



**HIGHWAY FACTORS AND RAILROAD GRADE CROSSING  
GROUP CHAIRMAN'S FACTUAL REPORT**

**Highway and Rail Crossing Attachment – Buckingham Branch Railroad –  
Grade Crossing Warning System, Monthly Test Records**

**Crozet, Virginia**

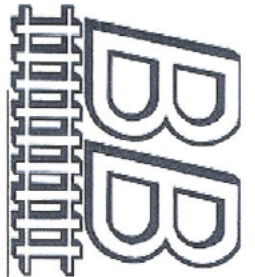
**HWY18MH005**

(21 pages)









**CROSSING WARNING SYSTEM TEST**

MAY 2017

Frequency: \_\_\_\_\_ USE TEST CODES FOR ALL FIELDS BELOW, DO NOT USE (CHECK) MARKS

Frequency	M	M	M	M	M	M	M	M	M	Q	Q	Q	A	A	A	A	A	A	ACTUAL	DESIGN
Name of Crossing : 5TH STREET DOT No.: 224671U M.P. 181.99 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : 7TH STREET DOT No.: 224672B M.P. 182.1 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : 11TH STREET DOT No.: 224674P M.P. 182.47 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : FARMINGTON ROAD DOT No.: 224683N M.P. 185.35 Type of Equipment : FLS + 1 BELL																				
Name of Crossing : WEST LEIGH ROAD DOT No.: 224686J M.P. 187.96 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : GRASSMERE ROAD DOT No.: 224689E M.P. 189.59 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : GILLIAMS RIDGE ROAD DOT No.: 224693U M.P. 191.42 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : LANE TOWN ROAD DOT No.: 224704E M.P. 195.85 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : JARMANS GAP ROAD DOT No.: 224707A M.P. 197.77 Type of Equipment : FLGS + 1 BELL																				
Name of Crossing : _____ DOT No.: 224730U _____																				

DATE OF TEST MM/DD/YY	GROUNDS (with system activated) FRA 234.459	STANDBY POWER FRA 234.251	FLASHING LIGHT UNITS FRA 234.253	MECHANISM FRA 234.257	GATE ARMS & FRA 234.257	WARNING SYSTEM OP. FRA 234.257	TRAFFIC PREEMPTION FRA 234.261	SIGNS FRA 234.269	CUT - OUT CIRCUITS FRA 234.274	INS. JOINTS / TRACK CON. FRA 234.201	CIRCUIT PLANS FRA 234.253	LAMP PORT FLASH RATE FRA 234.257	CLEAR GATE MECH. HOLD FRA 234.259	WARNING TIME FRA 234.265	TIMING REL. & DEVIC (Show time as MM:SS)	ACTUAL	DESIGN
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ITEM ADJUSTED,  
REPAIRED,  
OR REPLACED.

Test Codes  
C - Test Completed, left in compliance  
A - Adjustments made, test completed and left in compliance (item shall be identified)  
R - Repair/Replacement made, test completed and left in compliance (item shall be identified)

Frequency Codes  
M - Indicates Monthly Test  
Q - Indicates Quarterly Test  
A - Indicates Annual Test

Signature of Employee Performing Test (in ink)

\_\_\_\_\_

FORWARD TO SUPERVISOR SIGNALS MONTHLY

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Monthly Crossing Inspection Test, Completed: 2017-06-07**

AP.BBRR.Test.121

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Test Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER and GROUNDS TEST - FRA (234.251) (234.249)**

	BUSS Tested	No.of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		15.8	15.6	OK	NONE	OK	NONE	
2	OB	6		13.6	13.4	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM - FRA (234.255) (234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS - FRA (234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION - FRA (234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION - FRA (234.257)**

	<b>Equipment Tested (Bell)</b>	<b>Result of Test</b>	<b>Action Taken</b>	<b>Notes and Explanations</b>
1	ALL	OK	NONE	

Sign-Off

**Status:** COMPLETE

**Resp. Party:** MAYS, STEVE

**Signature:** \_\_\_\_\_ **Date:** 2017-06-07 \_\_\_\_\_

AP.BBRR.Test.121

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Quarterly Crossing Inspection Test, Completed: 2017-07-03**

