Crash Analysis Request

Order # 41000018642

500 feet on Both Sides of Bridge Number 98 on Secondary Route 1135 (McBryde Mill Road) over Branch of Raft Swamp in Hoke County

Document Prepared By:

Safety Planning Group
Traffic Safety Systems Management Unit
Transportation Mobility and Safety Division
North Carolina Department of Transportation

Note: The crash statistics have been generated and are available through North Carolina's Crash Database. This database provides an inventory of **reported** crashes on record that have occurred at this location. Please note that many traffic crashes go unreported for a variety of reasons, and this report simply provides a listing of all crashes on record that occurred within 0 feet of the section described above.

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Study Criteria Summary

County: HOKE **City:** All and Rural
Date: 02/01/2002 to 01/31/2012 **Study:** 41000018642
Location: 500 feet on Both Sides of Bridge Number 98 on Secondary Route 1135 (McBryde Mill Road) over Branch of Raft Swamp

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000018642	41000018642			76.8	8.4	250	40001135

Request Date	Courier Service	Phone No.	Ext.	Fax No.
03/01/2012				

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
HOKE	46	8	All and Rural		0	02/01/2002	01/31/2012	10.00

Location Text	Requestor
500 feet on Both Sides of Bridge Number 98 on Secondary Route 1135 (McBryde Mill Road) over Branch of Raft Swamp	Kelly Becker, PE NCDOT Capital Region

Fiche Roads	
Name	Code
SR 1135	40001135
MCBRYDE MILL	50019346

Strip Road					
Name	Code	Begin MP	End MP	Miles	Kilometers
SR 1135	40001135	1.572	1.768	0.196	0.315