national park service

The Road Inventory
of
Fredericksburg and Spotsylvania
National Military Park
FRSP – 4370
Cycle 4

Prepared By:
Federal Highway Administration
Road Inventory Program
Cycle 4

Fredericksburg and Spotsylvania National Military Park in Virginia

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Fredericksburg and Spotsylvania National Military Park

Section 1
Introduction

INTRODUCTION

Background: In 1976, the National Park Service (NPS) and the Federal Highway Administration (FHWA) entered into a Memorandum of Agreement (MOA), establishing the Road Inventory Program (RIP). In 1980, the NPS and the FHWA terminated the 1976 MOA and entered into a new MOA that provided for the completion of the initial phase of the RIP. The purpose of the RIP, per the 1980 MOA was to maintain and update RIP data in order to develop long-range costs and programs to bring National Park Service (NPS) roads up to, or to maintain, designated standards, and establish a maintenance management program.

The FHWA's Federal Lands Highway (FLH) was assigned the task of identifying condition deficiencies and corrective priorities along with associated corrective costs, inventorying maintenance features (e.g., culverts, signs, guardrail, etc.), summarizing the data and findings in a report and providing a photographic record of the road system.

The FLH completed the initial phase of the RIP in the early 1980's. As a result of this effort, each park received a RIP book, also known as the "Brown Book," that included the information collected during this initial RIP phase.

In an effort to maintain and update the RIP data, a cyclical data collection and reporting process was reestablished in the 1990's. The FLH completed two cycles of RIP data collection between 1994 and 2001. Cycle 1 was collected in 44 large parks from 1994 to 1996. This data was found to be unusable for comparison to future cycles. Cycle 2 data was collected from March 1997 to January 2001 in 79 large parks and 5 small parks containing 4,874 route miles. Each park received a copy of a Cycle 2 RIP Report, also known as the "Blue Book". Cycle 3 was completed from 2001 through 2004, and included data collection in all parks that contain pavement.

Since 1984, the RIP Program has been funded through the Federal Lands Highway Program's Park Roads and Parkways (PRP) Program. Currently, the NPS Washington Headquarters' Park Facility Management Division is responsible for coordinating the RIP program with the FLH. The FLH Washington office coordinates policy and prepares national reports and needs assessment studies for congress.

In 1998, the Transportation Equity Act for the 21st Century (TEA-21) amended Title 23 U.S.C., and inserted Section 204(a)(6) which requires the Federal Highway Administration and the National Park Service, to develop, by rule, a Pavement Management System (PMS) for the park roads and parkways serving the National Park System. As a result of the requirements in TEA-21, the NPS and FHWA are in the process of developing a PMS. The PMS will assist the decision-makers in effectively spending limited PRP Program funds. The PMS

will provide information for planning and programming road maintenance, rehabilitation, and reconstruction activities. RIP data will provide the basic information for this system.

Key information included in the RIP is the mileage inventory and condition assessments accomplished by the RIP Program. The mileage and condition data are used in the current allocation formula of PRP Program funds.

RIP Cycle 4: Cycle 4 data collection was initiated in spring 2006, where 86 large parks, consisting of 5,553 route miles and 6,232 paved parking areas, were selected as a representative sample of the entire NPS paved road network. Cycle 4 is scheduled for completion in spring 2009 and will serve the PMS in further development of its pavement preservation techniques.

In the Cycle 4 Reports, a general condition rating of excellent, good, fair and poor is ascribed to each one-mile section of paved roadway, and to each paved parking area. This condition rating system provides a realistic means of assessing the general funding needs for road improvements. Along with these descriptive condition ratings, a numerical rating between 0 and 100 is ascribed to each mile of road and to each parking area. This numerical rating is called a Pavement Condition Rating (PCR). The PCR rating system is described in Section 10 of this report.

All of the fieldwork required for obtaining inventory, condition, and maintenance feature information is coordinated with each park and the regional offices to ensure that the information in the RIP reports is accurate.

The FLH is responsible for all the data presented in this report. Anyone having questions or comments regarding the contents of this report is encouraged to contact the FHWA RIP Coordinator. It is our aim to provide exceptional customer satisfaction in our delivery of the RIP program.

The FHWA RIP Team

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Fredericksburg and Spotsylvania National Military Park

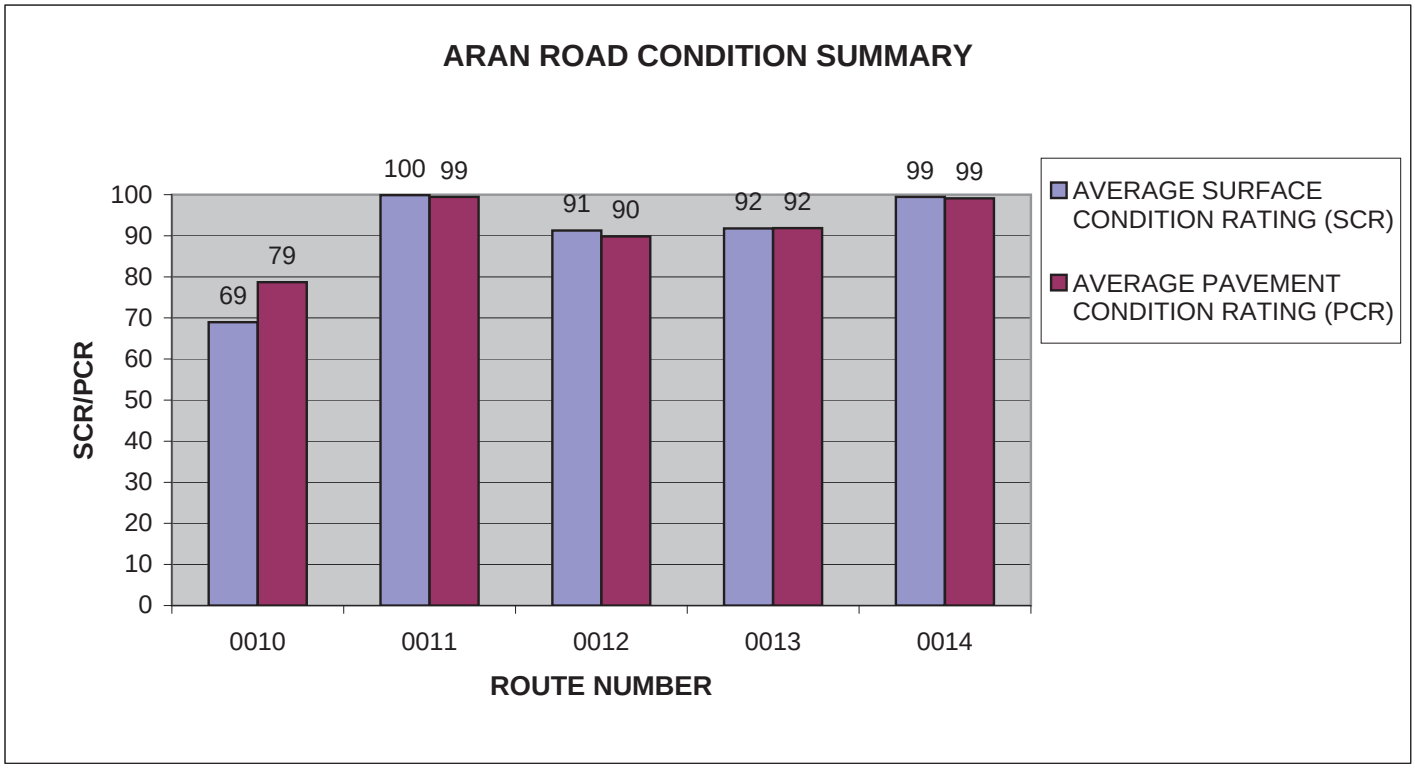
Section 2
Park Summary Information

FRSP: PAVED ROUTE MILES AND PERCENTAGES BY FUNCTIONAL CLASS AND PCR

F.C.	Pavement Condition Rating (PCR)								TOTAL MILES
	Poor (<=60)		Fair (61-84)		Good (85-94)		Excellent (95-100)		
	MILES	%	MILES	%	MILES	%	MILES	%	
1	1.33	6.96%	3.69	19.32%	4.80	25.13%	8.65	45.29%	**18.47**
2			0.08	0.42%	0.12	0.63%	0.02	0.10%	**0.22**
3									
4									
5	0.14	0.73%	0.21	1.10%	0.06	0.31%			**0.41**
6									
7									
8									
Totals	**1.47**	**7.70%**	**3.98**	**20.84%**	**4.98**	**26.07%**	**8.67**	**45.39%**	**19.10**

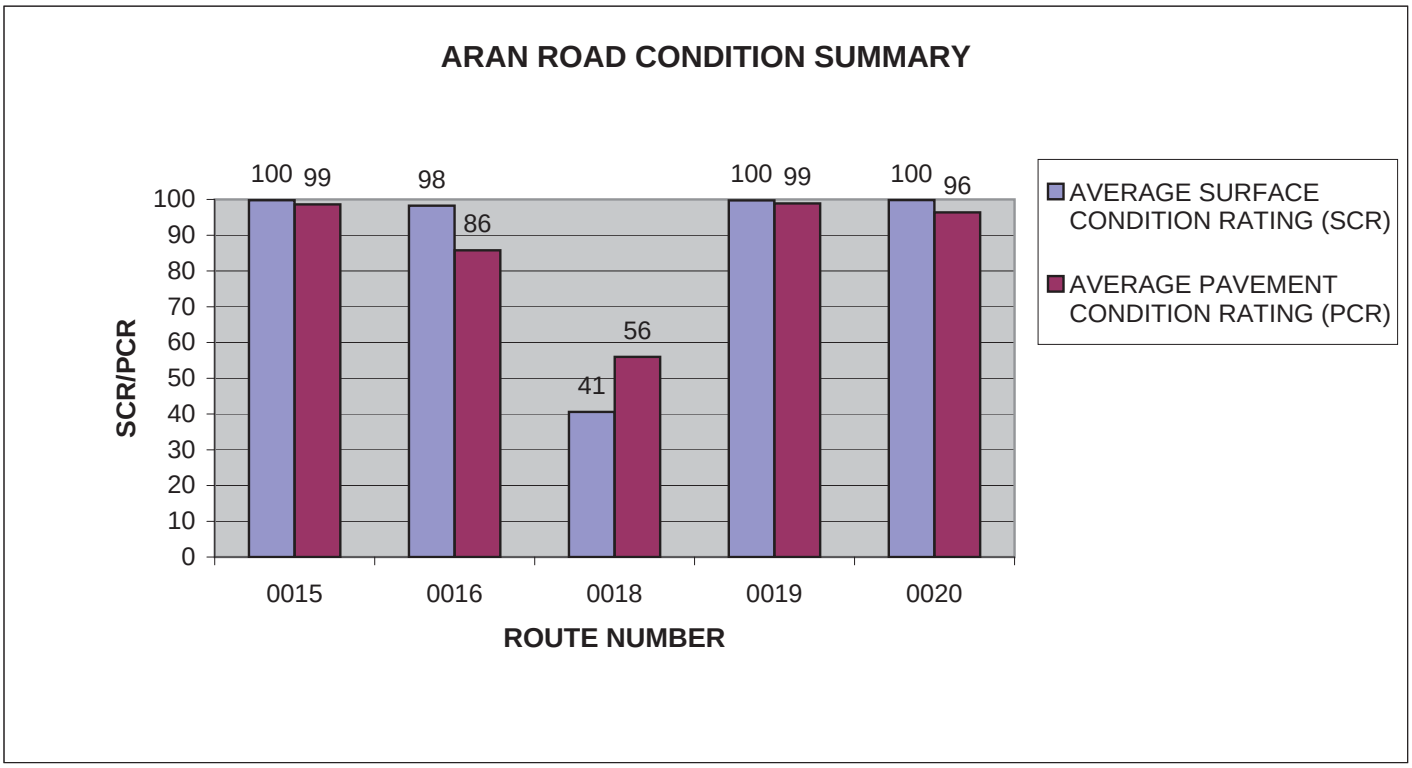
FRSP: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	LEE DRIVE	1	4.69	ASPHALT	69	79
0011	GRANT DRIVE WEST	1	1.06	ASPHALT	100	99
0012	HILL-EWELL DRIVE	1	3.35	ASPHALT	91	90
0013	MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE	1	4.69	ASPHALT	92	92
0014	HOOKER DRIVE	1	0.53	ASPHALT	99	99



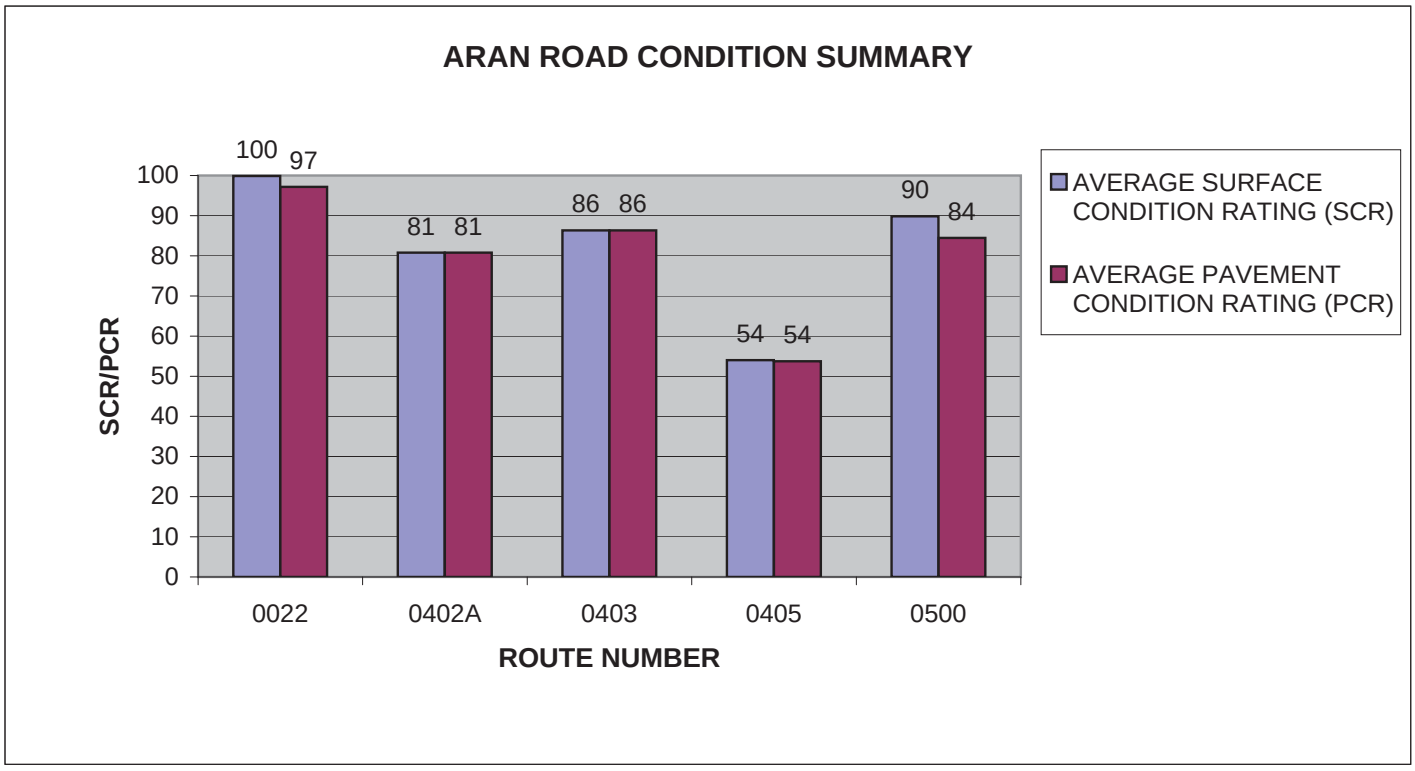
FRSP: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0015	BERRY - PAXTON DRIVE	1	0.45	ASPHALT	100	99
0016	JACKSON TRAIL EAST	1	2.856	ASPHALT	98	86
0018	SLOCUM DRIVE	1	0.8	ASPHALT	41	56
0019	ANDERSON DRIVE	1	0.72	ASPHALT	100	99
0020	GORDON DRIVE	1	0.71	ASPHALT	100	96



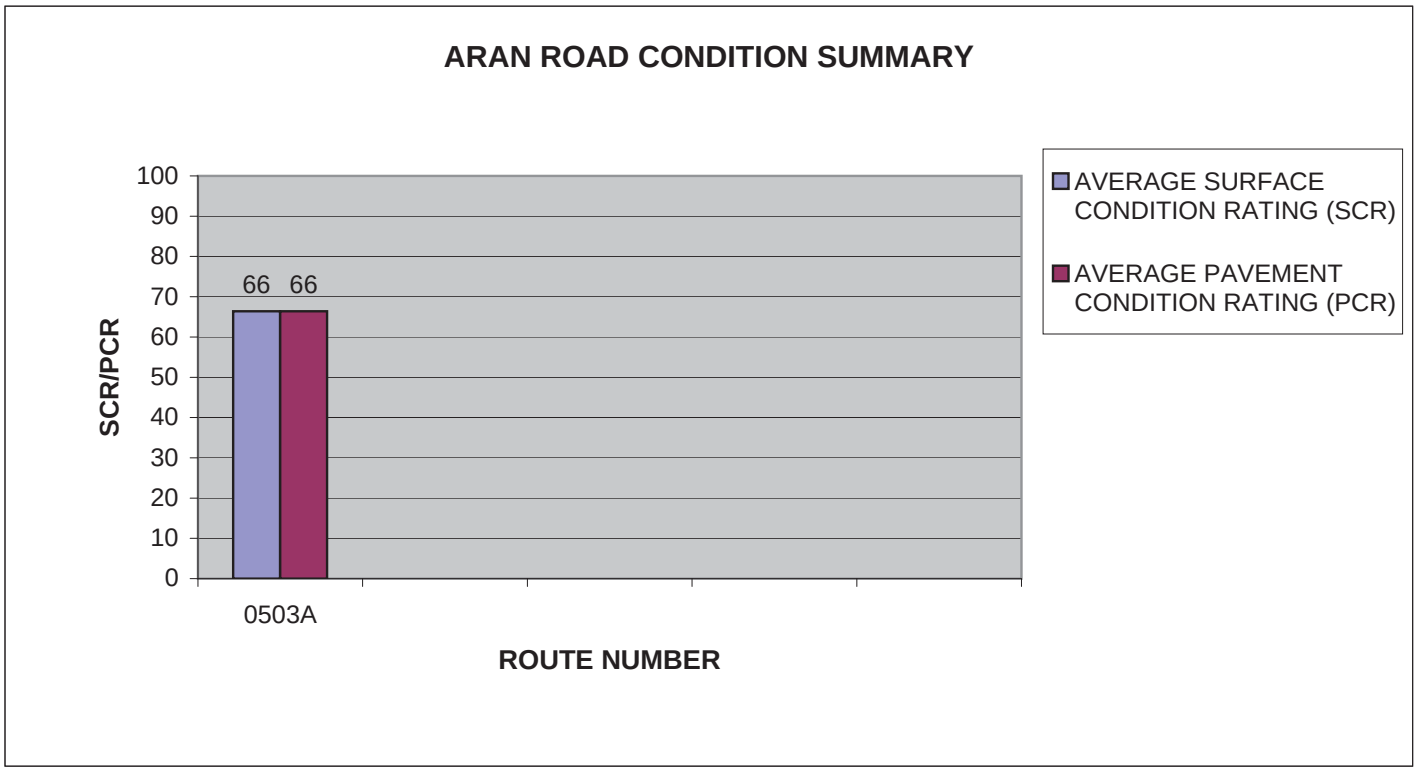
FRSP: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0022	BURNSIDE DRIVE	1	1.39	ASPHALT	100	97
0402A	QUARTERS 2 ACCESS ROAD	5	0.09	ASPHALT	81	81
0403	RANGER HEADQUARTERS ACCESS ROAD	5	0.06	ASPHALT	86	86
0405	RANGER LANE	5	0.11	ASPHALT	54	54
0500	CHATHAM LANE	2	0.586	ASPHALT	90	84