AP.BBRR.Test.222

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Testing Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER (FRA 234.251)and GROUNDS TEST (FRA 234.249)**

	BUSS Tested	No. of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		15.5	15	OK	NONE	OK	NONE	
2	OL	6		13.8	13.4	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM (FRA 234.26 & 234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS (FRA 234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION (FRA 234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	



**WARNING SYSTEM OPERATION (FRA 234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

**INSPECTION OF RAIL CONNECTIONS (FRA 234.271)**

	All Equipment Inspected	Test Result	Action Taken	Notes and Explanations
1	Insulated Rail Joints	N / A	N/A	
2	Track Connections	OK	NONE	
3	Bond Wires	OK	NONE	

**CUT-OUT CIRCUITS (FRA 234.269)**

	Circuit Identification	Result of Test	Notes and Explanations
1	N/A	N / A	

**Verify ALL Island Sensitivity**

	Test Result	Action Taken	Notes and Explanations
1	OK	NONE	

Sign-Off

**Status:** COMPLETE**Resp. Party:** MAYS, STEVE**Signature** \_\_\_\_\_ **Date:** 2017-07-03 \_\_\_\_\_

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Monthly Crossing Inspection Test, Completed: 2017-08-01**

AP.BBRR.Test.681

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Test Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER and GROUNDS TEST - FRA (234.251) (234.249)**

	BUSS Tested	No.of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		15.5	15	OK	NONE	OK	NONE	
2	OL	6		13.6	13	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM - FRA (234.255) (234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	14	NONE	
2	B	OK	14	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS - FRA (234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION - FRA (234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION - FRA (234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

Sign-Off

**Status:** COMPLETE

**Resp. Party:** MAYS, STEVE

**Signature:** \_\_\_\_\_ **Date:** 2017-08-01 \_\_\_\_\_

AP.BBRR.Test.681

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Quarterly Crossing Inspection Test, Completed: 2017-09-26**

AP.BBRR.Test.1220

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Testing Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER (FRA 234.251)and GROUNDS TEST (FRA 234.249)**

	BUSS Tested	No. of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		15.64	14.62	OK	NONE	OK	NONE	
2	OL	6		13.51	12.82	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM (FRA 234.26 & 234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS (FRA 234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION (FRA 234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION (FRA 234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

**INSPECTION OF RAIL CONNECTIONS (FRA 234.271)**

	All Equipment Inspected	Test Result	Action Taken	Notes and Explanations
1	Insulated Rail Joints	N / A	N/A	
2	Track Connections	OK	OK	
3	Bond Wires	OK	OK	

**CUT-OUT CIRCUITS (FRA 234.269)**

	Circuit Identification	Result of Test	Notes and Explanations
1	N/A	N / A	

**Verify ALL Island Sensitivity**

	Test Result	Action Taken	Notes and Explanations
1	OK	NONE	

Sign-Off

**Status:** COMPLETE**Resp. Party:** MAYS, STEVE**Signature:** \_\_\_\_\_ **Date:** 2017-09-26 \_\_\_\_\_

AP.BBRR.Test.1220

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Monthly Crossing Inspection Test, Completed: 2017-10-25**

AP.BBRR.Test.1491

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Test Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER and GROUNDS TEST - FRA (234.251) (234.249)**

	BUSS Tested	No.of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		15.79	15.13	OK	NONE	OK	NONE	
2	OL	6		13.71	13.32	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM - FRA (234.255) (234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS - FRA (234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION - FRA (234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION - FRA (234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

Sign-Off

**Status:** COMPLETE

**Resp. Party:** MAYS, STEVE

**Signature:** \_\_\_\_\_ **Date:** 2017-10-25 \_\_\_\_\_

AP.BBRR.Test.1491

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Monthly Crossing Inspection Test, Completed: 2017-11-20**

AP.BBRR.Test.1699

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Test Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER and GROUNDS TEST - FRA (234.251) (234.249)**

	BUSS Tested	No.of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		16.03	15.41	OK	NONE	OK	NONE	
2	OL	6		13.91	13.43	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM - FRA (234.255) (234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS - FRA (234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION - FRA (234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	



