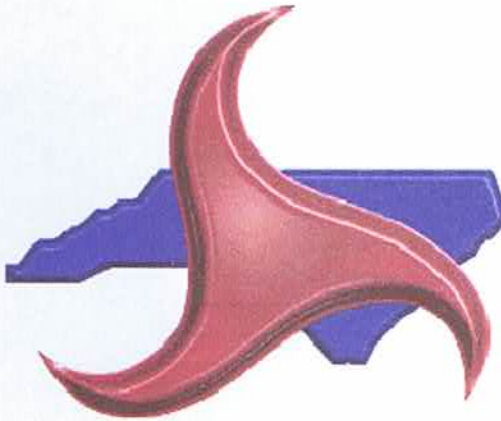


Bridge Design Speed Investigation

610030

Structure #30 on SR 1130 (Apple Orchard Road) over Clarks Creek

Montgomery County

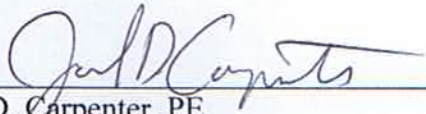


Document Prepared By:

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

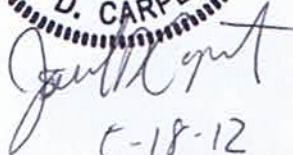
May 18, 2012

Principal Investigator & Project Manager



Jacob D. Carpenter, PE
Regional Manager




5-18-12

Bridge and Approach Investigation Checklist

Project 17BP.8.R.21

Description Bridge #30 over Clarks Creek

Route SR 1130 (Apple Orchard Road)

Division 8

County Montgomery

Existing Speed Limit 55 ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 25

Speed Data N/A - no traffic during field visit

Ball Bank Speed Study 20 mph: NB - 7, SB - 7 - BBI Readings for curve South of bridge
25 mph: NB - 14, SB - 14 - Bridge speed good at 25 mph per BBI
30 mph: NB - 20+, SB - 20+

Warning Signs at Bridge 4 Bridge end delineators, 2 Weight limit signs (11 ton SV, 16 ton TTST)
2 Reverse Turn warning signs with 25 mph advisory speeds

Roadside Development Wooded

ADT History 110 vpd (2009)

Pedestrian/Bicycle Traffic Minimal expected

Bridge and Approach Digital Photos Attached

Approach Lane Width 8 ft

Approach Shoulder Width 0.5-1 ft paved, 6 ft+ grass
Shoulder Type paved + grass

Lane Width (existing bridge) 8 ft

Shoulder width (existing bridge) 1.5 ft (~19 ft total width)

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 1130 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 Tight curves on both sides of bridge.

Reasonable Bridge Speed 25

Investigated by: Jacob D. Carpenter, PE

Reviewed by: 

County: Montgomery

Route: SR 1130 (Apple Orchard Road)

