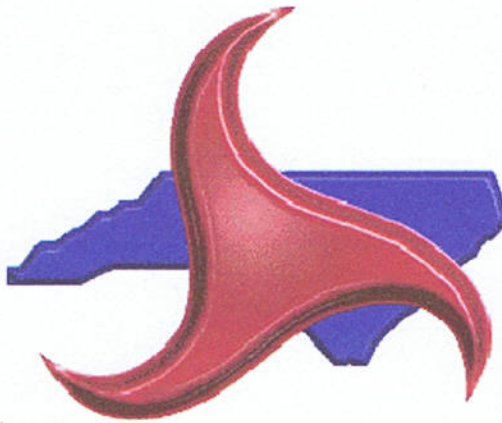


Bridge Design Speed Investigation

760093

Structure #93 on SR 1148 (Grassy Island Road) over Dry Creek

Richmond 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


5-18-12

Bridge and Approach Investigation Checklist

Project 17BP.8.R.56

Description Bridge #93 over Dry Creek

Route SR 1148 (Grassy Island Road)

Division 8

County Richmond

Existing Speed Limit 55 ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 60

Speed Data N/A - no traffic during field visit.

Ball Bank Speed Study Bridge speed good at 60 mph per BBI

Warning Signs at Bridge 4 Bridge end delineators, 2 Weight limit signs (21 ton SV, 28 ton TTST)

Roadside Development Wooded, Farmland

ADT History 290 vpd (2010) east of SR 1166

Pedestrian/Bicycle Traffic Minimal expected

Bridge and Approach Digital Photos Attached

Approach Lane Width 8.5 ft

Approach Shoulder Width 0.5 ft paved + 0-2 ft sand/gravel + 4-6 ft+ grass

Shoulder Type paved + gravel/sand + grass

Lane Width (existing bridge) 8.5 ft

Shoulder width (existing bridge) 3 ft SE, 2.5 ft NW (~22.5 ft total width)

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 1148 is classified as a rural local 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 _____

Reasonable Bridge Speed 55

Investigated by: Jacob D. Carpenter, PE

Reviewed by: _____



County: Richmond

Route: SR 1148 (Grassy Island Road)

Date: 3/15/12

Northeastbound



Northeastbound

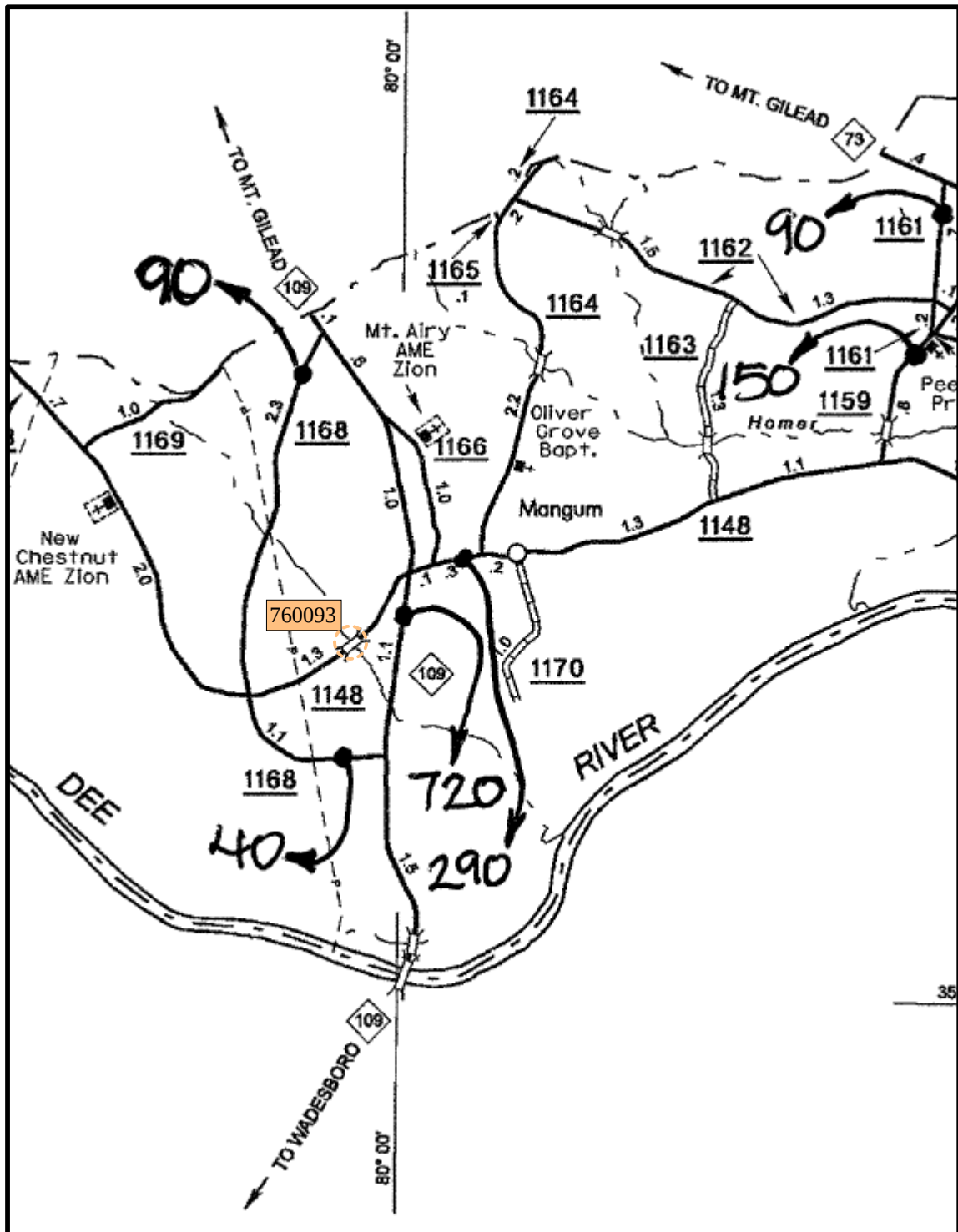


Southwestbound



Southwestbound





Bridge Approach Speed Crash Analysis Request

Order # 41000018518

500 feet on Both Sides of Bridge Number 93 on Secondary Route 1148 (Grassy Island Road) over Dry Creek in Richmond 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: RICHMOND **City:** All and Rural
Date: 02/01/2002 **to** 01/31/2012 **Study:** 41000018518
Location: 500 feet on Both Sides of Bridge Number 93 on Secondary Route 1148 (Grassy Island Road) over Dry Creek

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000018518	41000018518			76.8	8.4	200	40001148

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
RICHMOND	76	8	All and Rural		0	02/01/2002	01/31/2012	10.00

Location Text	Requestor
500 feet on Both Sides of Bridge Number 93 on Secondary Route 1148 (Grassy Island Road) over Dry Creek	Kelly Becker, PE NCDOT Capital Region

Fiche Roads	
Name	Code
SR 1148	40001148
GRASSY ISLAND	50012324

Strip Road					
Name	Code	Begin MP	End MP	Miles	Kilometers
SR 1148	40001148	16.316	16.510	0.194	0.312