FRSP: ARAN ROAD CONDITION SUMMARY

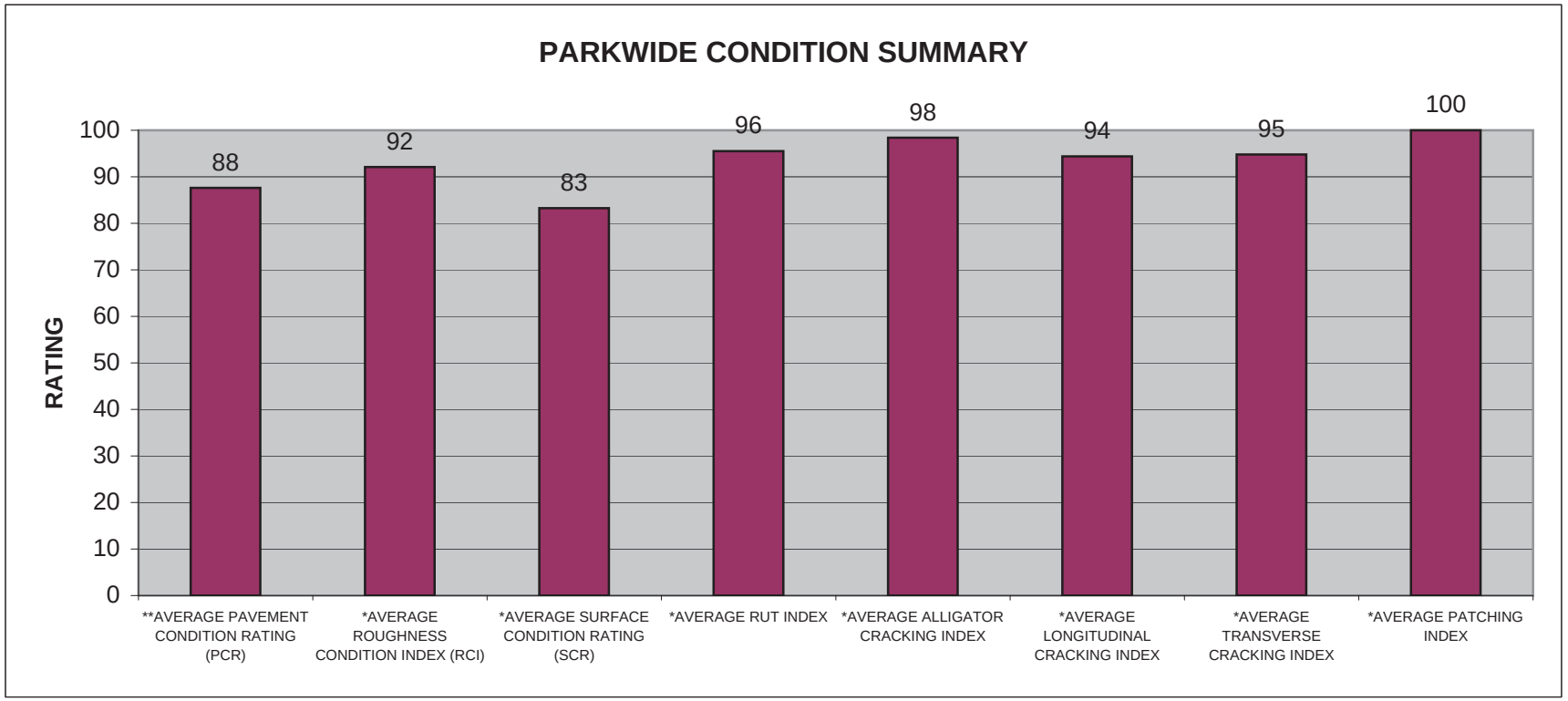
ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0503A	WILLIS HILL ROAD	5	0.15	ASPHALT	66	66



FRSP: PARKWIDE CONDITION SUMMARY

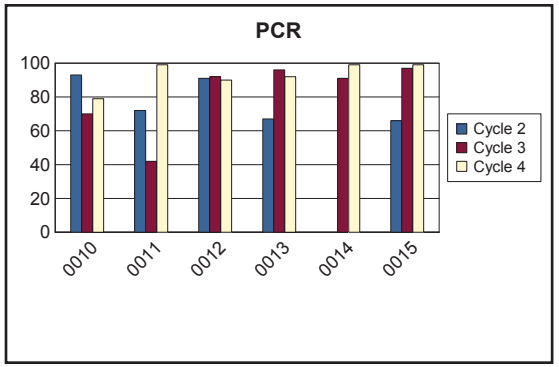
**AVERAGE PAVEMENT CONDITION RATING (PCR)	*AVERAGE ROUGHNESS CONDITION INDEX (RCI)	*AVERAGE SURFACE CONDITION RATING (SCR)	*AVERAGE RUT INDEX	*AVERAGE ALLIGATOR CRACKING INDEX	*AVERAGE LONGITUDINAL CRACKING INDEX	*AVERAGE TRANSVERSE CRACKING INDEX	*AVERAGE PATCHING INDEX
88	92	83	96	98	94	95	100

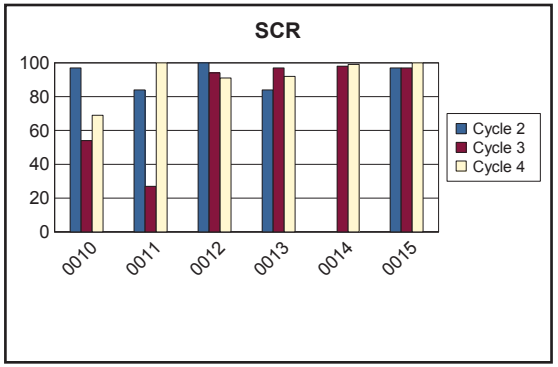
*** PCR Index is based on all ARAN-driven roads, parking areas, and manually rated routes.*
** Index values are based on ARAN-driven roads only.*

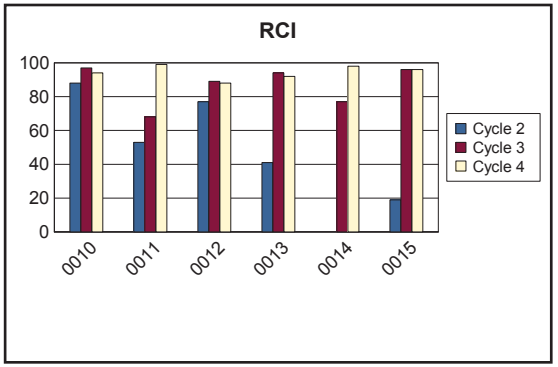


FRSP CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

				PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				
ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	COMMENT
0010	4.69	0.00	4.69	93	70	79	+13%	97	54	69	+28%	88	97	94	-3%	
0011	1.06	0.00	1.06	72	42	99	+136%	84	27	100	+270%	53	68	99	+46%	
0012	3.36	0.00	3.36	91	92	90	-2%	100	94	91	-3%	77	89	88	-1%	
0013	4.70	0.00	4.70	67	96	92	-4%	84	97	92	-5%	41	94	92	-2%	
0014	0.53	0.00	0.53	N/A	91	99	+9%	N/A	98	99	+1%	N/A	77	98	+27%	
0015	0.45	0.00	0.45	66	97	99	+2%	97	97	100	+3%	19	96	96	0%	



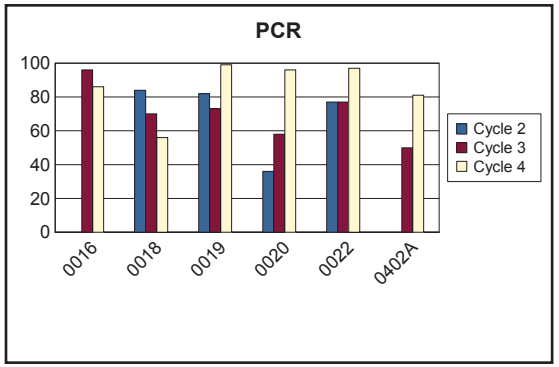


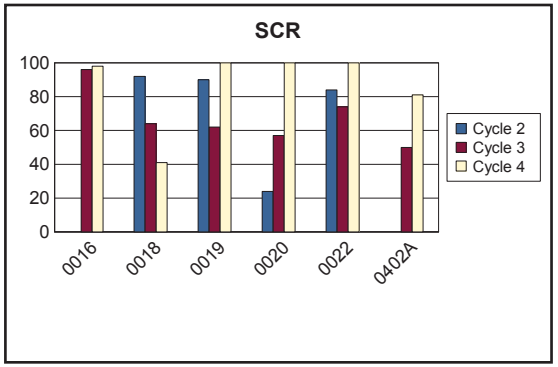


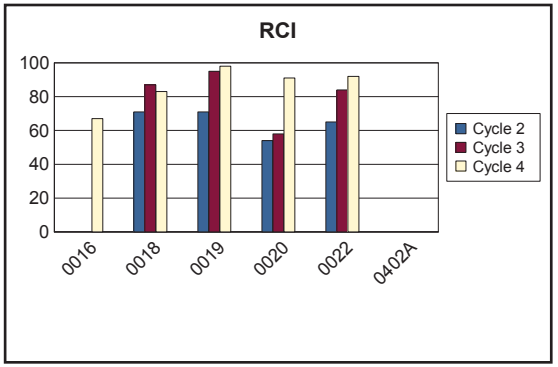
Cycle 4 Data Collected 3/23/2009 - 3/23/2009

FRSP CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

				PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				
ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	COMMENT
0016	0.10	0.00	0.10	N/A	96	86	-10%	N/A	96	98	+2%	N/A	N/A	67	N/A	No RCI collected in Cycle 3.
0018	0.80	0.00	0.80	84	70	56	-20%	92	64	41	-36%	71	87	83	-5%	
0019	0.74	0.00	0.74	82	73	99	+36%	90	62	100	+61%	71	95	98	+3%	
0020	0.71	0.00	0.71	36	58	96	+66%	24	57	100	+75%	54	58	91	+57%	
0022	1.42	0.00	1.42	77	77	97	+26%	84	74	100	+35%	65	84	92	+10%	
0402A	0.09	0.00	0.09	N/A	50	81	+62%	N/A	50	81	+62%	N/A	N/A	N/A	N/A	No RCI collected in Cycle 3 or Cycle 4.



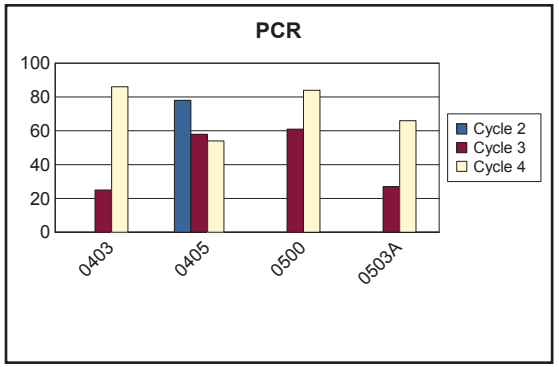


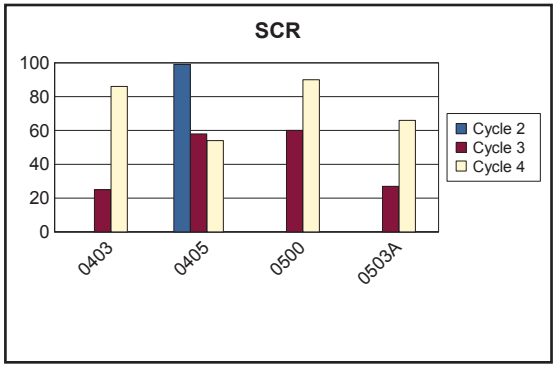


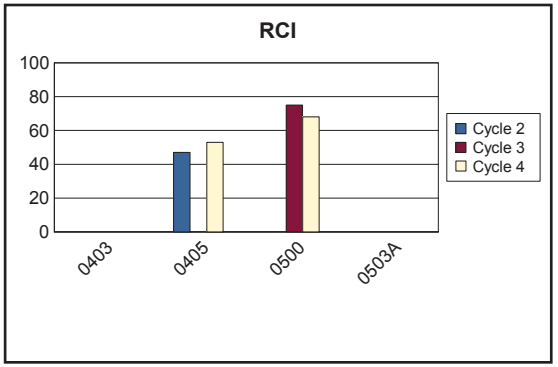
Cycle 4 Data Collected 3/23/2009 - 3/23/2009

FRSP CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0403	0.09	0.00	0.09	N/A	25	86	+244%	N/A	25	86	+244%	N/A	N/A	N/A	N/A	No RCI collected in Cycle 3 or Cycle 4.
0405	0.11	0.00	0.11	78	58	54	-7%	99	58	54	-7%	47	N/A	53	N/A	No RCI collected in Cycle 3.
0500	0.24	0.00	0.24	N/A	61	84	+38%	N/A	60	90	+50%	N/A	75	68	-9%	
0503A	0.15	0.00	0.15	N/A	27	66	+144%	N/A	27	66	+144%	N/A	N/A	N/A	N/A	No RCI collected in Cycle 3 or Cycle 4.





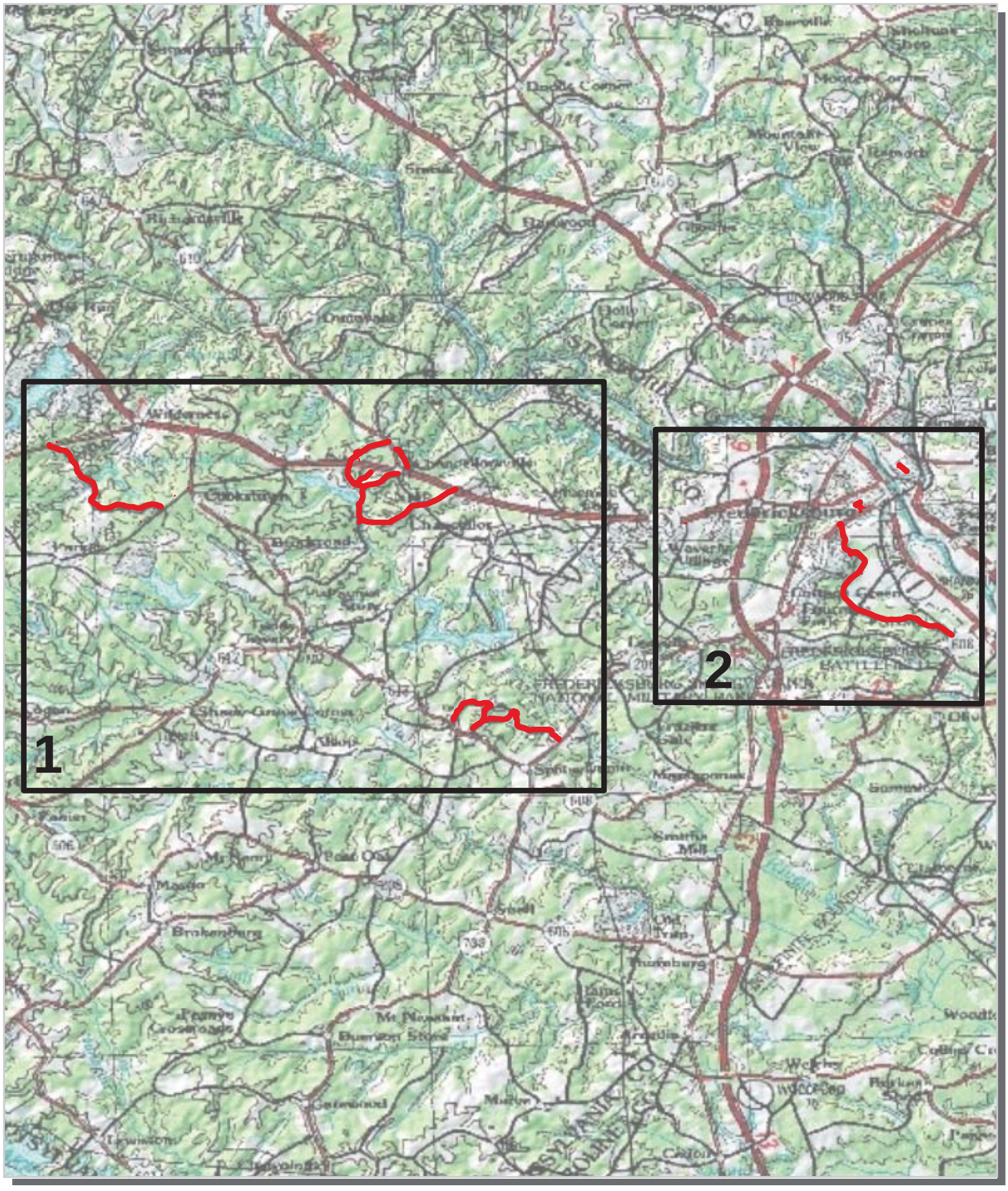


Cycle 4 Data Collected 3/23/2009 - 3/23/2009

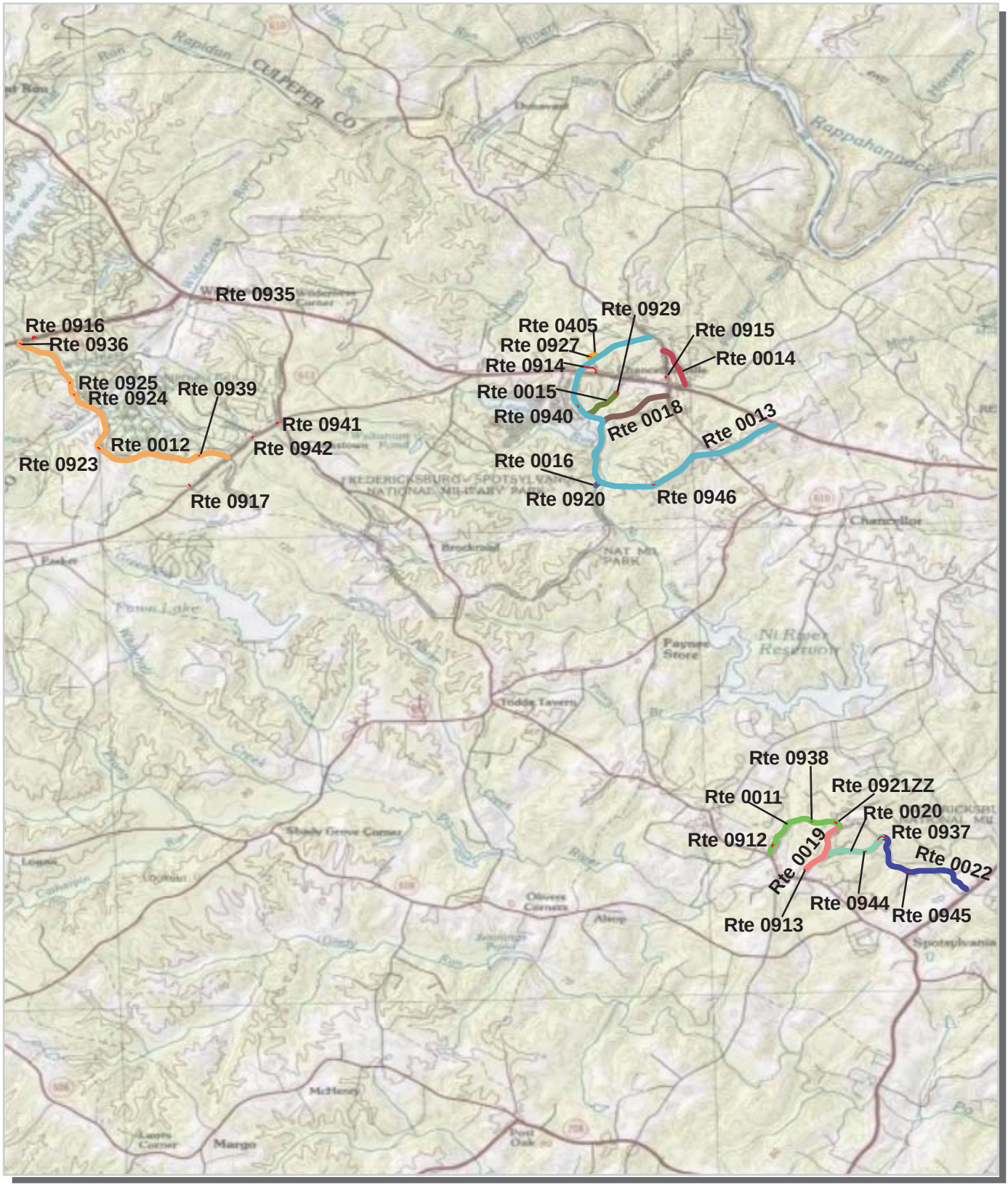
Fredericksburg and Spotsylvania
National Military Park

