

Bridge and Approach Investigation Checklist

Project 17BP.11.R.100
Description Bridge # 153
Route SR 1728
Division 11
County Wilkes

Existing Speed Limit 55 MPH
Reasonable & Comfortable Passenger Car Speed 25 MPH
Speed Data NA
Ball Bank Speed Study 15 degrees at 30mph
Warning Signs at Bridge Bridge End Delineators, Square turn with 25mph advisory
Roadside Development 10%
ADT History 2009-310vpd, 2011-320vpd, 2013-220 vpd
Pedestrian/Bicycle Traffic unknown
Bridge and Approach Digital Photos see attached
Approach Lane Width 8 FEET
Approach Shoulder Width: 4 to 6 FEET
Shoulder Type grass
Lane Width (existing bridge) 8 FEET
Shoulder width (existing bridge) 3 FEET
Strategic Corridor / Thoroughfare Designation and Recommended Cross Section
Crash History and Safety Considerations Two crashes in recent 10 year study

Comments

Reasonable Bridge Speed 30 MPH

Investigated by: J. A. Hamrick, P. E.
Date: 7/17/2014

Reviewed by: _____



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

Study Criteria Summary

County: WILKES **City:** All and Rural
Date: 5/1/2004 **to** 4/30/2014 **Study:** BRIDGE153ONSR1728
Location: Bridge number 153 on SR 1728 (Longbottom Rd). 500 feet from each end

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
1	103939066	0.800	12/28/2013 22:07	FIXED OBJECT	\$ 1700	0	0	1	0	2	5	3	5	0	13	1
Unit 1 : 5 Alchl/Drugs: 0 Speed: 50 MPH Dir: W Veh Mnvr/Ped Actn: 4 Obj Strk: 33																
2	102117829	0.810	08/20/2007 18:22	FIXED OBJECT	\$ 2750	0	0	0	0	1	1	1	5	0	13	1
Unit 1 : 2 Alchl/Drugs: 0 Speed: 55 MPH Dir: W Veh Mnvr/Ped Actn: 4 Obj Strk: 38																

**Legend for
Report
Details:**

Acc No - Accident Number
 Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
 Condition: R - Road Surface, L - Ambient Light, W - Weather
 Rd Ch - Road Character
 Rd Ci - Roadway Contributing Circumstances
 Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
 Alchl/Drugs - Alcohol Drugs Suspected
 Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
 Obj Strk - Object Struck

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Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	2	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	1	50.00
Total Injury Crashes	1	50.00
Property Damage Only Crashes	1	50.00
Night Crashes	1	50.00
Wet Crashes	1	50.00
Alcohol/Drugs Involvement Crashes	0	0.00

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	2	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	1	50.00
Class C Crashes	0	0.00
Property Damage Only Crashes	1	50.00

Vehicle Exposure Statistics

Annual ADT = 300

Total Length = 0.2 (Miles) 0.322 (Kilometers)

Total Vehicle Exposure = 0.22 (MVMT) 0.35 (MVKMT)

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	912.74	567.15
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	456.37	283.58
Night Crash Rate	456.37	283.58
Wet Crash Rate	456.37	283.58
EPDO Rate	4289.89	2665.61

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Miscellaneous Statistics

Severity Index =	4.70
EPDO Crash Index =	9.40
Estimated Property Damage Total = \$	4450.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
FIXED OBJECT	2	100.00

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	1	100.00
Class C Injuries	0	0.00
Total Non-Fatal Injuries	1	100.00
Total Injuries	1	100.00

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Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	0	0.00
Feb	0	0.00
Mar	0	0.00
Apr	0	0.00
May	0	0.00
Jun	0	0.00
Jul	0	0.00
Aug	1	50.00
Sep	0	0.00
Oct	0	0.00
Nov	0	0.00
Dec	1	50.00

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	1	50.00
Tue	0	0.00
Wed	0	0.00
Thu	0	0.00
Fri	0	0.00
Sat	1	50.00
Sun	0	0.00

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Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	0	0.00
0800-0859	0	0.00
0900-0959	0	0.00
1000-1059	0	0.00
1100-1159	0	0.00
1200-1259	0	0.00
1300-1359	0	0.00
1400-1459	0	0.00
1500-1559	0	0.00
1600-1659	0	0.00
1700-1759	0	0.00
1800-1859	1	50.00
1900-1959	0	0.00
2000-2059	0	0.00
2100-2159	0	0.00
2200-2259	1	50.00
2300-2359	0	0.00

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Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	1	0	0	1
Dark	0	1	0	1
Other	0	0	0	0
Total	1	1	0	2

Object Struck Summary

Object Type	Times Struck	Percent of Total
OFFICIAL HIGHWAY SIGN BREAKAWAY	1	50.00
TREE	1	50.00

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PICKUP	1	50.00
VAN	1	50.00

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Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2004	0	0	0	0
2005	0	0	0	0
2006	0	0	0	0
2007	1	0	0	1
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0
2013	1	0	1	0
2014	0	0	0	0
Total	2	0	1	1

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2004	0	0
2005	0	0
2006	0	0
2007	0	0
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0
2013	0	1
2014	0	0
Total	0	1

Miscellaneous Totals

Year	Property Damage	EPDO Index
2004	\$ 0	0.00
2005	\$ 0	0.00
2006	\$ 0	0.00

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Year	Property Damage	EPDO Index
2007	\$ 2750	1.00
2008	\$ 0	0.00
2009	\$ 0	0.00
2010	\$ 0	0.00
2011	\$ 0	0.00
2012	\$ 0	0.00
2013	\$ 1700	8.40
2014	\$ 0	0.00
Total	\$ 4450	9.40

