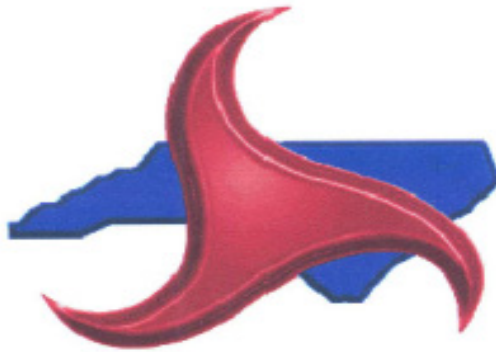


Bridge Design Speed Investigation

Bridge #163 on SR 1311 (Lower Doe Bag Road) over Doe Bag Creek
Yancey County



Document Prepared By:

Mattern & Craig, Inc.
Consulting Engineers - Surveyors
12 Broad Street
Asheville, NC 28801
(828) 254-2201
FAX: (828) 254-4562

Commission No: 3241

May 15, 2012



Investigating Engineer


James Voso, PE

Bridge and Approach Investigation Checklist

Project 17BP.13.R.83
Description Replace Bridge #163 on SR 1311 (Lower Doe Bag Rd) over Doe Bag Creek
Route SR 1311 (Lower Doe Bag Road)
Division 13
County Yancey

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable
Passenger Car Speed 15 mph

Speed Data N/A

Ball Bank Speed Study Curve west of Bridge #163 had a ball bank indication of 12 at 20 mph.

Warning Signs at Bridge Bridge End Delineators both ends, One Lane Bridge warning sign, Weight Limit (11 tons - single vehicle, 19 tons - truck tractor semitrailer)

Roadside Development Residences in southeast quadrant of bridge. Wooded in the southwest quadrant and north of bridge.

ADT History 90 (2000)

Pedestrian/Bicycle Traffic None

Bridge and Approach
Digital Photos (attached)

Approach Lane Width 10' one lane

Approach Shoulder Width: 2'
Shoulder Type Grass

Lane Width (existing bridge) 10' one lane

Shoulder width (existing bridge) 3'

Strategic Corridor / Thoroughfare
Designation and Recommended
Cross Section Not a Strategic Corridor/Thoroughfare. Two lane cross section at 20 mph based on 3R guidelines.

Crash History and
Safety Considerations No crashes reported (1/1/2002 - 12/31/2011, 10 years).

Comments Gravel road with pot holes. Road condition impacts travel speed.
Maximum safe travel speed is 20 mph.