Section 3
Park Route Location / Condition Maps

Fredericksburg and Spotsylvania
National Military Park
Route Location Map
Key Map



Fredericksburg and Spotsylvania
National Military Park
Route Location Map
Area 1

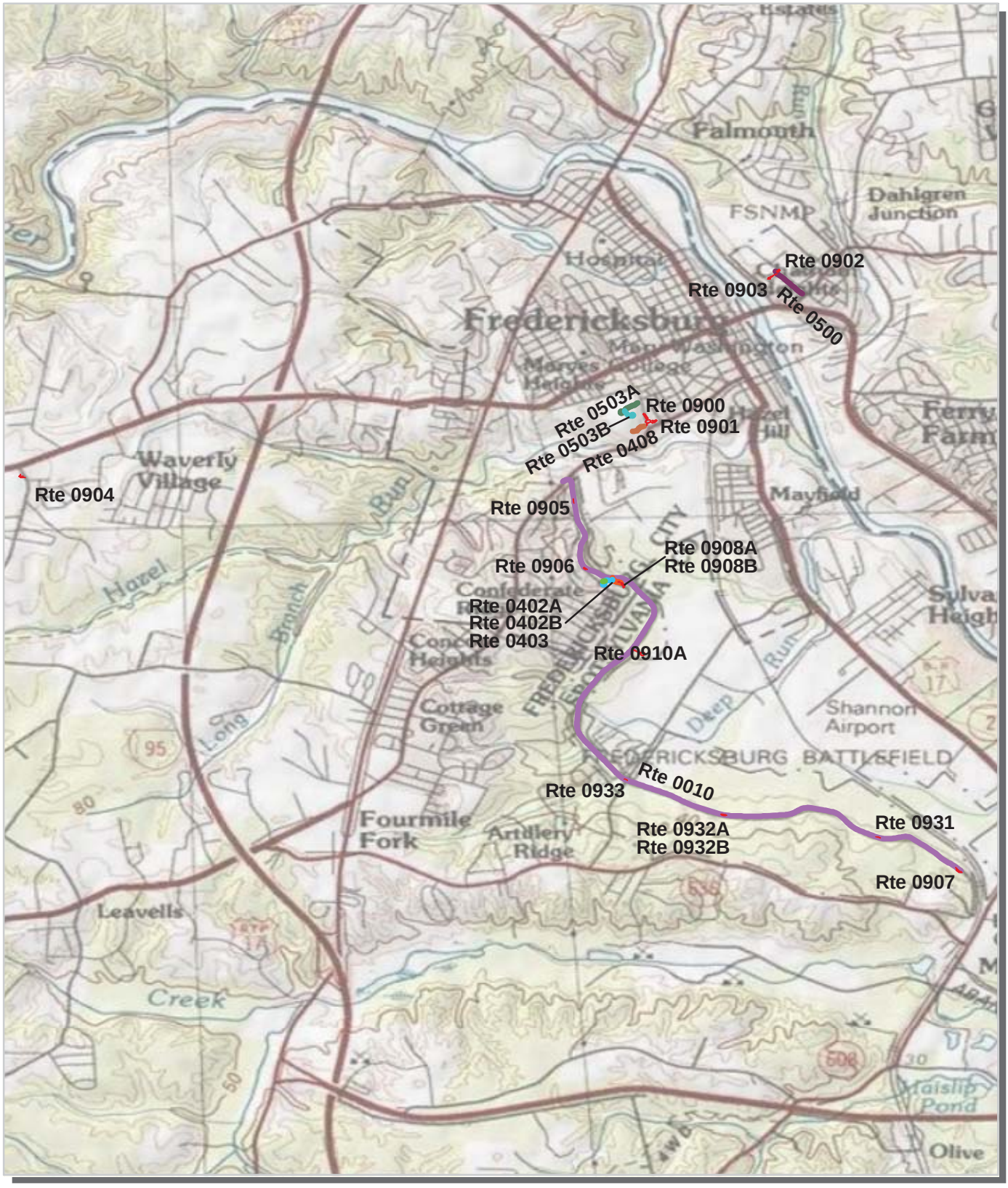


Unique colors used to differentiate routes

3 1.5 0 3 Miles

N

Fredericksburg and Spotsylvania National Military Park
Route Location Map
Area 2

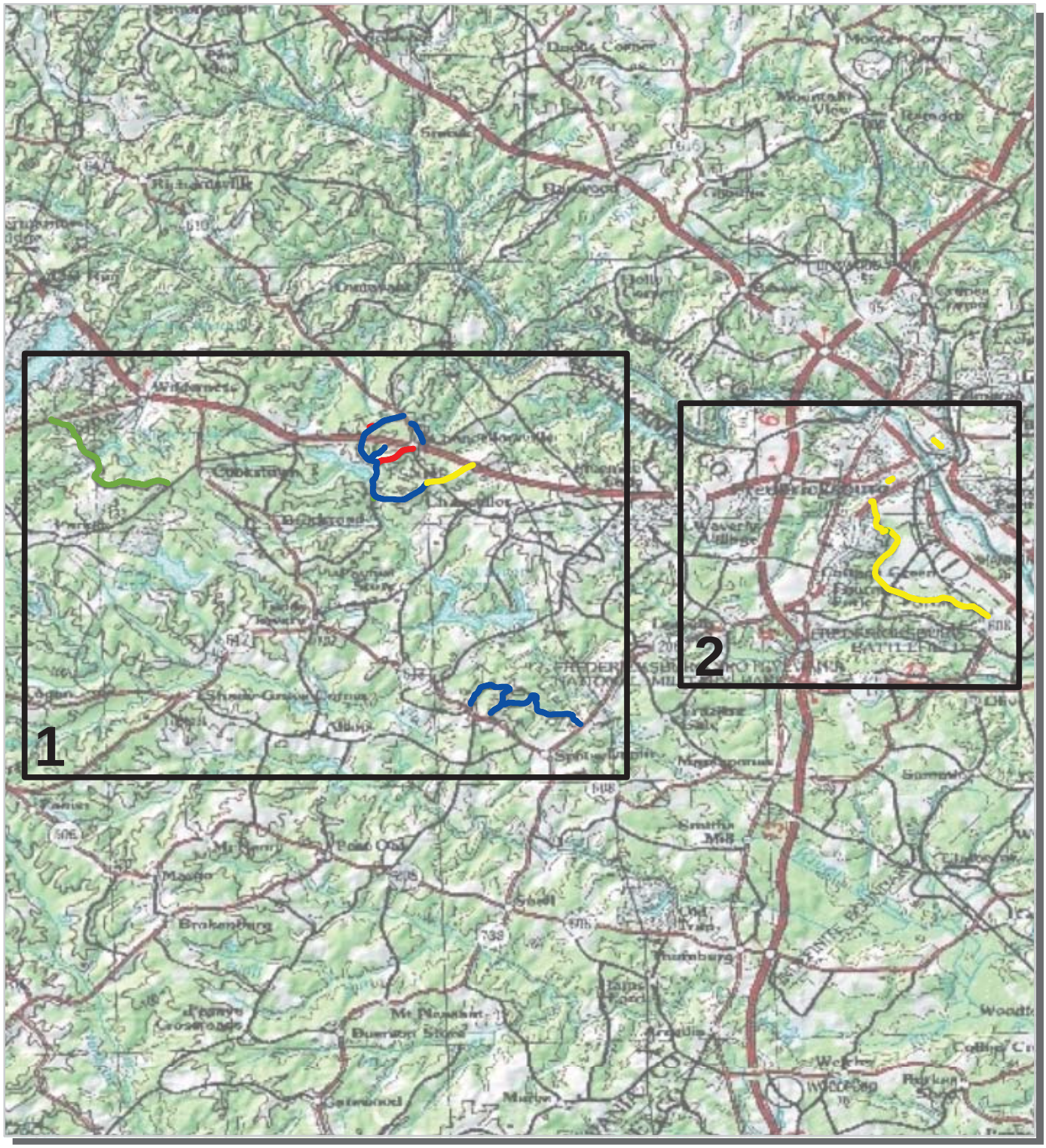


Unique colors used to differentiate routes

1 0.5 0 1 Miles

N

Fredericksburg and Spotsylvania
National Military Park
Route Condition Map
PCR - Mile by Mile
Key Map



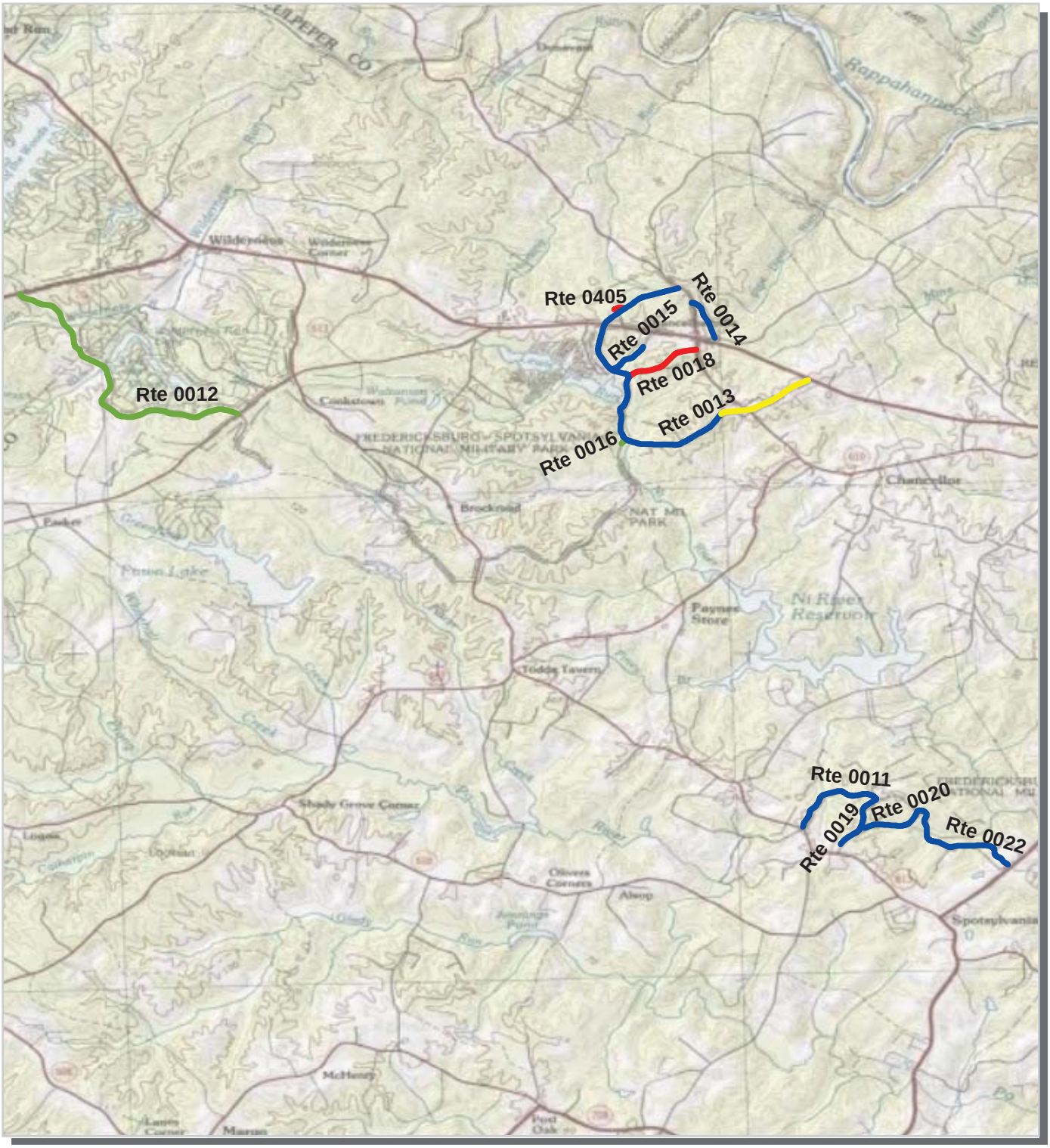
PCR	Poor	Fair	Good	Excellent	No Data
	(<=60)	(61 - 84)	(85 - 94)	(95 - 100)	

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

4 2 0 4 Miles

N

Fredericksburg and Spotsylvania
National Military Park
Route Condition Map
PCR - Mile by Mile
Area 1



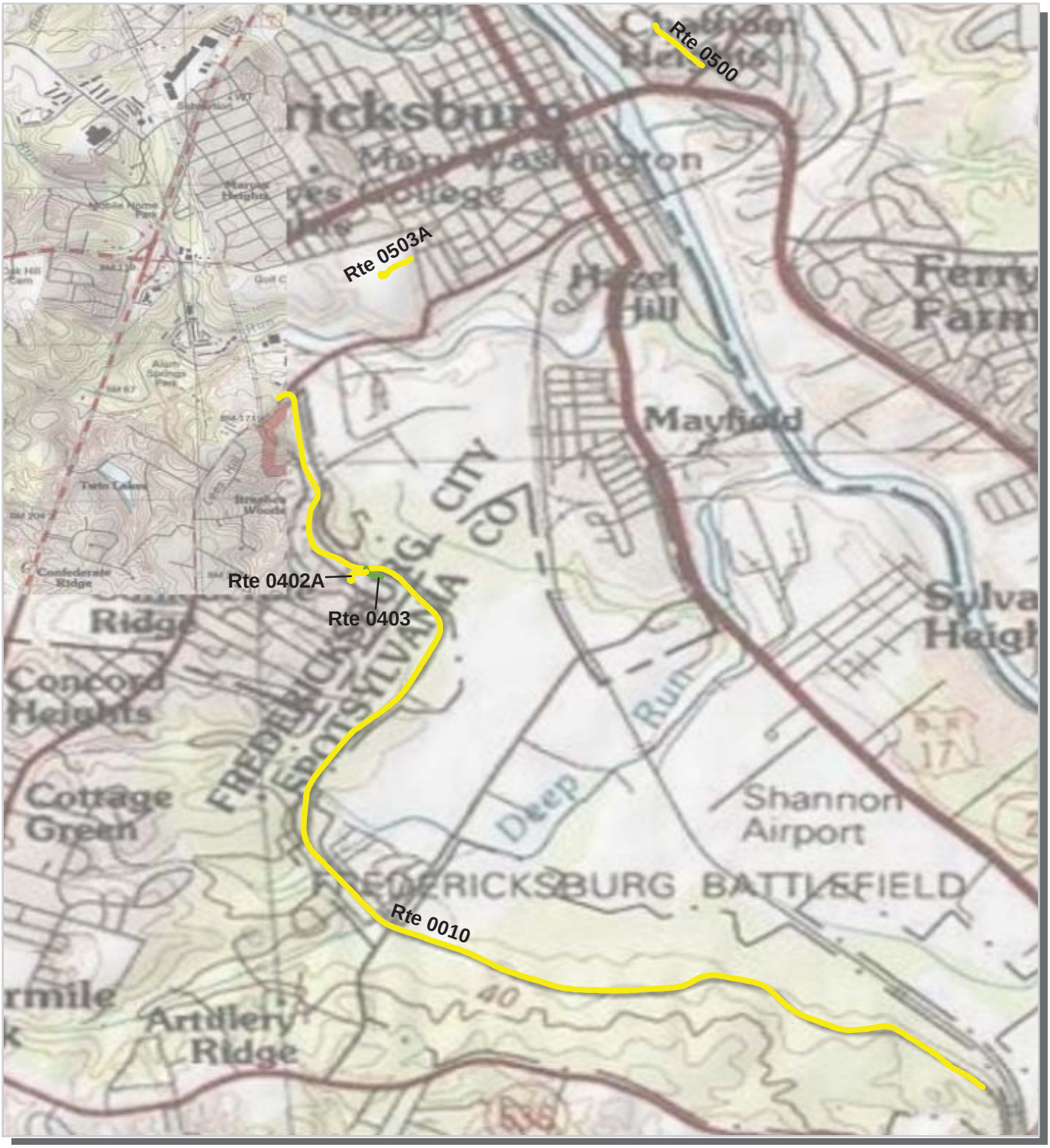
PCR	Poor	Fair	Good	Excellent	No Data
	(<=60)	(61 - 84)	(85 - 94)	(95 - 100)	

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

2 1 0 2 Miles

N

Fredericksburg and Spotsylvania National Military Park
Route Condition Map
PCR - Mile by Mile
Area 2



PCR	Poor	Fair	Good	Excellent	No Data
	(<=60)	(61 - 84)	(85 - 94)	(95 - 100)	

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

1 0.5 0 1 Miles

N

Fredericksburg and Spotsylvania
National Military Park

Section 4
Park Route Inventory

NPS/RIP Route ID Report

Shading Color Key:
Red text denotes approx. mileage

White = Paved Routes, ARAN Driven
Yellow = Unpaved Routes, ARAN not Driven
Blue = All Paved Parking Areas
Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
Black = Paved State, Local or Private non-NPS Routes, ARAN Driven
= Concession Route Flag ON

** Unpaved Routes displayed on report were obtained from FMSS database and not inventoried by Road Inventory Program (RIP)

FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0010	24265		LEE DRIVE	FROM STATE ROUTE 1 (LAFAYETTE BOULEVARD)	TO ROUTE 0907 (LEE DRIVE PARKING 3 (PROSPECT HILL)) ON RIGHT	BATTLE OF FREDERICKSBURG	4.690	0.000	4.690	1		0	AS	2
0011	24130		GRANT DRIVE WEST	FROM STATE ROUTE 613 (BROCK ROAD)	TO ROUTE 0019 (ANDERSON DRIVE) ON RIGHT	BATTLE OF SPOTSYLVANIA COURT HOUSE	1.060	0.000	1.060	1		0	AS	1
0012	24016		HILL-EWELL DRIVE	FROM STATE ROUTE 621 (ORANGE PLANK ROAD)	TO STATE ROUTE 20 (CONSTITUTION HIGHWAY)	BATTLE OF THE WILDERNESS	3.350	0.000	3.350	1		0	AS	1
0013	23953		MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)	TO STATE ROUTE 610 (ELYS FORD ROAD)	BATTLE OF CHANCELLORSVILLE	4.690	0.000	4.690	1		0	AS	1
0014	23949		HOOKER DRIVE	FROM STATE ROUTE 610 (ELYS FORD ROAD)	TO STATE ROUTE 618 (WILES DRIVE)	BATTLE OF CHANCELLORSVILLE	0.530	0.000	0.530	1		0	AS	1
0015	23969		BERRY - PAXTON DRIVE	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 3.15	TO ROUTE 0929 (FAIRVIEW PARKING)	BATTLE OF CHANCELLORSVILLE	0.450	0.000	0.450	1		0	AS	1
0016	23978		JACKSON TRAIL EAST	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 2.10	TO STATE ROUTE 613 (BROCK ROAD)	N/A	0.080	2.776	2.856	1		0	AS	1
0017	46311		JACKSON TRAIL WEST	FROM STATE ROUTE 613 (BROCK ROAD)	TO STATE ROUTE 613 (BROCK ROAD)	N/A	0.000	2.340	2.340	1		0	GR	
0018	23961		SLOCUM DRIVE	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 2.96	TO OLD PLANK ROAD	BATTLE OF CHANCELLORSVILLE	0.800	0.000	0.800	1		0	AS	1
0019	24140		ANDERSON DRIVE	FROM END OF ROUTE 0011 (GRANT DRIVE WEST)	TO ROUTE 0913 (ANDERSON DRIVE PARKING)	BATTLE OF SPOTSYLVANIA COURT HOUSE	0.720	0.000	0.720	1		0	AS	1
0020	24136		GORDON DRIVE	FROM ROUTE 0019 (ANDERSON DRIVE)	TO ROUTE 0022 (BURNSIDE DRIVE) AND ROUTE 0937 (EAST ANGLE PARKING) ON LEFT	BATTLE OF SPOTSYLVANIA COURT HOUSE	0.710	0.000	0.710	1		0	AS	1
0021	23980		JACKSON SHRINE	FROM STATE ROUTE 208 (COURTHOUSE ROAD)	TO JACKSON SHRINE	BATTLE OF CHANCELLORSVILLE	0.000	0.370	0.370	1		0	GR	
0022	24131		BURNSIDE DRIVE	FROM END ROUTE 0020 (GORDON DRIVE) AND ROUTE 0937 (EAST ANGLE PARKING) ON LEFT	TO STATE ROUTE 208 (COURTHOUSE ROAD)	BATTLE OF SPOTSYLVANIA COURT HOUSE	1.390	0.000	1.390	1		0	AS	1
0100	24129		HANCOOK ROAD	FROM STATE ROUTE 613 (BROCK ROAD)	TO CULVERT	N/A	0.000	0.651	0.651	2		0	GR	
0104	24014		LACY HOUSE ROAD	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)	TO GATE	N/A	0.000	0.040	0.040	2		0	GR	
0300	24142		MCCOULL HOUSE ROAD	FROM ROUTE 0020 (GORDON DRIVE)	TO STORAGE AREA	N/A	0.000	0.290	0.290	3		0	GR	