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2004	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0
2007	0	0	0	1	0	0	0
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0
2013	0	0	0	1	0	0	0
2014	0	0	0	0	0	0	0
Total	0	0	0	2	0	0	0

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Strip Analysis Report

Strip Diagram

Features	Milepost	Crash IDs
	0.71	
	0.72	
	0.73	
	0.74	
	0.75	
	0.76	
	0.77	
	0.78	
	0.79	
	0.80	103939066
Structure:960153	0.81	102117829
	0.82	
	0.83	
	0.84	
	0.85	
	0.86	
	0.87	
	0.88	
	0.89	
Structure:960152	0.90	
	0.91	

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Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
BRIDGE153ONSR1728			17BP11R100	76.8	8.4	300	

Request Date	Courier Service	Phone No.	Ext.	Fax No.

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
WILKES	96	11	All and Rural		0	5/1/2004	4/30/2014	10.00

Location Text	Requestor
Bridge number 153 on SR 1728 (Longbottom Rd). 500 feet from each end	Jimmy Hamrick, PE High Country and Foothills Safety Region

Included Accidents	Old MP	New MP	Type
102117829		0.81	I

Fiche Roads

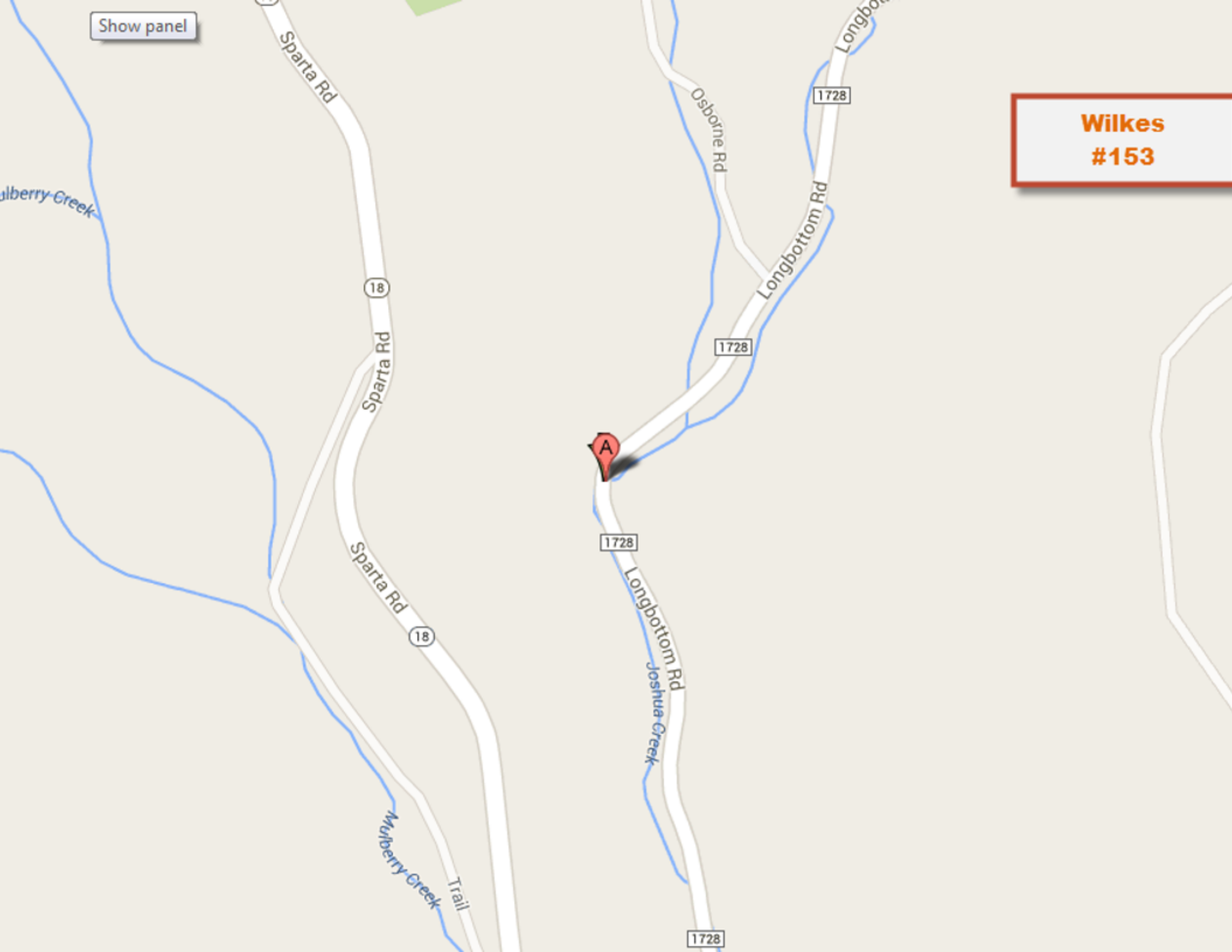
Name	Code
SR 1728	40001728
Longbottom	50018122
SR 1730	40001730
DEHART	50008168

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
SR 1728	40001728	0.710	0.910	0.200	0.322

Show panel

Wilkes
#153



Bridge # 153 Wilkes Co.





SB SR 1728



SB SR 1728



SB SR 1728



NB SR 1728



NB SR 1728



NB SR 1728



NB SR 1728