Reasonable Bridge Speed 20 mph

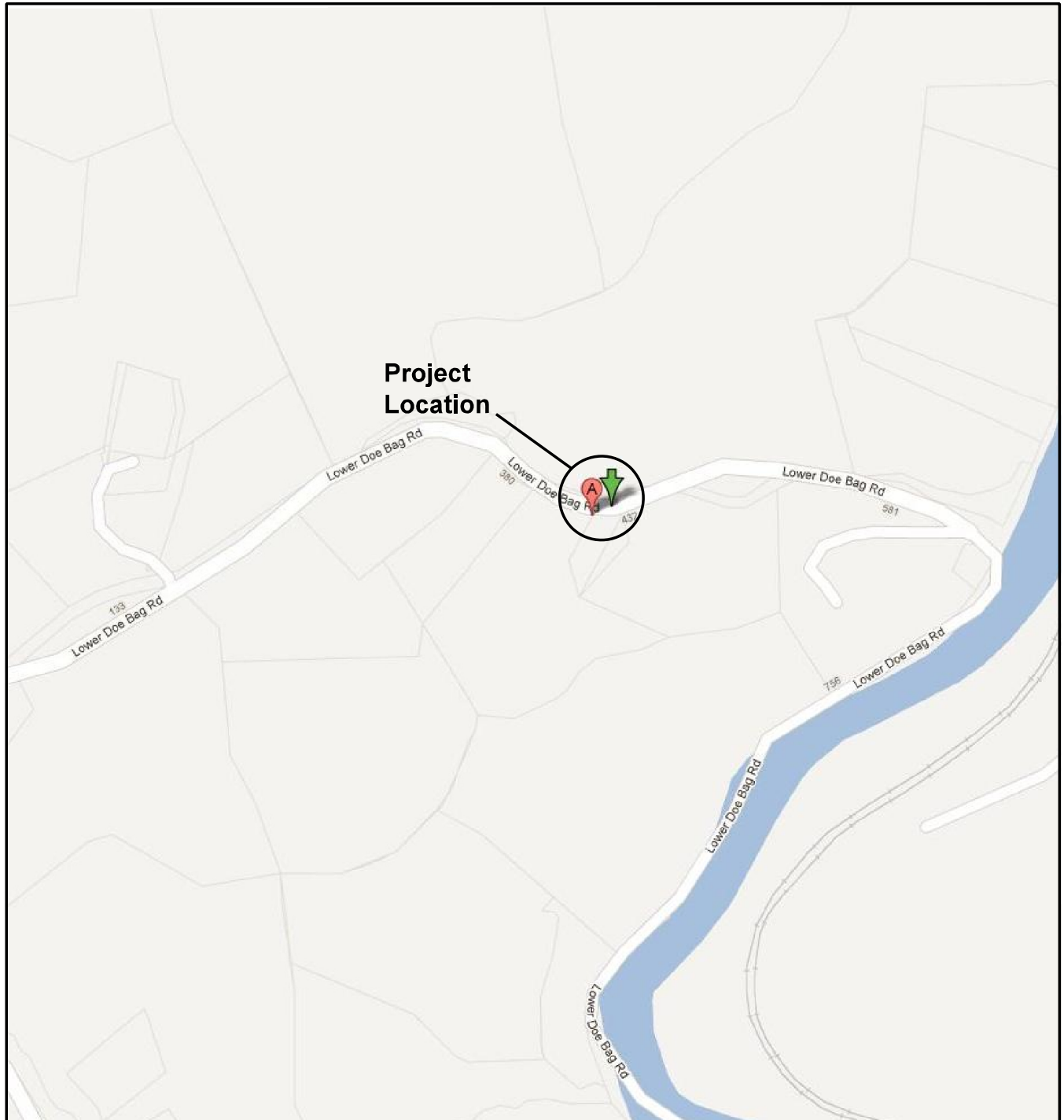
Investigated by: Tom Mulloy Reviewed by: James Voso

N.T.S.

Bridge #163

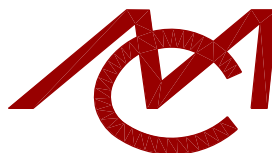
Yancey County

Division 13



VICINITY MAP

Bridge #163 on SR 1311
(Lower Doe Bag Road)
over Doe Bag Creek



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Bridge Approach Speed Crash Analysis Request

Order # 41000017953

500 feet on Both Sides of Bridge Number 163 on Secondary Route 1311 (Lower Doe Bag Road) over Doebag Creek in Yancey 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.

Study Criteria Summary

Report Details

Bridge #163

Yancey County

Division 13

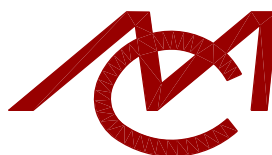


Eastbound Approach



Eastbound Approach at bridge

Bridge #163 on SR 1311
(Lower Doe Bag Road)
over Doe Bag Creek



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Bridge #163

Yancey County

Division 13

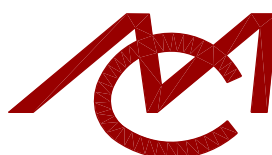


Westbound Approach



Westbound Approach at bridge

Bridge #163 on SR 1311
(Lower Doe Bag Road)
over Doe Bag Creek



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