NPS/RIP Route ID Report

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Green = All Unpaved Parking Areas
Grey = Paved Routes, ARAN not Driven
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FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0402A	24275		QUARTERS 2 ACCESS ROAD	FROM ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD) AT MP 0.01	TO END OF LOOP	BATTLE OF FREDERICKSBURG	0.090	0.000	0.090	5		0	AS	2
0402B	103092		QUARTERS 2 ACCESS ROAD SPUR	FROM ROUTE 0402A (QUARTERS 2 ACCESS ROAD) AT MP 0.05	TO END OF PAVEMENT	BATTLE OF FREDERICKSBURG	0.013	0.000	0.013	5		755	AS	2
0403	24271		RANGER HEADQUARTERS ACCESS ROAD	FROM ROUTE 0010 (LEE DRIVE)	TO ROUTE 0908A (RANGER HEADQUARTERS PARKING)	N/A	0.060	0.000	0.060	5		0	AS	2
0404	24015		UTILITY AREA ACCESS ROAD	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)	TO UTILITY AREA	N/A	0.000	0.010	0.010	5		0	GR	
0405	46386		RANGER LANE	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 4.07	TO END OF PAVEMENT	BATTLE OF CHANCELLORSVILLE	0.110	0.000	0.110	5		0	AS	1
0406	46502		UTILITY AREA	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)	TO UTILITY ROAD	N/A	0.000	0.012	0.012	5		0	GR	
0407	46508		JACKSON FLANK ATTACK ROAD	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)	TO END	N/A	0.000	0.170	0.170	5		0	GR	
0408	23732		MARYE'S HEIGHTS NATIONAL CEMETERY ROAD	FROM SUNKEN ROAD GATE	TO BIG STATUE IN NATIONAL CEMETERY	BATTLE OF FREDERICKSBURG	0.078	0.000	0.078	5		3,089	BR	2
0409	24141		SBF CCC MAINTENANCE SHED ROAD	FROM	TO	N/A	0.000	0.100	0.100	6		0	GR	
0500	23787		CHATHAM LANE	FROM STATE ROUTE 218 (CHATHAM HEIGHTS ROAD)	TO STATE ROUTE 607 (RIVER ROAD)	CHATHAM	0.220	0.366	0.586	2		0	AS	2
0503A	46505		WILLIS HILL ROAD	FROM SUNKEN ROAD	TO END OF LOOP	BATTLE OF FREDERICKSBURG	0.150	0.000	0.150	5		0	AS	2
0503B	103094		WILLIS HILL ROAD SPUR	FROM ROUTE 0503A (WILLIS HILL ROAD) AT MP 0.15 (ON RIGHT)	TO END OF LOOP	BATTLE OF FREDERICKSBURG	0.087	0.000	0.087	5		4,594	AS	2
0900	24283		VISITOR CENTER PARKING	FROM LAFAYETTE BLVD	TO PARKING	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			26,491	AS	2
0901	46504		VISITOR CENTER ANNEX	FROM LAFAYETTE BLVD	TO WILLIS STREET	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			10,135	AS	2
0902	23793		CHATHAM LANE VISITOR PARKING	FROM ROUTE 0500 (CHATHAM LANE) AT MP 0.21 (ON RIGHT)	TO PARKING	CHATHAM	0.000	0.000	0.000			7,126	AS	2
0903	23795		CHATHAM HOUSE ADMINISTRATIVE PARKING	FROM ROUTE 0500 (CHATHAM LANE) AT MP 0.20 (ON LEFT)	TO PARKING	CHATHAM	0.000	0.000	0.000			10,568	AS	2
0904	36542		SALEM CHURCH PARKING	FROM OLD SALEM CHURCH ROAD	TO PARKING	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			9,098	AS	2
0905	24280		LEE DRIVE PARKING 1 (LEE HILL)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 0.19 (ON RIGHT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			2,547	AS	2
0906	24281		LEE DRIVE PARKING 2 (HOWINSON HILL)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 0.69 (ON RIGHT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			4,430	AS	2

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FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0907	24279		LEE DRIVE PARKING 3 (PROSPECT HILL)	FROM ROUTE 0010 (LEE DRIVE) AT MP 4.66 (ON RIGHT)	TO ROUTE 0010 (LEE DRIVE) AT END	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			9,601	AS	2
0908A	24272		RANGER HEADQUARTERS PARKING	FROM END OF ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD)	TO PARKING	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			11,500	AS	2
0908B	103077		RANGER HEADQUARTERS EMPLOYEE PARKING	ADJACENT TO ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD) AT MP 0.05 (ON LEFT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			1,231	AS	2
0910A	24273		PICKET CIRCLE PARKING A	FROM ROUTE 0010 (LEE DRIVE) AT MP 1.50 (ON LEFT)	TO PARKING	BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			14,263	AS	2
0910B	103078		PICKET CIRCLE PARKING B	ADJACENT TO ROUTE 0910A (PICKET CIRCLE PARKING A) ON RIGHT		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			0	GR	
0912	24143		SPOTSYLVANIA EXHIBIT PARKING	FROM ROUTE 0011 (GRANT DRIVE WEST) AT MP 0.08 (ON LEFT)	TO ROUTE 0011 (GRANT DRIVE WEST) AT MP 0.12 (ON LEFT)	BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			7,776	AS	1
0913	46225		ANDERSON DRIVE PARKING	FROM END OF ROUTE 0019 (ANDERSON DRIVE)	TO PARKING	BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			3,494	AS	1
0914	23974		CHANCELLORSVILLE VISITOR CENTER	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)	TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 3.87 (ON RIGHT)	BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			34,566	AS	1
0915	36538		CHANCELLORSVILLE HOUSE SITE PARKING	FROM STATE ROUTE 610 (ELYS FORD ROAD)	TO STATE ROUTE 610 (ELYS FORD ROAD)	BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			6,659	AS	1
0916	24026		WILDERNESS EXHIBIT SHELTER PARKING	FROM STATE ROUTE 20 (CONSTITUTION HIGHWAY)	TO STATE ROUTE 20 (CONSTITUTION HIGHWAY)	BATTLE OF THE WILDERNESS	0.000	0.000	0.000			13,471	AS	1
0917	24028		WIDOW TAP FARM PARKING	FROM STATE ROUTE 621 (ORANGE PLANK ROAD)	TO PARKING	BATTLE OF THE WILDERNESS	0.000	0.000	0.000			4,063	AS	1
0919	46307		JACKSON'S SHRINE PARKING	FROM ROUTE 0021 (JACKSON SHRINE) AT END	TO PARKING	BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			0	GR	
0920	36541		CATHARINE FURNACE PARKING	ADJACENT TO ROUTE 0016 (JACKSON TRAIL EAST) AT MP 0.07 (ON LEFT)		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			1,491	AS	1
0921ZZ	46230		BLOODY ANGLE PARKING AREAS	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON RIGHT AND LEFT)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			5,587	AS	1
0923	103079		CHEWNING FARM PARKING	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 1.48 (ON LEFT)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			1,521	AS	1
0924	103080		WADSWORTH'S DIVISION	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 2.37 (ON LEFT)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			818	AS	1
0925	103081		HIGGERSON FARM	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 2.53 (ON LEFT)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			663	AS	1

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FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0926	36543		WILDERNESS BATTLE PICNIC PARKING	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 2.71 (ON RIGHT)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			0	GR	
0927	103082		WESTERN RANGER OFFICE PARKING	ADJACENT TO ROUTE 0405 (RANGER LANE) ON LEFT		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			826	AS	1
0928	103083		CHANCELLORSVILLE MAINTENANCE PARKING	ADJACENT TO ROUTE 0014 (HOOKER DRIVE) AT MP 0.06 (ON RIGHT)		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			0	GR	
0929	103084		FAIRVIEW PARKING	FROM END OF ROUTE 0015 (BERRY - PAXTON DRIVE)	TO PARKING	BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			7,306	AS	1
0930	103085		LANDRAM HOUSE PARKING	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT MP 1.01 (ON LEFT)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			0	GR	
0931	103086		LEE DRIVE PARKING 4 (MEADE MONUMENT)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 4.15 (ON LEFT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			1,630	AS	2
0932A	103087		LEE DRIVE PARKING 5A (BERNARD'S CABIN)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 3.21 (ON LEFT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			2,484	AS	2
0932B	103088		LEE DRIVE PARKING 5B (BERNARD'S CABIN)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 3.21 (ON RIGHT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			1,981	AS	2
0933	103089		LEE DRIVE PARKING 6 (LANSDOWNE ENTRANCE)	ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 2.61 (ON LEFT)		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			951	AS	2
0935	24022		WILDERNESS TAVERN PARKING	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)	TO PRIVATE DRIVE (GRAVEL, PROVIDES ACCESS TO FARM)	BATTLE OF THE WILDERNESS	0.000	0.000	0.000			809	AS	1
0936	116198		SAUNDERS FIELD PARKING	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			814	AS	1
0937	116199		EAST ANGLE PARKING	ADJACENT TO ROUTE 0022 (BURNSIDE DRIVE) AND ROUTE 0020 (GORDON DRIVE)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			10,122	AS	1
0938	116201		UPTON'S ATTACK PARKING	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			965	AS	1
0939	116202		WIDOW TAP FARM FIELD	ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			1,182	AS	1
0940	116203		HAZEL GROVE PARKING	ADJACENT TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			3,194	AS	1
0941	116204		VERMONT MONUMENT PARKING	FROM STATE ROUTE 621 (ORANGE PLANK ROAD)	TO STATE ROUTE 621 (ORANGE PLANK ROAD)	BATTLE OF THE WILDERNESS	0.000	0.000	0.000			6,860	AS	1
0942	116205		LONGSTREET PARKING	ADJACENT TO STATE ROUTE 621 (ORANGE PLANK ROAD)		BATTLE OF THE WILDERNESS	0.000	0.000	0.000			2,035	AS	1
0943	116206		NATURAL RESOURCE MANAGEMENT PARKING	ADJACENT TO PARKVIEW DRIVE		BATTLE OF FREDERICKSBURG	0.000	0.000	0.000			0	GR	
0944	116207		SALIENT TRENCHES PARKING	ADJACENT TO ROUTE 0020 (GORDON DRIVE)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			2,425	AS	1

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FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	Route Description To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0945	116208		HETH'S SALIENT	ADJACENT TO ROUTE 0022 (BURNSIDE DRIVE)		BATTLE OF SPOTSYLVANIA COURT HOUSE	0.000	0.000	0.000			2,511	AS	1
0946	116209		MAURY BIRTHPLACE TRAIL PARKING	ADJACENT TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 1.54		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			1,824	AS	1
0947	117016		HARRISON HOUSE PARKING	ADJACENT TO ROUTE 0020 (GORDON DRIVE) AT MP 0.02 (ON RIGHT)		BATTLE OF CHANCELLORSVILLE	0.000	0.000	0.000			1,320	AS	1

SUMMARY TOTALS FOR FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

ROUTE TOTALS

ARAN Driven Route Miles	19.100
All Paved Route Miles	19.278
All Unpaved Route Miles	7.125
TOTAL PARK ROUTE MILES	26.403
All Manually Rated Roads (SQFT)	8,437

PARKING AREA TOTALS

All Paved Parking (SQFT)	236,337
All Unpaved Parking (SQFT)	0
TOTAL ALL PARKING (SQFT)	236,337

LANE MILE TOTALS

ARAN Driven Lane Miles	33.505
Paved Parking Lane Miles	4.069
Paved MRR Lane Miles	0.145
TOTAL PAVED LANE MILES	37.719

CONCESSION TOTALS

Concession Paved Route Miles	0.000
Concession Unpaved Route Miles	0.000
Concession Paved Parking Area SQFT	0
Concession Unpaved Parking Area SQFT	0
Concession Paved MRR SQFT	0

WEIGHTED AVERAGE PARK VALUES

PCR (Rating)	SCR (Rating)	RCI (Rating)	RUT (Index)	AC (Index)	LC (Index)	TC (Index)	PATCH (Index)	PCR (Concession)
87.63	83.27	92.09	95.52	98.40	94.39	94.79	99.99	N/A

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General Park Road Functional Classification Table

Class 1 Principal Park Road/Rural Parkway (Public Roads) Roads which constitute the main access route, circulatory tour, or thoroughfare for park visitors. Route Numbers 1 - 99. Note: Rural parkways (e.g. Natchez Trace) are numbered 1 - 9. State Routes Inventoried for Park. Route Numbers 5000-5999

Class 2 Connector Park Road (Public Roads) - Roads which provide access within a park to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, etc. Route Numbers 100-199.

Class 3 Special Purpose Park Road (Public Roads) - Roads which provide circulation within public areas, such as campgrounds, picnic areas, visitor center complexes, concessionaire facilities, etc. These roads generally serve low-speed traffic and are often designed for one-way circulation. Route Numbers 200-299.

Class 4 Primitive Park Roads (Public Roads) - Roads which provide circulation through remote areas and/or access to primitive campgrounds and undeveloped areas. These roads frequently have no minimum design standards and their use may be limited to specially equipped vehicles. Route Numbers 200-299.
Note: Functional Classes 3 and 4 have the same route numbers because, historically, they were numbered similarly.

Class 5 Administrative Access Road (Administrative Roads) - All public roads intended for access to administrative developments or structures such as park offices, employee quarters, or utility areas. Route Numbers 400-499.

Class 6 Restricted Road (Administrative Roads) - All roads normally closed to the public, including patrol roads, truck trails, and other similar roads. Route Numbers 400-499.
Note: Functional Classes 5 and 6 have the same route numbers because historically they were numbered similarly and often there is little distinction between these routes. For example, because utility areas and employee housing are often closed to the public, this restriction would result in classification of FC 6 rather than FC 5.

Class 7 Urban Parkway (Urban Parkways and City Streets) - These facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation's capital. Other major park roads or portions thereof, however, may be included in this category. Route Numbers 1-9.

Class 8 City Streets (Urban Parkways and City Streets) - City streets are usually extensions of the adjoining street system that are owned and maintained by the National Park Service. The construction and/or reconstruction should conform with accepted local engineering practice and local conditions. Route Numbers 600-699.

****

A park road system contains those roads within or giving access to a park or other unit of the NPS which are administered by the NPS, or by the Service in cooperation with other agencies. The assignment of a functional classification (FC) to a park road is not based on traffic volumes or design speed, but on the intended use or function of that road or route.

The historic route numbering system also included a 300 number series for interpretive roads, and a 500 series for one-way roads. There are approximately 250 roads nationwide which are designated by the 300 and 500 series. The numbers for these roads will be maintained for reporting consistency. However, since these interpretive and one-way routes are not as clearly tied to a specific functional class, the 300 and 500 series will be discontinued for future use.

5000 route numbers are assigned to Non-NPS Routes that are State, County or City owned which border, traverse, or provide access to Park Facilities or Assets. 5000 Routes are driven for GPS, Video Log and Road Features only.

Surface Type Abbreviations:

AS - Asphaltic Concrete Pavement

CO - Portland Cement Concrete Pavement

BR - Brick or Pavers Road Bed

CB - Cobble Stone Road Bed

GR - Gravel Road Bed

SA - Sand Road Bed

NV - Native or Dirt Material Road Bed

OT - Other Materials Road Bed

NPS/RIP Subcomponent Details for FRSP

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= Subcomponent Flag ON

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FRSP

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Asset Entered in FMSS System

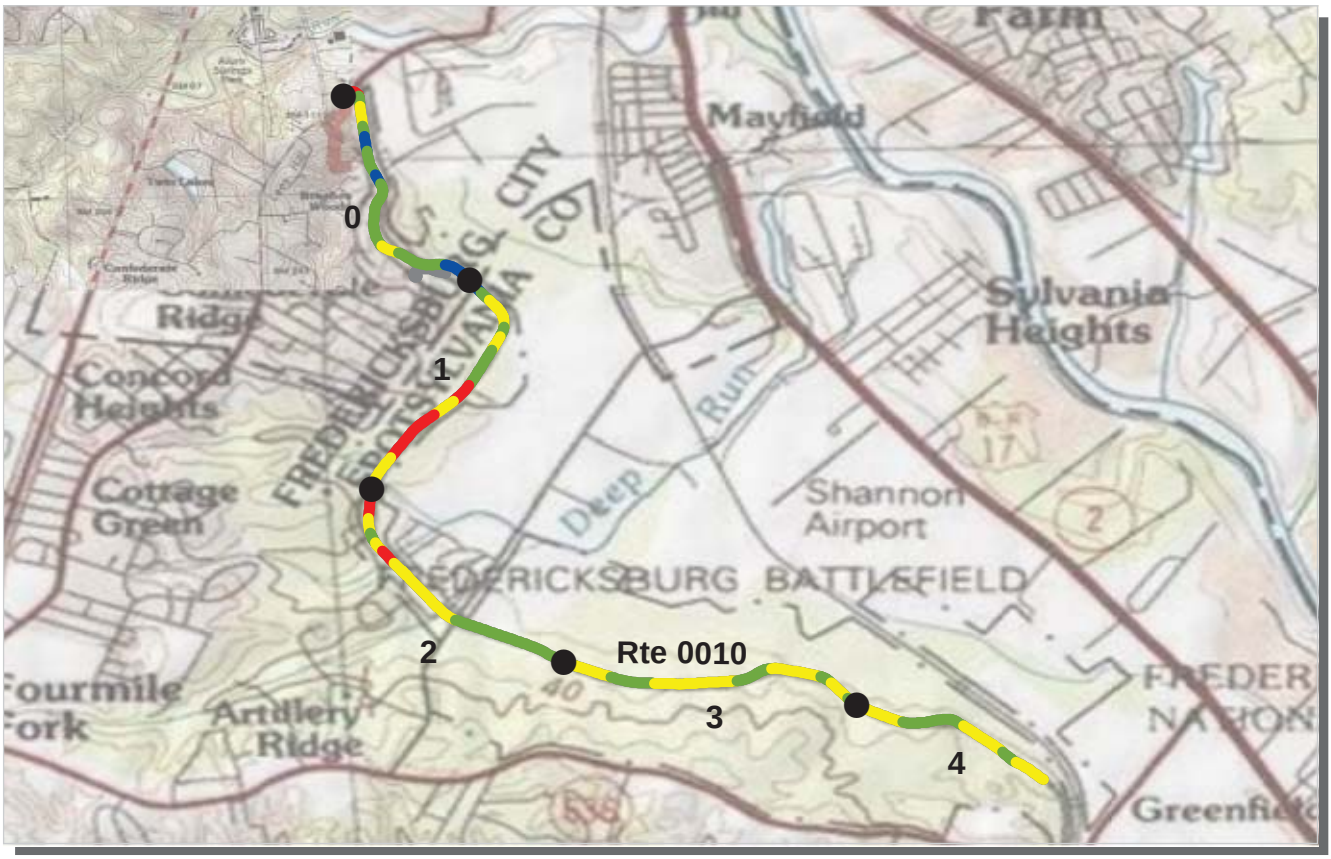
Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0921ZZ	46230		BLOODY ANGLE PARKING AREAS	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON RIGHT AND LEFT)				0.00	0.00	0.00	5,587