**WARNING SYSTEM OPERATION - FRA (234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

Sign-Off

**Status:** COMPLETE

**Resp. Party:** MAYS, STEVE

**Signature:** \_\_\_\_\_ **Date:** 2017-11-20 \_\_\_\_\_

AP.BBRR.Test.1699

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Quarterly Crossing Inspection Test, Completed: 2017-12-18**

AP.BBRR.Test.2063

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Testing Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER (FRA 234.251)and GROUNDS TEST (FRA 234.249)**

	BUSS Tested	No. of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		16.05	15.36	OK	NONE	OK	NONE	
2	OL	6		13.89	13.12	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM (FRA 234.26 & 234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS (FRA 234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION (FRA 234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION (FRA 234.257)**

	Equipment Tested (Bell)	Result of Test	Action Taken	Notes and Explanations
1	ALL	OK	NONE	

**INSPECTION OF RAIL CONNECTIONS (FRA 234.271)**

	All Equipment Inspected	Test Result	Action Taken	Notes and Explanations
1	Insulated Rail Joints	N / A	N/A	
2	Track Connections	OK	NONE	
3	Bond Wires	OK	NONE	

**CUT-OUT CIRCUITS (FRA 234.269)**

	Circuit Identification	Result of Test	Notes and Explanations
1	N/A	N / A	

**Verify ALL Island Sensitivity**

	Test Result	Action Taken	Notes and Explanations
1	OK	NONE	

Sign-Off

**Status:** COMPLETE**Resp. Party:** MAYS, STEVE**Signature:** \_\_\_\_\_ **Date:** 2017-12-18 \_\_\_\_\_

AP.BBRR.Test.2063

**BBRR - R&A EAST - LANETOWN. 224704E MP195.85 - 224704E**  
**Monthly Crossing Inspection Test, Completed: 2018-01-16**

AP.BBRR.Test.2267

**NOTES**

Name	Value
Abbreviations	G = Gate C= Cantilever NB = Northbound SB = Southbound E = East W = West
Testing	ALL Approach shunt testing performed at ninety percent (90%) of approach length as noted on the plans.
Test Results Codes	OK = Test or Inspection Completed-Equipment meets FRA requirements UN = Unsatisfactory N / A = Not Applicable
Action Taken Codes	A = Adjustment made & test complete-Equipment in satisfactory condition R = Repairs or replacements needed S = Repairs or replacements made-Equipment in satisfactory condition N/A = No action required

**STAND BY POWER and GROUNDS TEST - FRA (234.251) (234.249)**

	BUSS Tested	No.of Lead Cells	No. of Nicad-Cells	Power On Voltage	Power Off Voltage	Test Result	Action Taken	Grounds Test Test Result	Grounds Test Action Taken	Notes and Explanations
1	XB	7		16.04	15.51	OK	NONE	OK	NONE	
2	OL	6		13.99	13.62	OK	NONE	OK	NONE	
3										
4										
5										
6										
7										
8										

**GATE ARM AND GATE MECHANISM - FRA (234.255) (234.223)**

	Gate	Observations	Timing	Action Taken	Notes and Explanations
1	A	OK	13	NONE	
2	B	OK	13	NONE	
3					
4					
5					
6					
7					
8					

**FLASHING LIGHT UNITS - FRA (234.253)**

	Units	Visibility	Cleanliness	No Damage	Notes and Explanations
1	ALL	OK	OK	OK	

**PRE-EMPTION - FRA (234.261)**

	Traffic	Beacon	Notes and Explanations
1	N / A	N / A	

**WARNING SYSTEM OPERATION - FRA (234.257)**

	<b>Equipment Tested (Bell)</b>	<b>Result of Test</b>	<b>Action Taken</b>	<b>Notes and Explanations</b>
1	ALL	OK	NONE	

Sign-Off

**Status:** COMPLETE

**Resp. Party:** MAYS, STEVE

**Signature:** \_\_\_\_\_ **Date:** 2018-01-16 \_\_\_\_\_

AP.BBRR.Test.2267