Date: 3/15/12

Northbound



Northbound

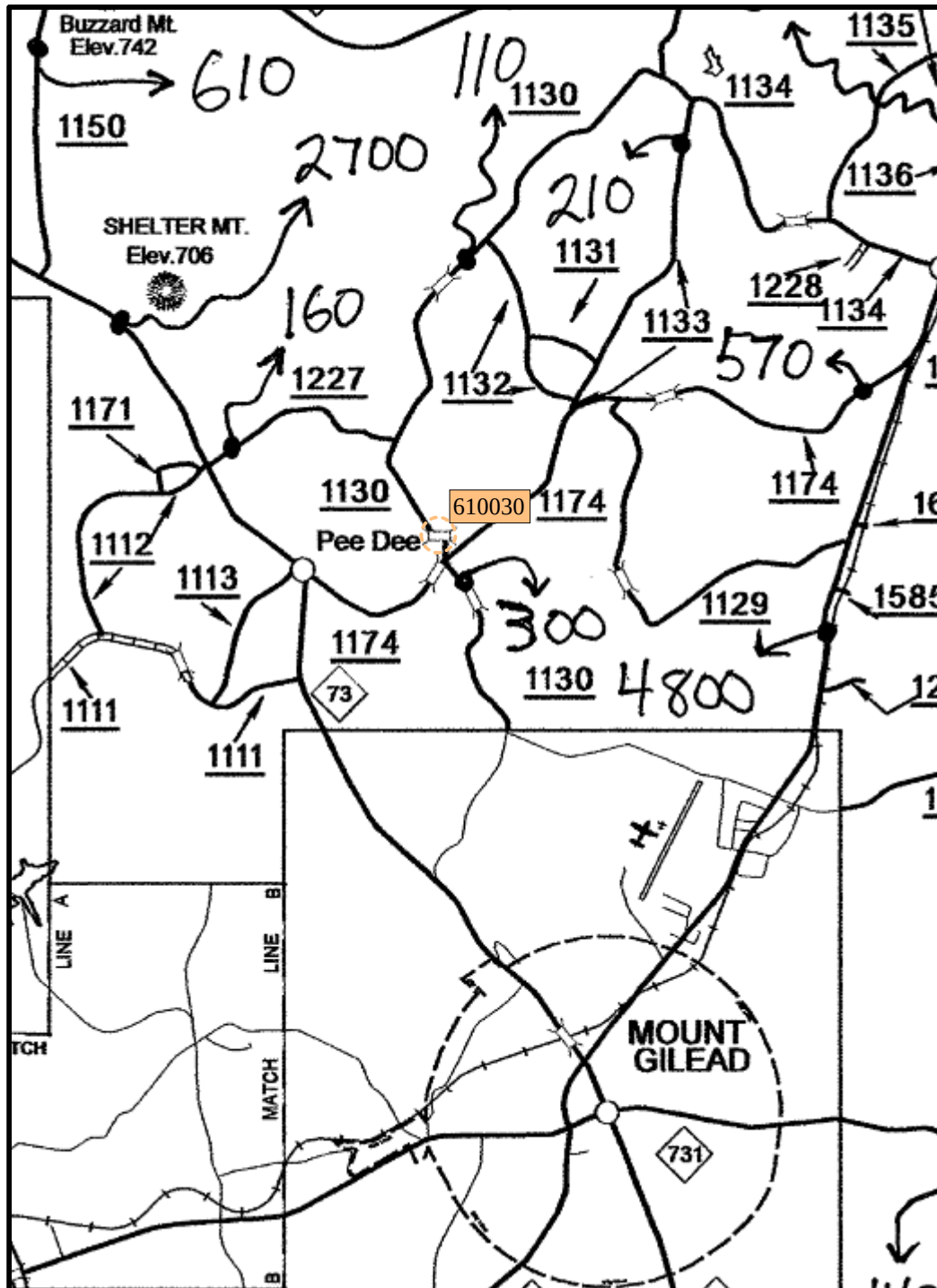


Southbound



Southbound





Bridge Location Map - Bridge #610030

Bridge Approach Speed Crash Analysis Request

Order # 41000018629

500 feet on Both Sides of Bridge Number 30 on Secondary Route 1130 (Apple Orchard Road) over Clarks Creek in Montgomery 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: MONTGOMERY **City:** All and Rural
Date: 02/01/2002 **to** 01/31/2012 **Study:** 41000018629
Location: 500 feet on Both Sides of Bridge Number 30 on Secondary Route 1130 (Apple Orchard Road) over Clarks Creek

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000018629	41000018629			76.8	8.4	400	40001130

Request Date	Courier Service	Phone No.	Ext.	Fax No.
03/22/2012		(919)773-2778		

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
MONTGOMERY	61	8	All and Rural		0	02/01/2002	01/31/2012	10.00

Location Text	Requestor
500 feet on Both Sides of Bridge Number 30 on Secondary Route 1130 (Apple Orchard Road) over Clarks Creek	Kelly L. Becker, PE Capital Region Raleigh NC

Fiche Roads

Name	Code
SR 1130	40001130
APPLE ORCHARD	50000854

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
SR 1130	40001130	3.440	3.640	0.200	0.322