Asset FRSP-0921ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	Route Description From	Route Description To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0921AZ	46230	☐	BLOODY ANGLE PARKING 1	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON RIGHT)				0.00	0.00	0.00	2,112
0921BZ	46230	☐	BLOODY ANGLE BUS PARKING	ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON LEFT)				0.00	0.00	0.00	3,474

Fredericksburg and Spotsylvania
National Military Park

Section 5
Paved Route Condition Rating Sheets (CRS)



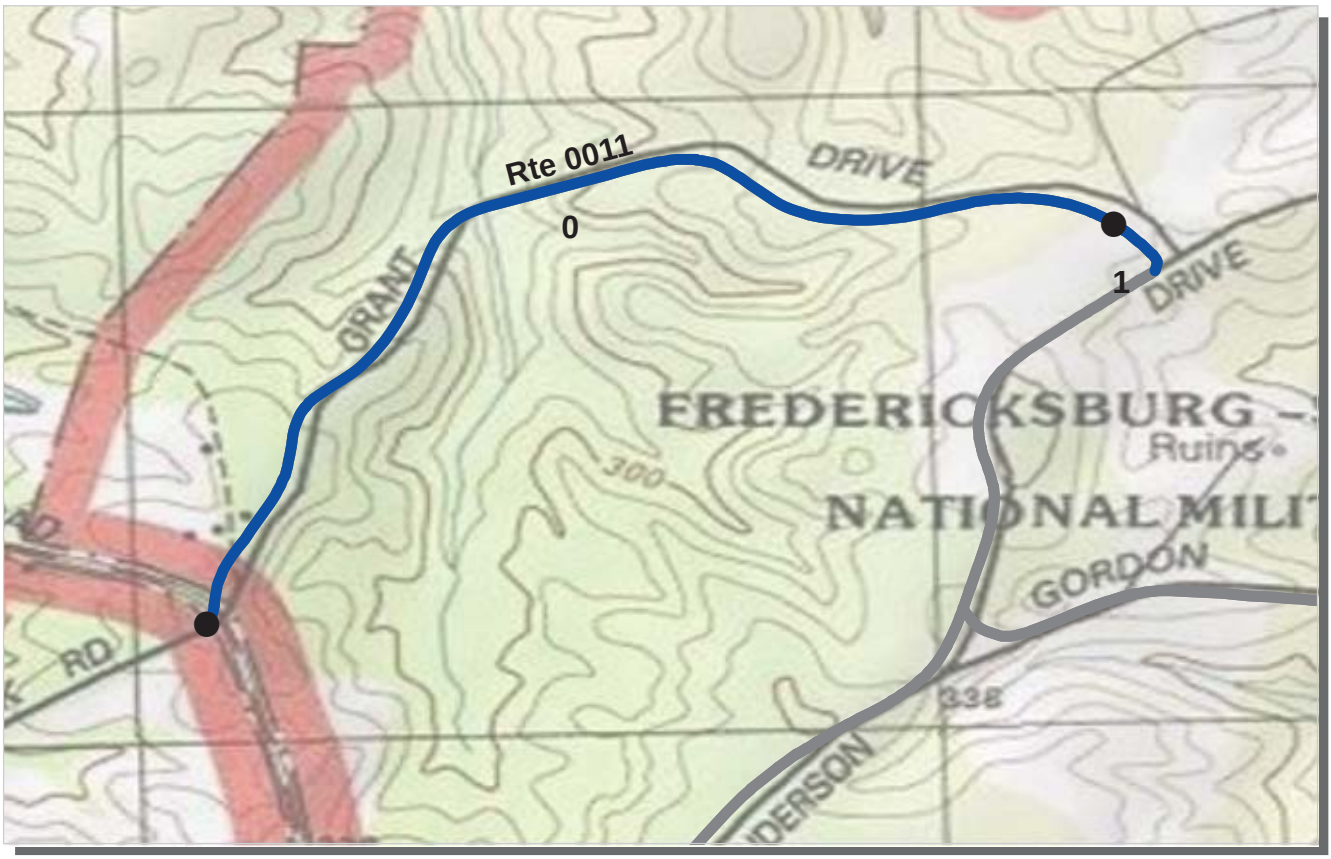
PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0010 LEE DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK
COLLECTED: 3/23/2009
NORTHEAST REGION **TOTAL LENGTH: 4.69 Miles**

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	0.69
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	20	20	20	20	20
Lane Width (ft)	10	10	10	10	10
Shoulder Width Right (ft)	NC	NC	NC	NC	NC
Shoulder Width Left (ft)	NC	NC	NC	NC	NC
Roadway Condition Information					
SCR (Surface Condition Rating)	79	59	66	72	68
PCR (Pavement Condition Rating)	84	72	77	82	77
Distress Index Values					
Alligator Cracking Index	100	98	97	98	99
Longitudinal Cracking Index	93	83	89	90	89
Tranverse Cracking Index	90	86	89	89	87
Patching Index	100	100	100	100	100
Rutting Index	96	89	91	95	93
Roughness Condition Index (RCI)	92	93	94	97	92

NC - Not Collected



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0011 GRANT DRIVE WEST
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

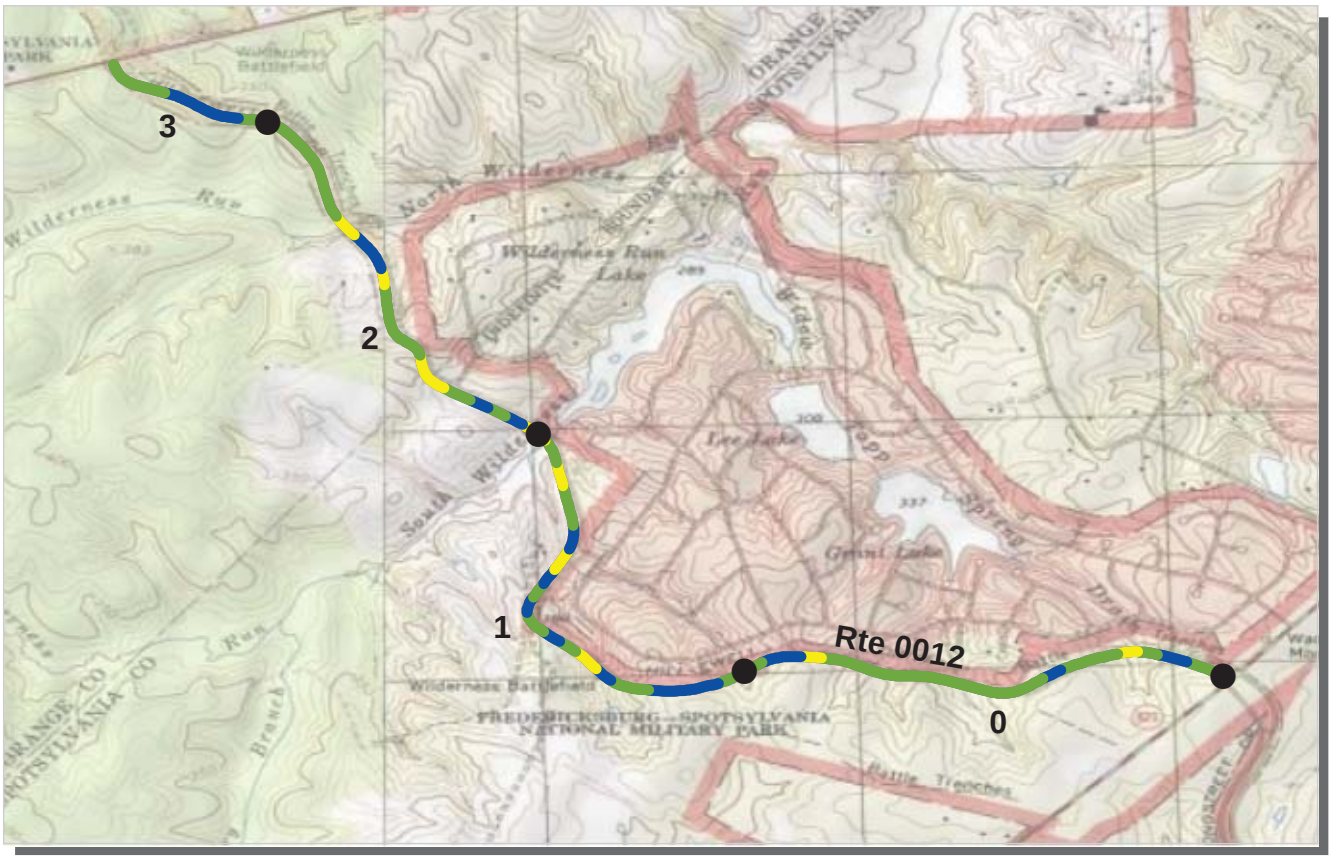
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 1.06 Miles**

Section Number	0	1			
Section Length (mi)	1.00	0.06			
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	20	20			
Lane Width (ft)	10	10			
Shoulder Width Right (ft)	NC	NC			
Shoulder Width Left (ft)	NC	NC			
Roadway Condition Information					
SCR (Surface Condition Rating)	100	100			
PCR (Pavement Condition Rating)	99	100			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	100	100			
Tranverse Cracking Index	100	100			
Patching Index	100	100			
Rutting Index	100	100			
Roughness Condition Index (RCI)	99	NC			

NC - Not Collected

ROUTE: 0011 GRANT DRIVE WEST



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

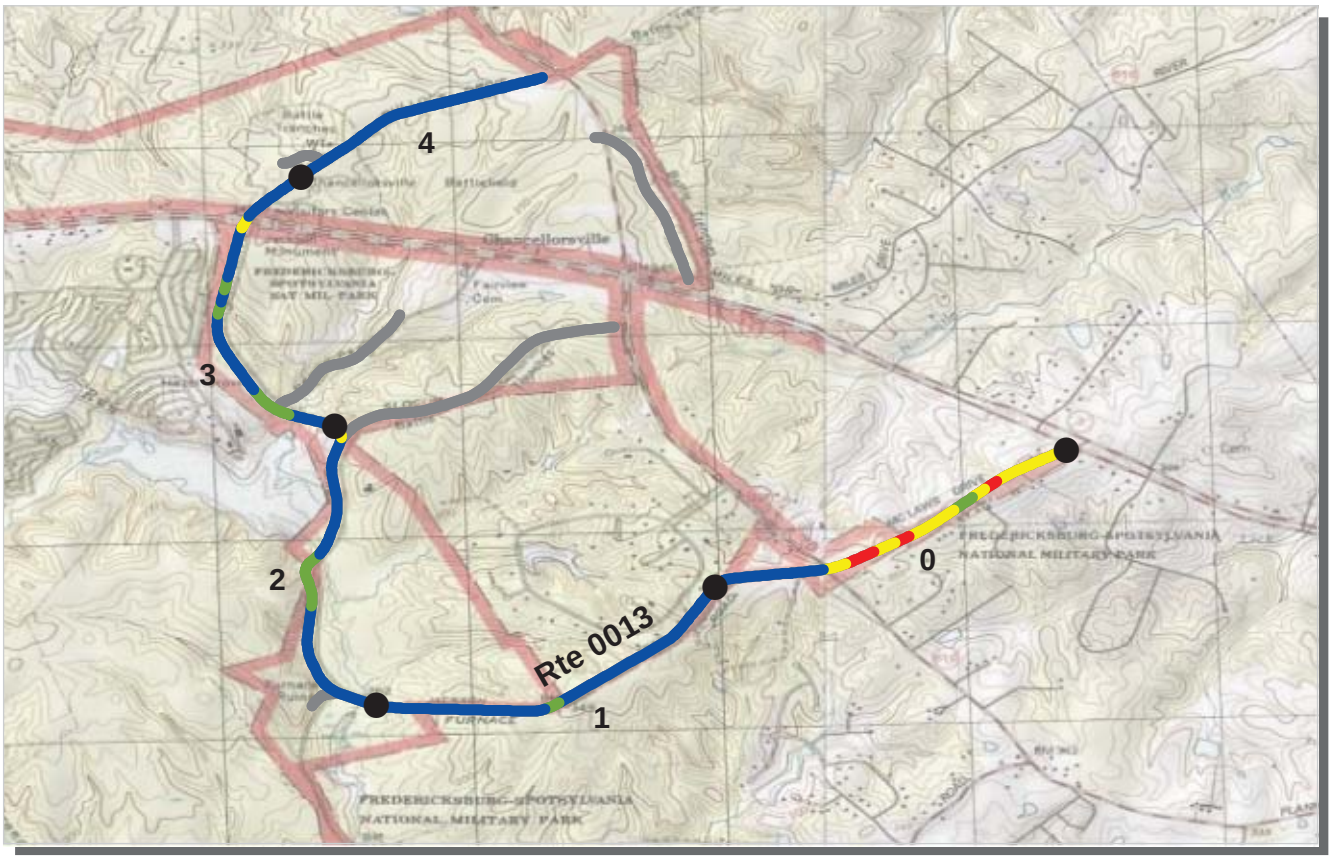
ROUTE: 0012 HILL-EWELL DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 3.35 Miles**

Section Number	0	1	2	3	
Section Length (mi)	1.00	1.00	1.00	0.35	
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2	2	2	
Paved Width (ft)	20	20	19	19	
Lane Width (ft)	10	10	9	9	
Shoulder Width Right (ft)	NC	NC	NC	NC	
Shoulder Width Left (ft)	NC	NC	NC	NC	
Roadway Condition Information					
SCR (Surface Condition Rating)	91	91	91	94	
PCR (Pavement Condition Rating)	91	90	88	91	
Distress Index Values					
Alligator Cracking Index	100	100	100	100	
Longitudinal Cracking Index	99	98	99	99	
Tranverse Cracking Index	100	99	99	100	
Patching Index	100	100	100	100	
Rutting Index	92	94	93	94	
Roughness Condition Index (RCI)	90	88	85	87	

NC - Not Collected



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0013 MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

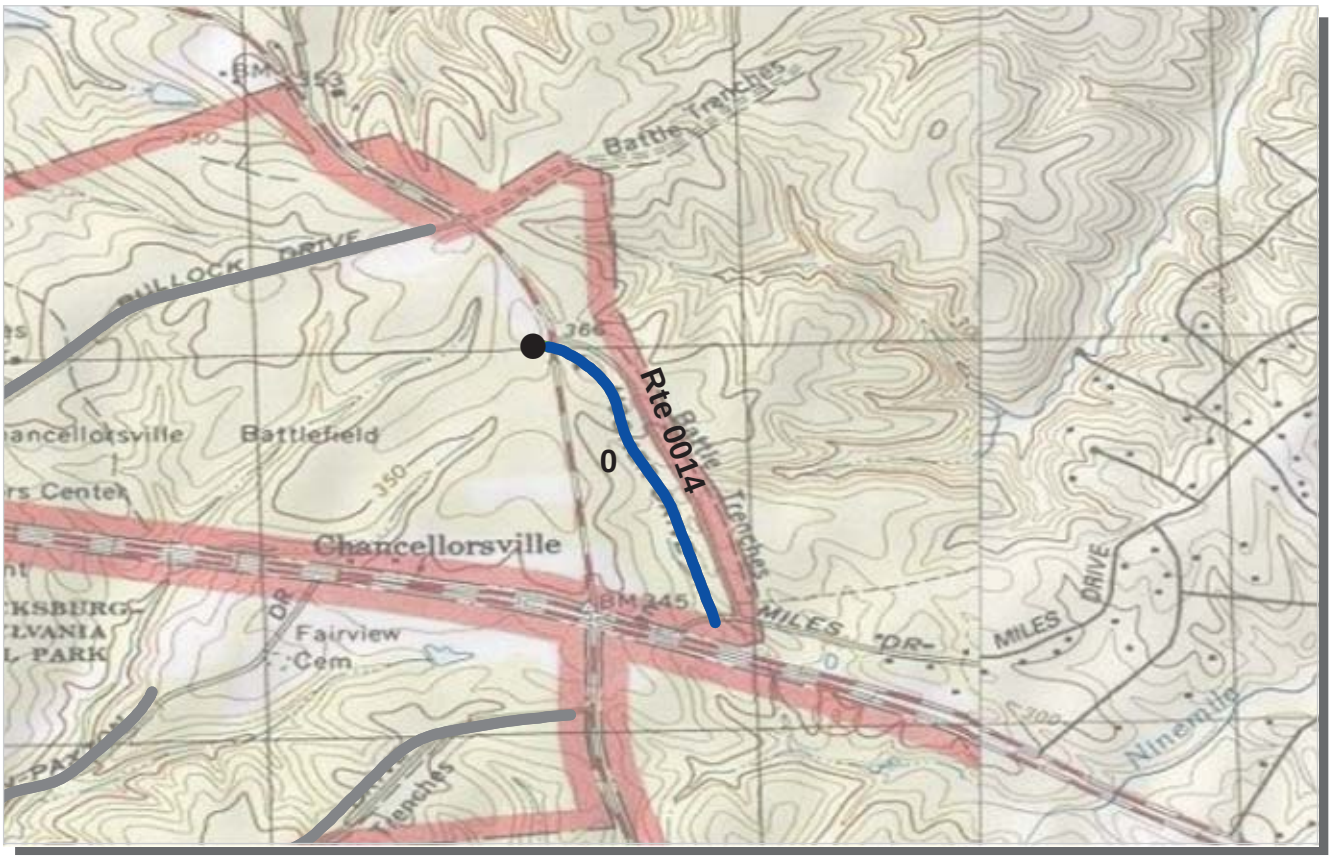
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 4.69 Miles**

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	0.69
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	20	20	21	21	16
Lane Width (ft)	10	10	11	10	14
Shoulder Width Right (ft)	NC	NC	NC	NC	NC
Shoulder Width Left (ft)	NC	NC	NC	NC	NC
Roadway Condition Information					
SCR (Surface Condition Rating)	67	100	98	97	100
PCR (Pavement Condition Rating)	74	98	95	95	99
Distress Index Values					
Alligator Cracking Index	90	100	100	100	100
Longitudinal Cracking Index	90	100	98	98	100
Tranverse Cracking Index	93	100	100	99	100
Patching Index	100	100	100	100	100
Rutting Index	95	100	100	100	100
Roughness Condition Index (RCI)	85	96	91	93	97

NC - Not Collected

ROUTE: 0013 MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE



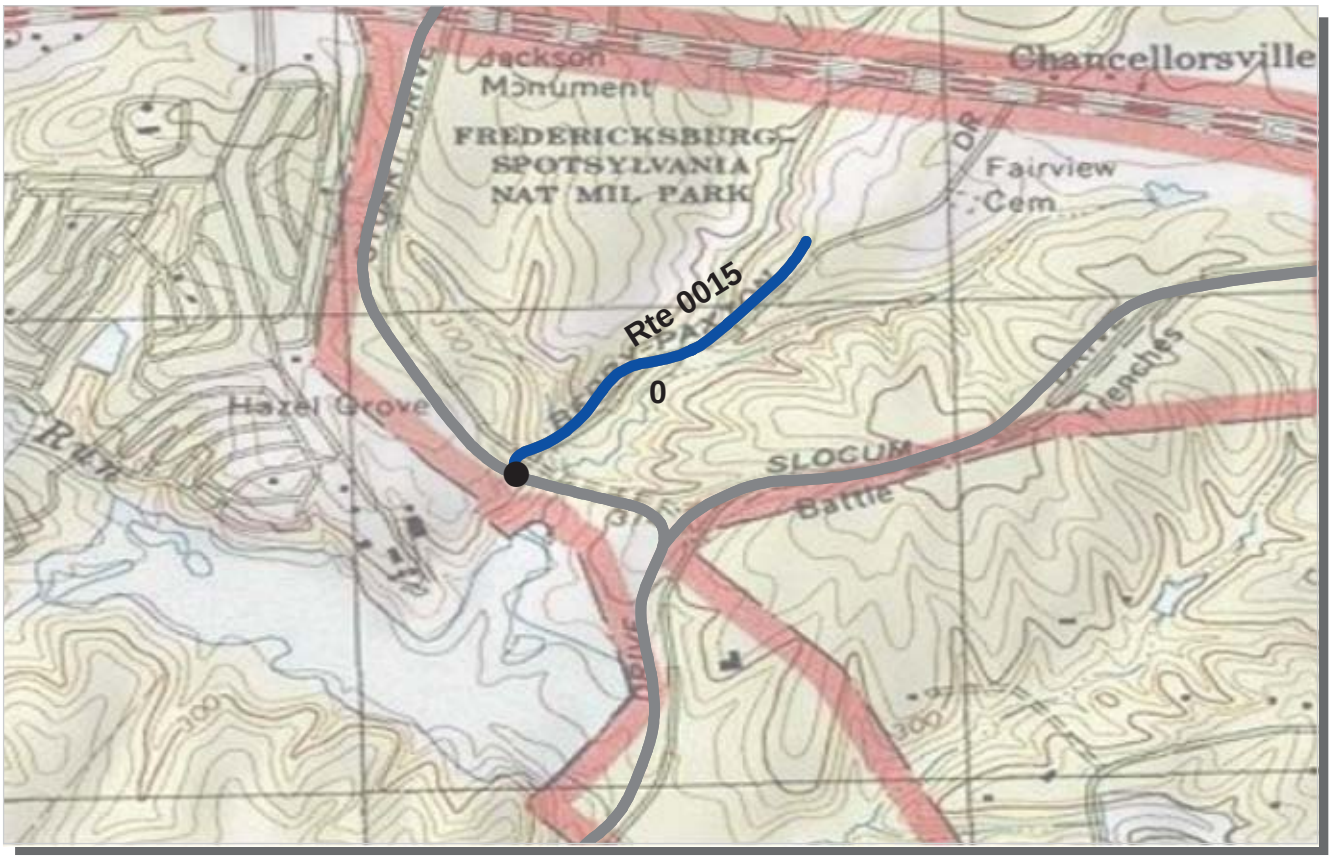
PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0014 HOOKER DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK
COLLECTED: 3/23/2009
NORTHEAST REGION **TOTAL LENGTH: 0.53 Miles**

Section Number	0				
Section Length (mi)	0.53				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	22				
Lane Width (ft)	11				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	99				
PCR (Pavement Condition Rating)	99				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	98				

NC - Not Collected



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0015 BERRY - PAXTON DRIVE

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

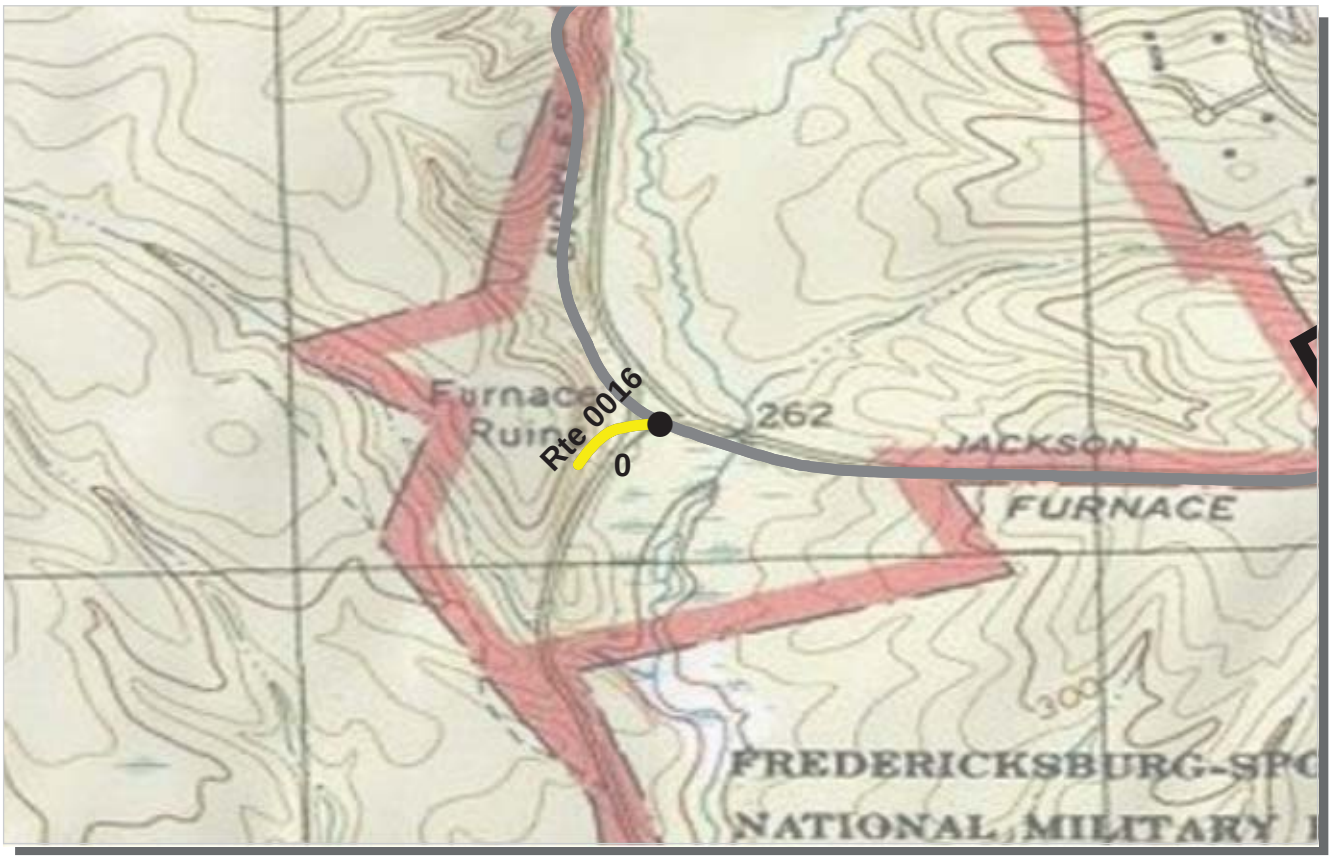
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.45 Miles**

Section Number	0				
Section Length (mi)	0.45				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement Condition Rating)	99				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	96				

NC - Not Collected

ROUTE: 0015 BERRY - PAXTON DRIVE



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0016 JACKSON TRAIL EAST

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

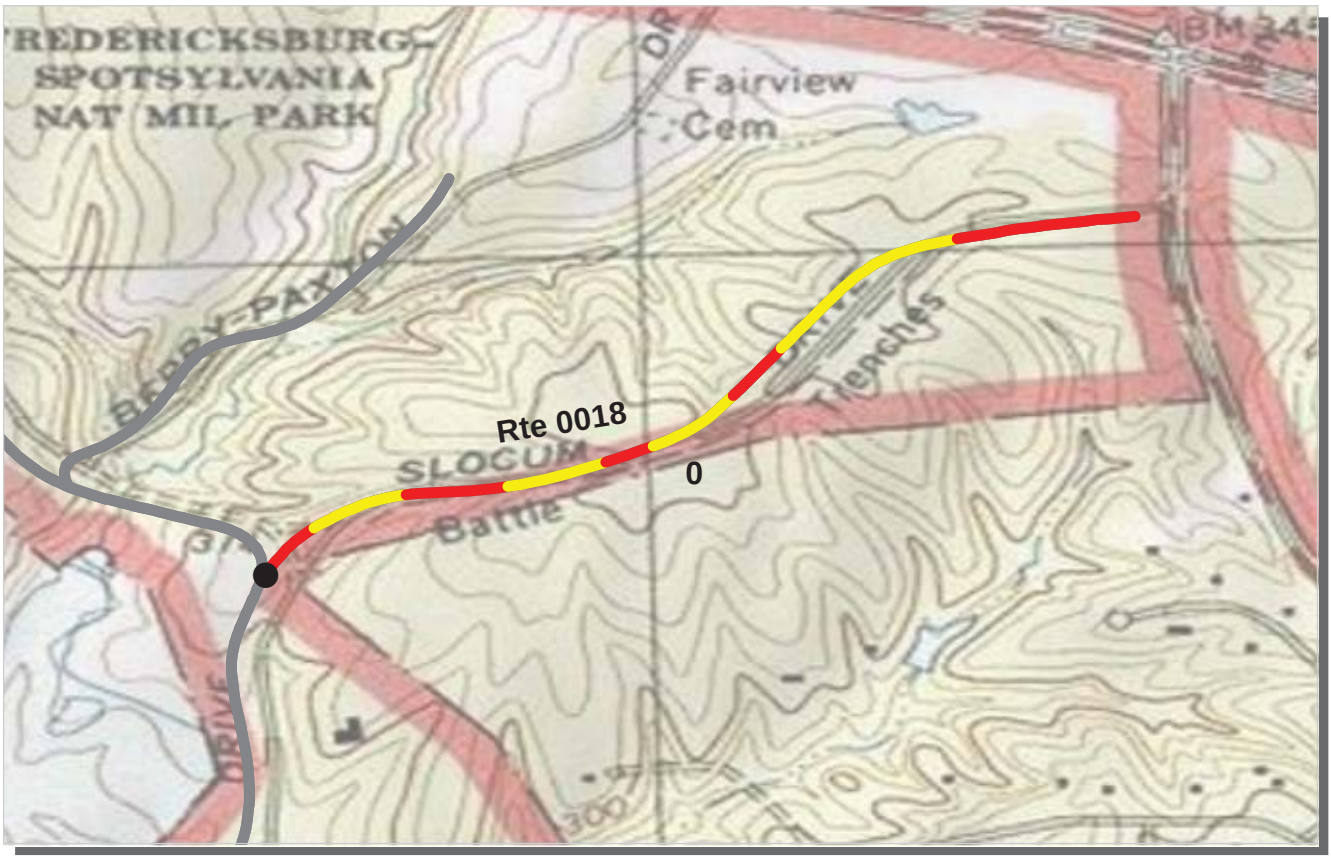
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.08 Miles**

Section Number	0				
Section Length (mi)	0.08				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	25				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	98				
PCR (Pavement Condition Rating)	86				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	98				
Roughness Condition Index (RCI)	67				

NC - Not Collected

ROUTE: 0016 JACKSON TRAIL EAST



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0018 SLOCUM DRIVE

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.80 Miles**

Section Number	0				
Section Length (mi)	0.80				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	20				
Lane Width (ft)	19				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	41				
PCR (Pavement Condition Rating)	56				
Distress Index Values					
Alligator Cracking Index	80				
Longitudinal Cracking Index	90				
Tranverse Cracking Index	87				
Patching Index	100				
Rutting Index	84				
Roughness Condition Index (RCI)	83				

NC - Not Collected

ROUTE: 0018 SLOCUM DRIVE

PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

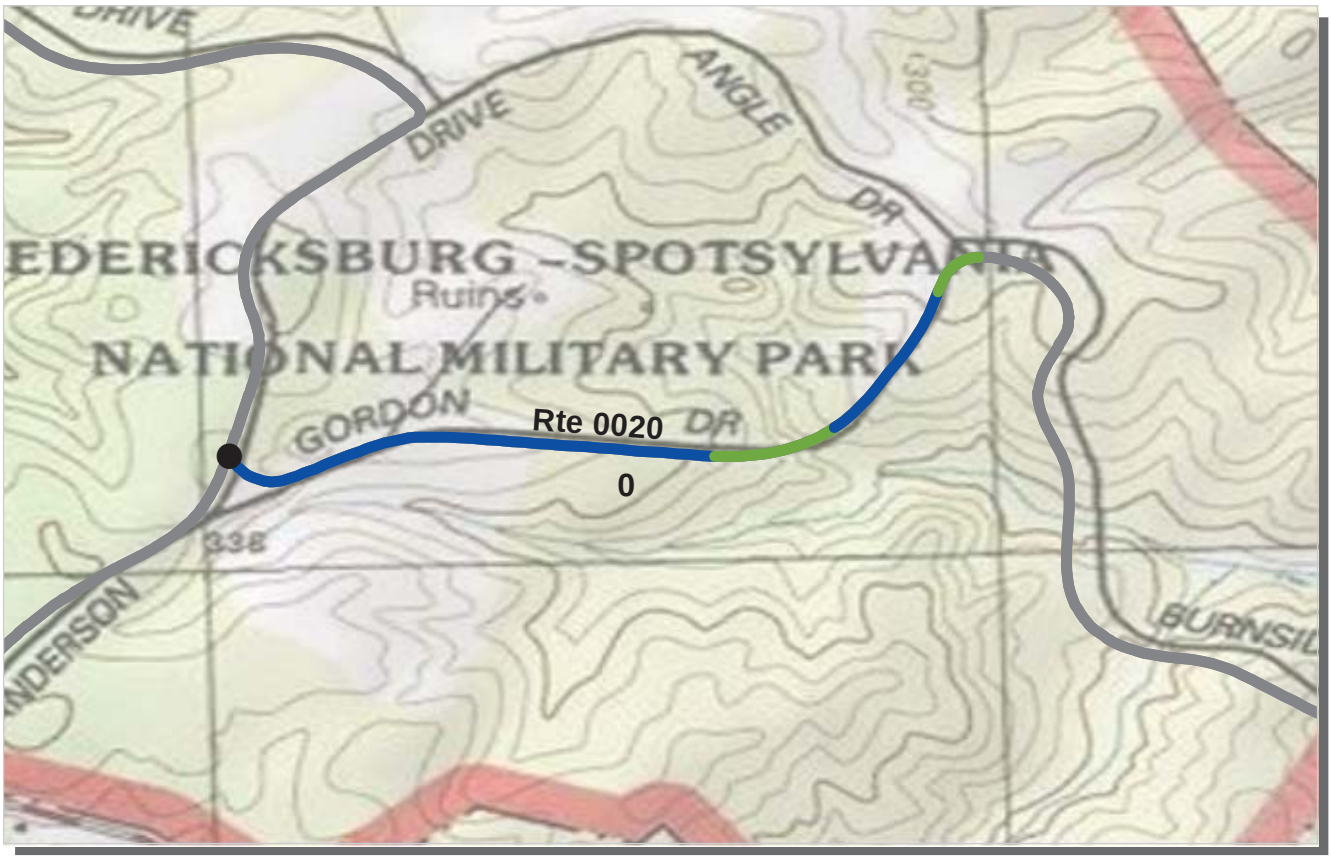
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0019 ANDERSON DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK
COLLECTED: 3/23/2009
NORTHEAST REGION **TOTAL LENGTH: 0.72 Miles**

Section Number	0				
Section Length (mi)	0.72				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	20				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement Condition Rating)	99				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	98				

NC - Not Collected

ROUTE: 0019 ANDERSON DRIVE



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0020 GORDON DRIVE

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.71 Miles**

Section Number	0				
Section Length (mi)	0.71				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	15				
Lane Width (ft)	13				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	100				
PCR (Pavement Condition Rating)	96				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Tranverse Cracking Index	100				
Patching Index	100				
Rutting Index	100				
Roughness Condition Index (RCI)	91				

NC - Not Collected

ROUTE: 0020 GORDON DRIVE

PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0022 BURNSIDE DRIVE
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK
COLLECTED: 3/23/2009
NORTHEAST REGION **TOTAL LENGTH: 1.39 Miles**

Section Number	0	1			
Section Length (mi)	1.00	0.39			
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1	1			
Paved Width (ft)	15	19			
Lane Width (ft)	15	11			
Shoulder Width Right (ft)	NC	NC			
Shoulder Width Left (ft)	NC	NC			
Roadway Condition Information					
SCR (Surface Condition Rating)	100	100			
PCR (Pavement Condition Rating)	97	97			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	100	100			
Tranverse Cracking Index	100	100			
Patching Index	100	100			
Rutting Index	100	100			
Roughness Condition Index (RCI)	93	92			

NC - Not Collected

ROUTE: 0022 BURNSIDE DRIVE

PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0402A QUARTERS 2 ACCESS ROAD
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.09 Miles**

Section Number	0				
Section Length (mi)	0.09				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	12				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	80				
PCR (Pavement Condition Rating)	80				
Distress Index Values					
Alligator Cracking Index	98				
Longitudinal Cracking Index	94				
Tranverse Cracking Index	93				
Patching Index	100				
Rutting Index	94				
Roughness Condition Index (RCI)	NC				

NC - Not Collected

ROUTE: 0402A QUARTERS 2 ACCESS ROAD

PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0403 RANGER HEADQUARTERS ACCESS ROAD
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

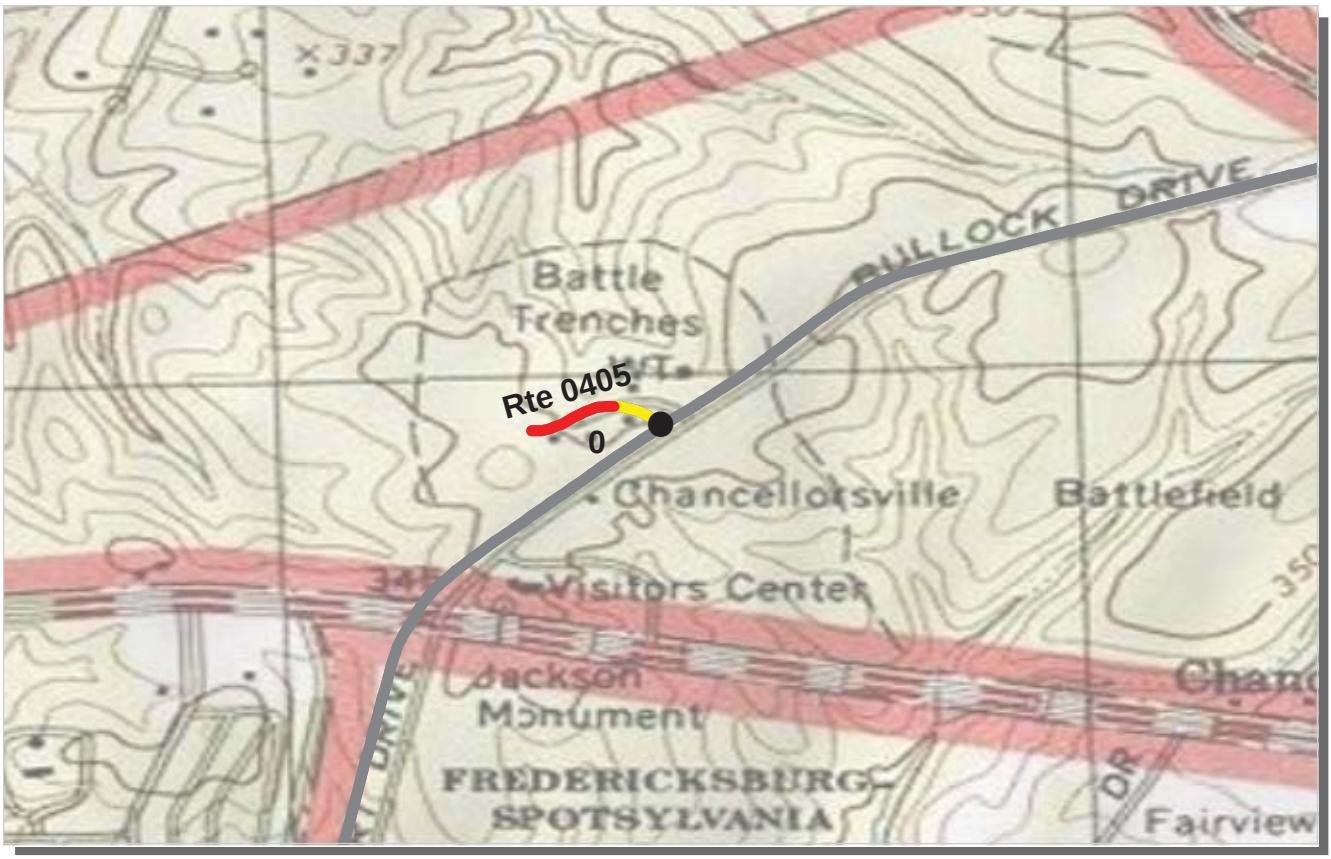
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.06 Miles**

Section Number	0				
Section Length (mi)	0.06				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	12				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	86				
PCR (Pavement Condition Rating)	86				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	97				
Tranverse Cracking Index	95				
Patching Index	100				
Rutting Index	94				
Roughness Condition Index (RCI)	NC				

NC - Not Collected

ROUTE: 0403 RANGER HEADQUARTERS ACCESS ROAD



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0405 RANGER LANE

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

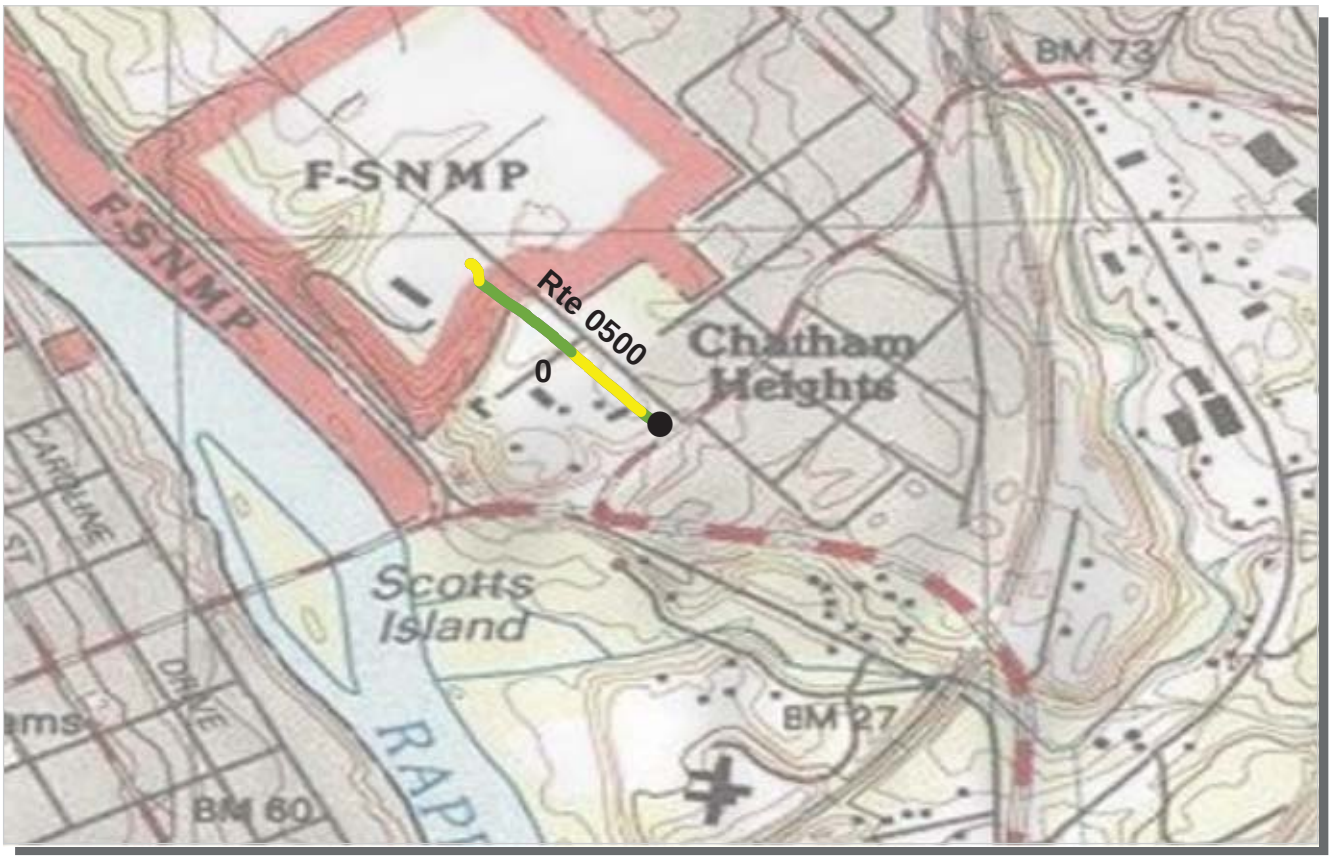
COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.11 Miles**

Section Number	0				
Section Length (mi)	0.11				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	17				
Lane Width (ft)	9				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	56				
PCR (Pavement Condition Rating)	54				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	93				
Tranverse Cracking Index	92				
Patching Index	100				
Rutting Index	71				
Roughness Condition Index (RCI)	50				

NC - Not Collected

ROUTE: 0405 RANGER LANE



PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0500 CHATHAM LANE

FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.22 Miles**

Section Number	0				
Section Length (mi)	0.22				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	12				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	90				
PCR (Pavement Condition Rating)	84				
Distress Index Values					
Alligator Cracking Index	99				
Longitudinal Cracking Index	99				
Tranverse Cracking Index	96				
Patching Index	100				
Rutting Index	95				
Roughness Condition Index (RCI)	68				

NC - Not Collected

ROUTE: 0500 CHATHAM LANE

PCR Poor (<=60) Fair (61 - 84) Good (85 - 94) Excellent (95 - 100) No Data

* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0503A WILLIS HILL ROAD
FRSP : FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

COLLECTED: 3/23/2009

NORTHEAST REGION **TOTAL LENGTH: 0.15 Miles**

Section Number	0				
Section Length (mi)	0.15				
Traffic					
AADT	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
SADT					
ADT Date					
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	21				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	66				
PCR (Pavement Condition Rating)	66				
Distress Index Values					
Alligator Cracking Index	99				
Longitudinal Cracking Index	93				
Tranverse Cracking Index	87				
Patching Index	100				
Rutting Index	87				
Roughness Condition Index (RCI)	NC				

NC - Not Collected

ROUTE: 0503A WILLIS HILL ROAD

Fredericksburg and Spotsylvania
National Military Park

Section 6
Manually Rated Paved Route Condition Rating Sheets (MRR)

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0402B

QUARTERS 2 ACCESS ROAD SPUR

FROM ROUTE 0402A (QUARTERS 2 ACCESS ROAD) AT MP 0.05

TO END OF PAVEMENT

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0402B	PUBLIC	12/8/2008		755	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths

90 45 0 90 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0408

MARYE'S HEIGHTS NATIONAL CEMETERY ROAD

FROM SUNKEN ROAD GATE

TO BIG STATUE IN NATIONAL CEMETERY

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0408	PUBLIC	12/9/2008		3,089	0.05	BR
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

300 150 0 300

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0503B

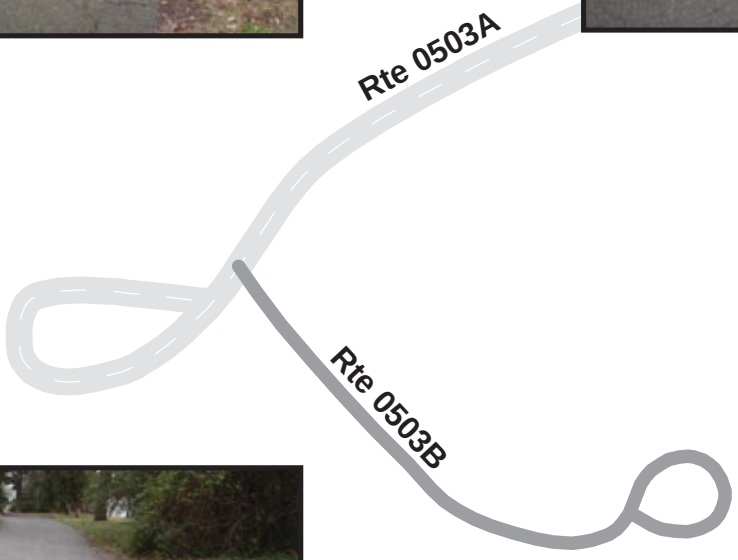
WILLIS HILL ROAD SPUR

FROM ROUTE 0503A (WILLIS HILL ROAD) AT MP 0.15 (ON RIGHT)

TO END OF LOOP

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0503B	PUBLIC	12/9/2008		4,594	0.08	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



240 120 0 240 Feet

Fredericksburg and Spotsylvania
National Military Park

Section 7
Parking Area Condition Rating Sheets

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0900

VISITOR CENTER PARKING

FROM LAFAYETTE BLVD

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0900	PUBLIC	12/9/2008		26,491	0.46	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	9	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

240 120 0 240

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0901

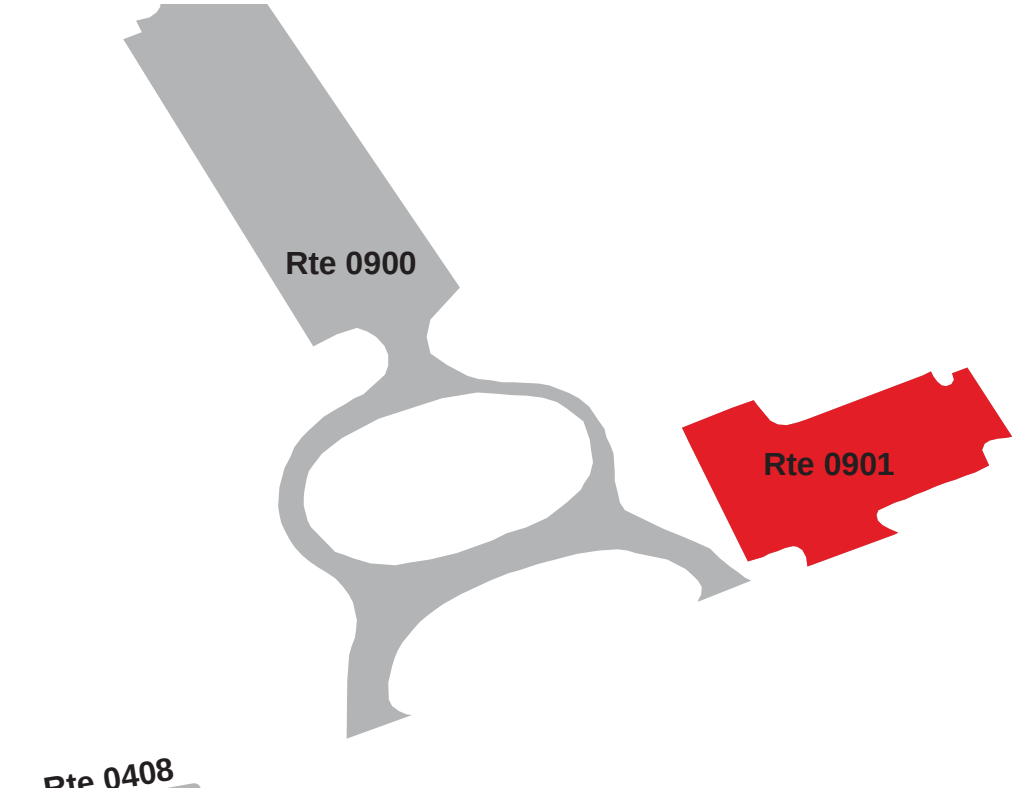
VISITOR CENTER ANNEX

FROM LAFAYETTE BLVD

TO WILLIS STREET

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0901	PUBLIC	12/9/2008		10,135	0.17	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	0	NO CURB AND GUTTER	CONCRETE CURB	GOOD/90

* Lane miles are based on 11' lane widths



200 100 0 200 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0902

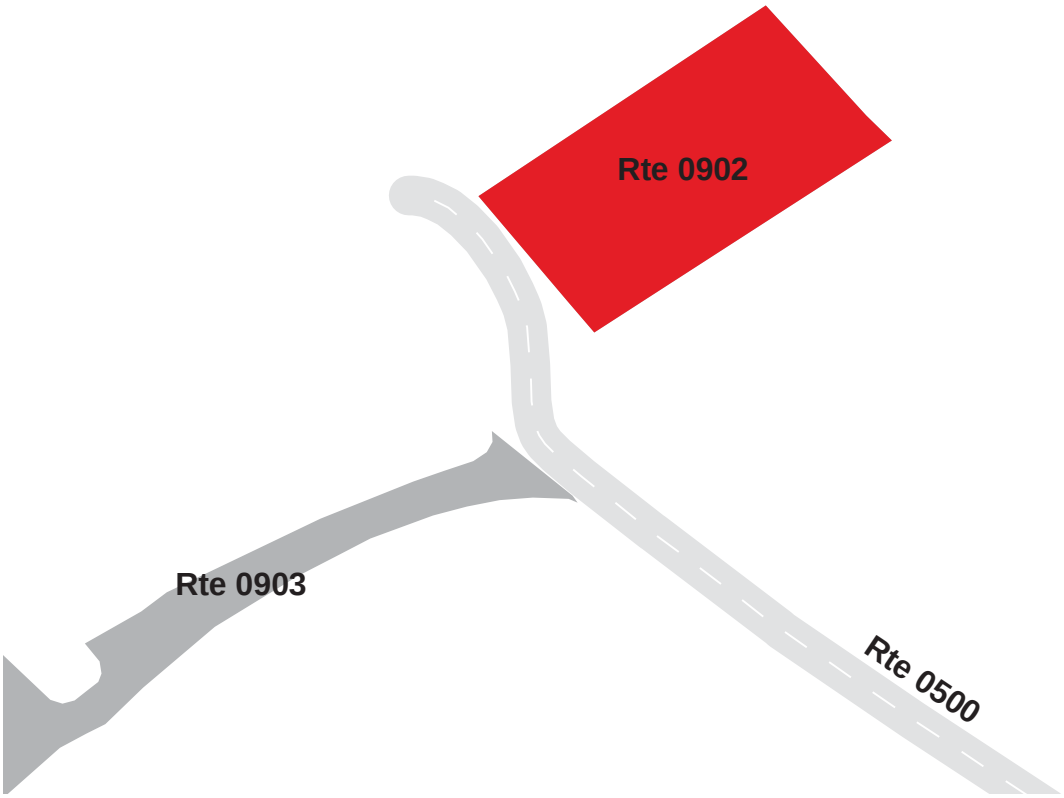
CHATHAM LANE VISITOR PARKING

FROM ROUTE 0500 (CHATHAM LANE) AT MP 0.21 (ON RIGHT)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0902	PUBLIC	12/9/2008		7,126	0.12	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



120 60 0 120

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0903

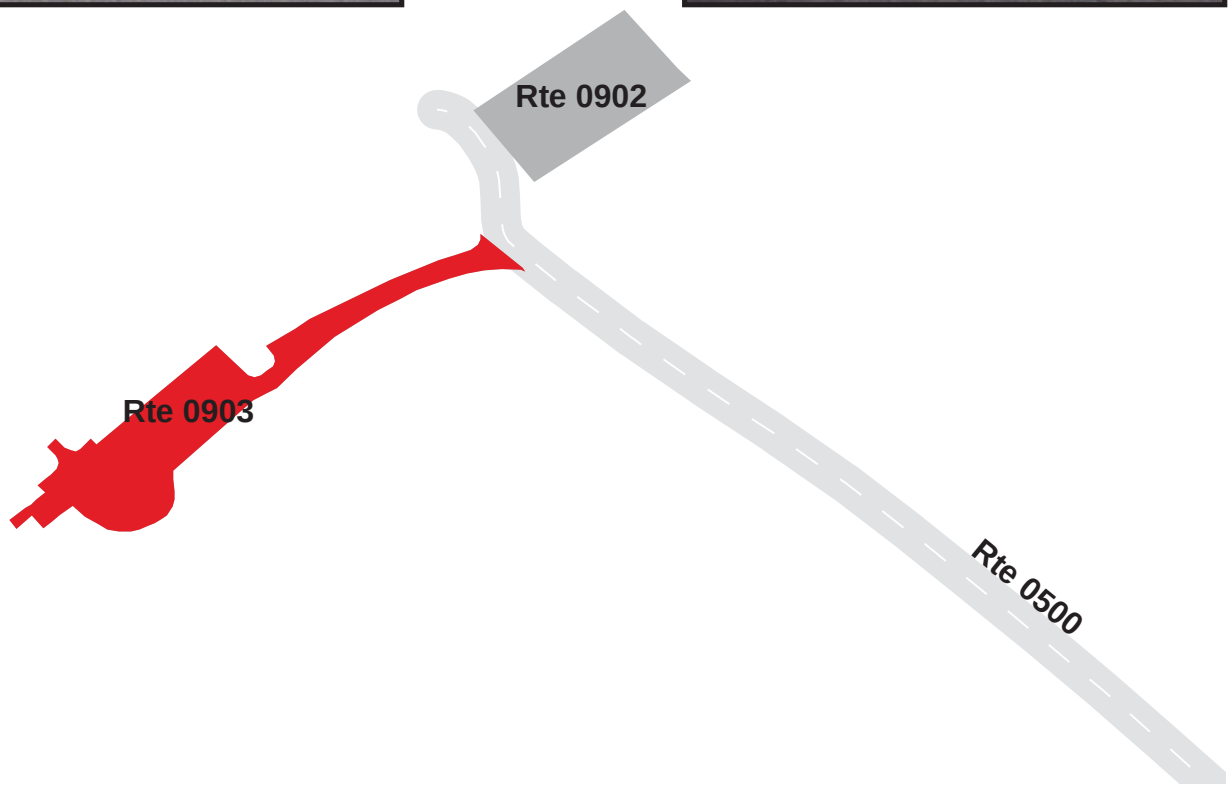
CHATHAM HOUSE ADMINISTRATIVE PARKING

FROM ROUTE 0500 (CHATHAM LANE) AT MP 0.20 (ON LEFT)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0903	PUBLIC	12/9/2008		10,568	0.18	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0904

SALEM CHURCH PARKING

FROM OLD SALEM CHURCH ROAD

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	12/9/2008		9,098	0.16	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths

190 95 0 190 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

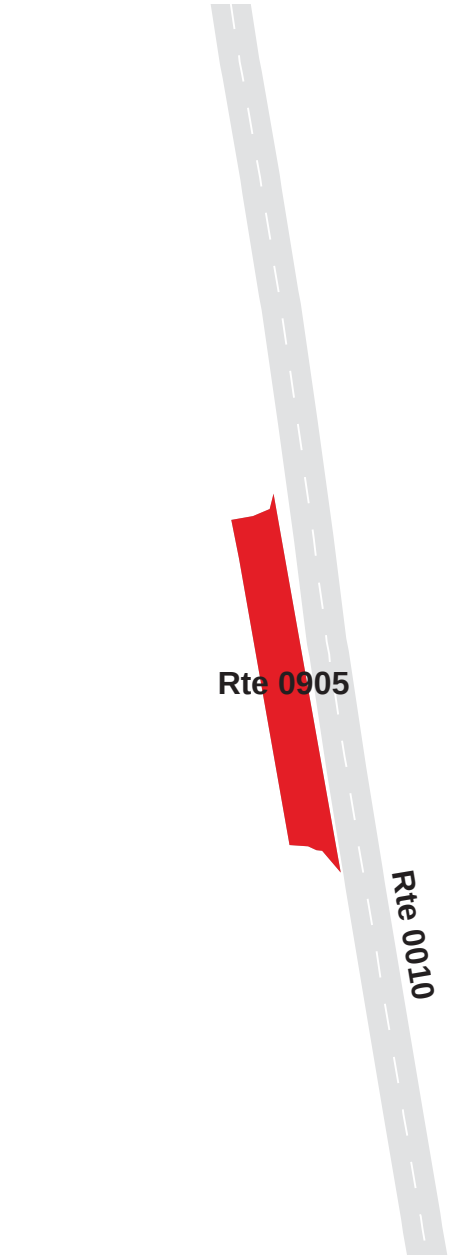
Route 0905

LEE DRIVE PARKING 1 (LEE HILL)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 0.19 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	12/9/2008		2,547	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	0	NO CURB AND GUTTER	CONCRETE CURB	GOOD/90

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

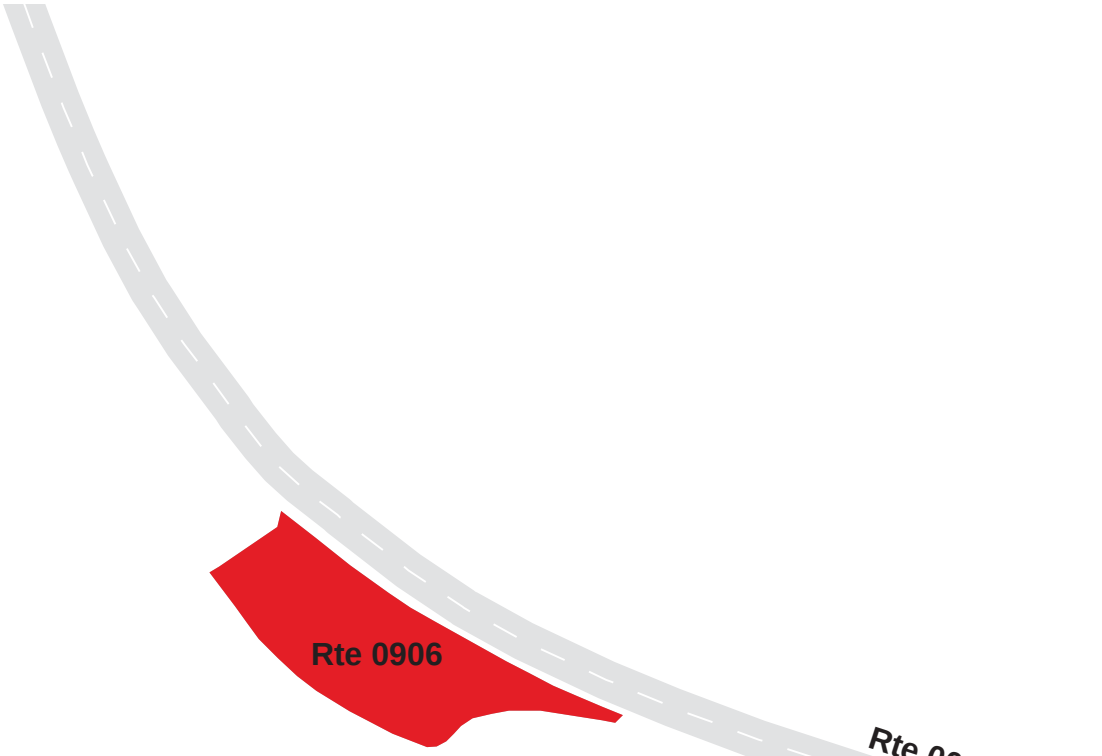
Route 0906

LEE DRIVE PARKING 2 (HOWINSON HILL)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 0.69 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0906	PUBLIC	12/9/2008		4,430	0.08	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0907

LEE DRIVE PARKING 3 (PROSPECT HILL)

FROM ROUTE 0010 (LEE DRIVE) AT MP 4.66 (ON RIGHT)

TO ROUTE 0010 (LEE DRIVE) AT END

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0907	PUBLIC	12/9/2008		9,601	0.17	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

240 120 0 240 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0908A

RANGER HEADQUARTERS PARKING

FROM END OF ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0908A	NONPUBLIC	12/9/2008		11,500	0.20	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	1	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths

230 115 0 230
Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

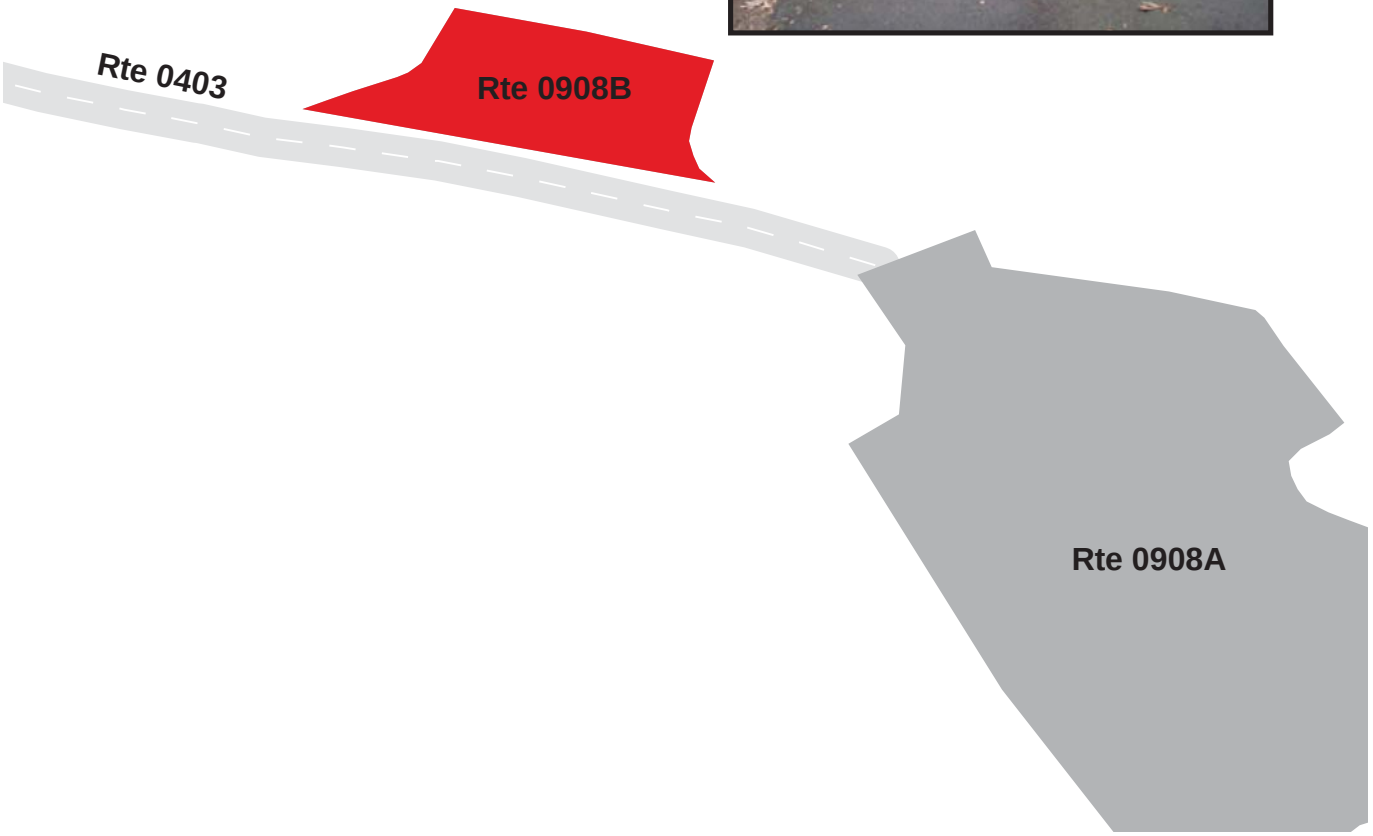
Route 0908B

RANGER HEADQUARTERS EMPLOYEE PARKING

ADJACENT TO ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD) AT MP 0.05 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0908B	PUBLIC	12/9/2008		1,231	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0910A

PICKET CIRCLE PARKING A

FROM ROUTE 0010 (LEE DRIVE) AT MP 1.50 (ON LEFT)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0910A	PUBLIC	12/9/2008		14,263	0.25	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
1	1	1	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths

200 100 0 200

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0912

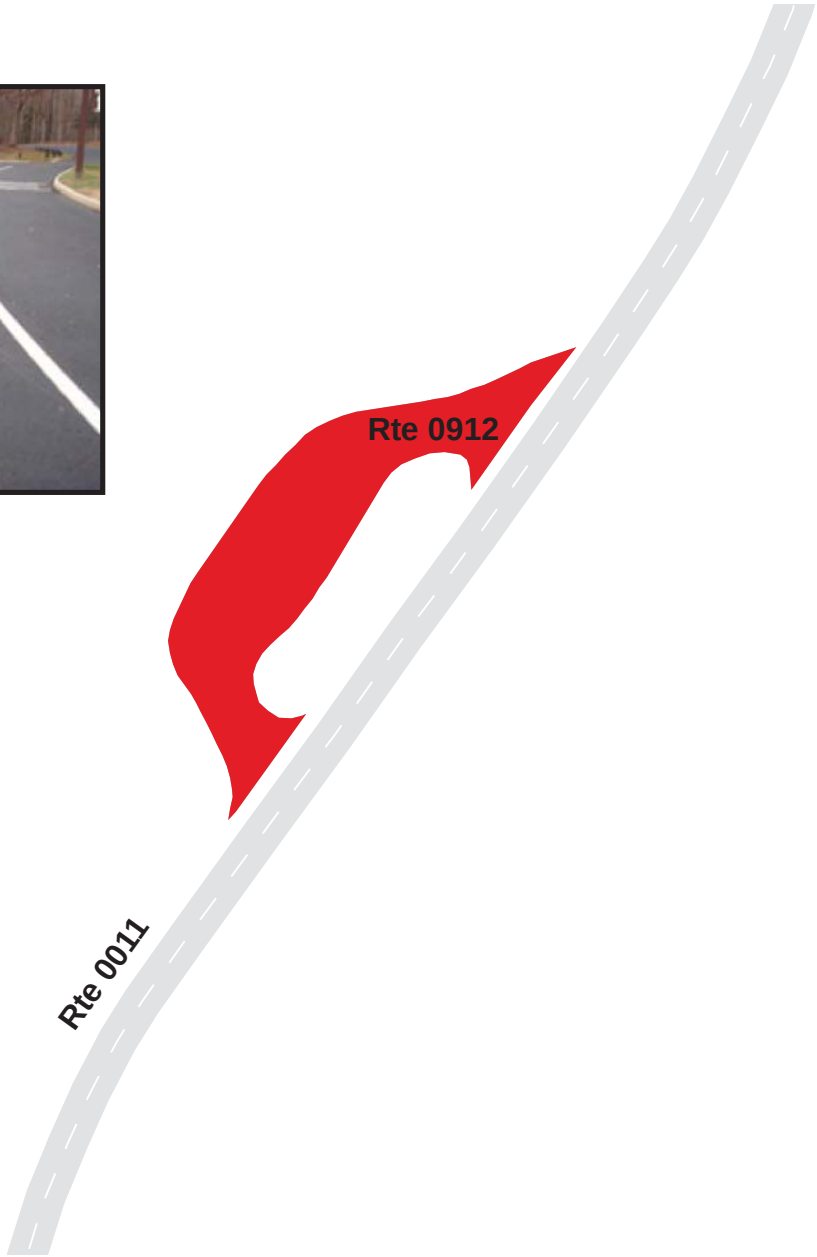
SPOTSYLVANIA EXHIBIT PARKING

FROM ROUTE 0011 (GRANT DRIVE WEST) AT MP 0.08 (ON LEFT)

TO ROUTE 0011 (GRANT DRIVE WEST) AT MP 0.12 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0912	PUBLIC	12/9/2008		7,776	0.13	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	2	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



125 62.5 0 125

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0913

ANDERSON DRIVE PARKING

FROM END OF ROUTE 0019 (ANDERSON DRIVE)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0913	PUBLIC	12/9/2008		3,494	0.06	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

60 30 0 60 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0914

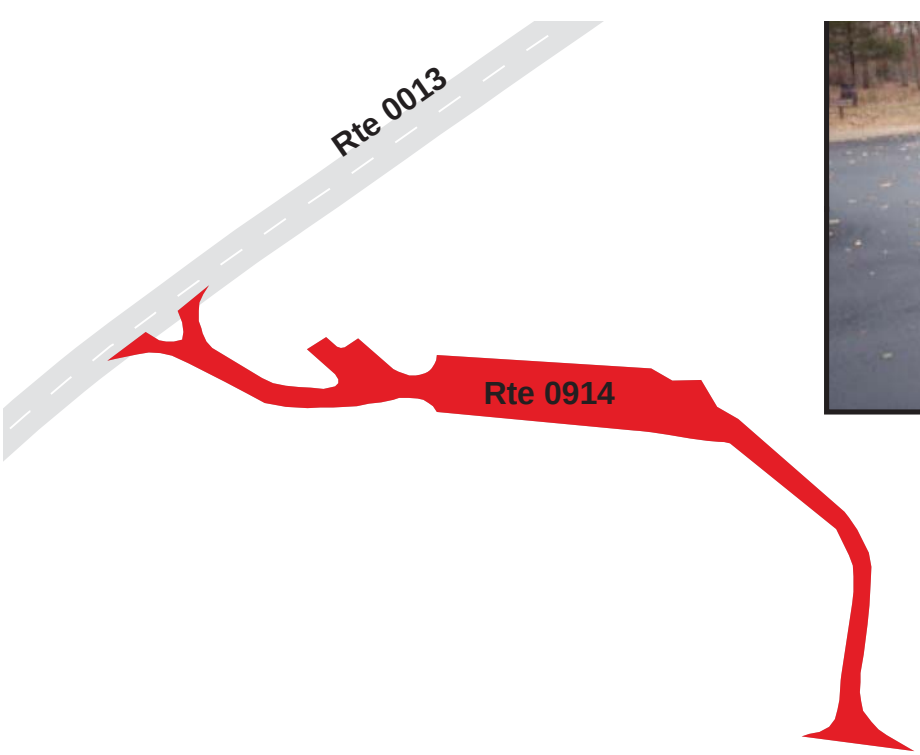
CHANCELLORSVILLE VISITOR CENTER

FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)

TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 3.87 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0914	PUBLIC	12/10/2008		34,566	0.60	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
1	2	0	1	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



280 140 0 280 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0915

CHANCELLORSVILLE HOUSE SITE PARKING

FROM STATE ROUTE 610 (ELYS FORD ROAD)

TO STATE ROUTE 610 (ELYS FORD ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0915	PUBLIC	12/10/2008		6,659	0.12	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
2	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

80 40 0 80 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0916

WILDERNESS EXHIBIT SHELTER PARKING

FROM STATE ROUTE 20 (CONSTITUTION HIGHWAY)

TO STATE ROUTE 20 (CONSTITUTION HIGHWAY)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0916	PUBLIC	12/10/2008		13,471	0.23	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
2	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0917

WIDOW TAP FARM PARKING

FROM STATE ROUTE 621 (ORANGE PLANK ROAD)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0917	PUBLIC	12/10/2008		4,063	0.07	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
1	0	0	0	NO CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths

60 30 0 60 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0920

CATHARINE FURNACE PARKING

ADJACENT TO ROUTE 0016 (JACKSON TRAIL EAST) AT MP 0.07 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0920	PUBLIC	12/10/2008		1,491	0.03	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

30 15 0 30 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0921ZZ

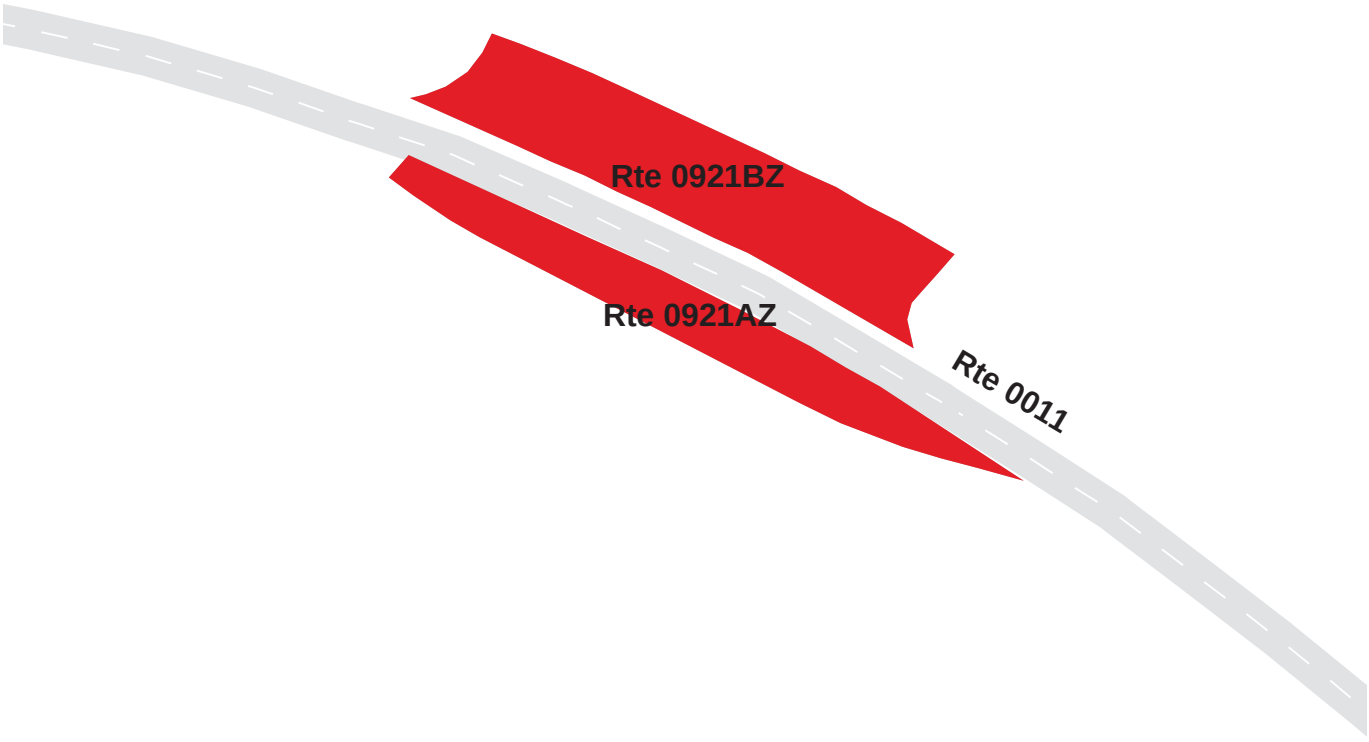
BLOODY ANGLE PARKING AREAS

ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON RIGHT AND LEFT)

Summary Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0921ZZ	PUBLIC	12/9/2008		5,587	0.10	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	SUMMARY/97

* Lane miles are based on 11' lane widths



100 50 0 100 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0921AZ

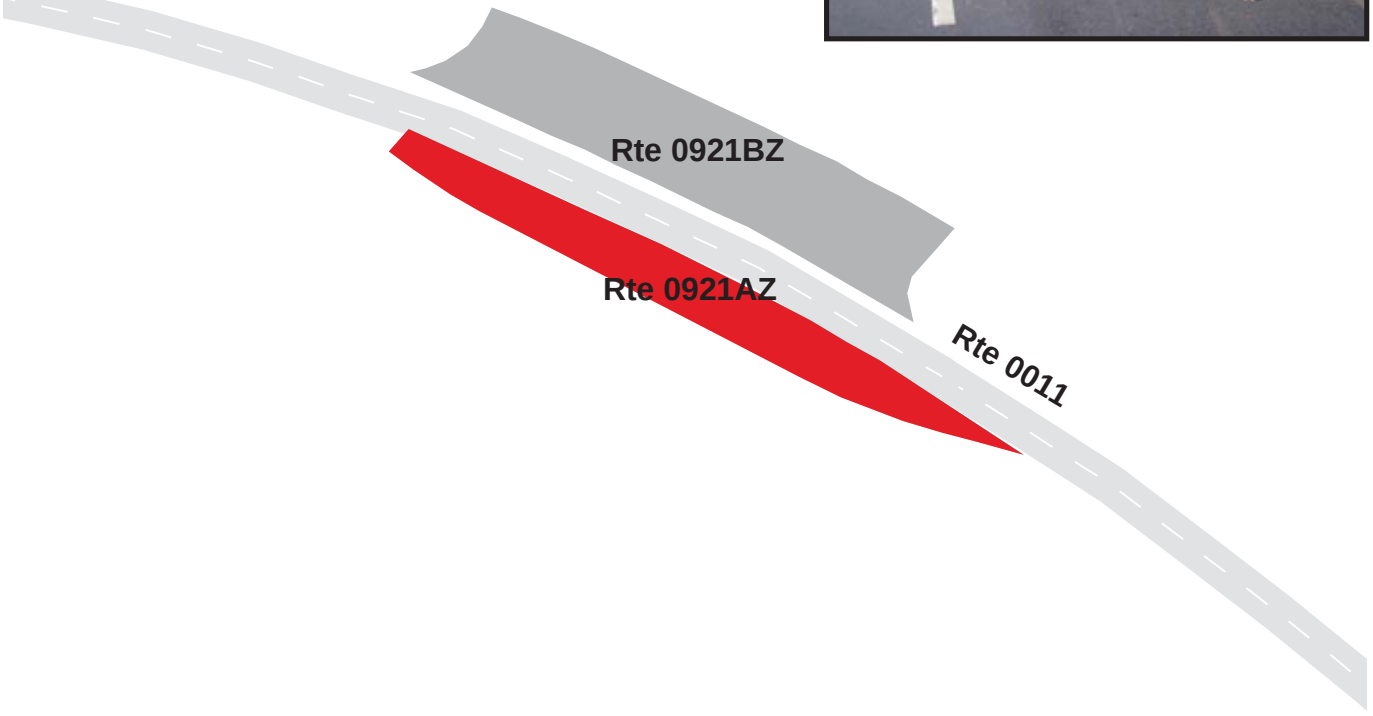
BLOODY ANGLE PARKING 1

ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON RIGHT)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0921AZ	PUBLIC	12/9/2008		2,112	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



100 50 0 100 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0921BZ

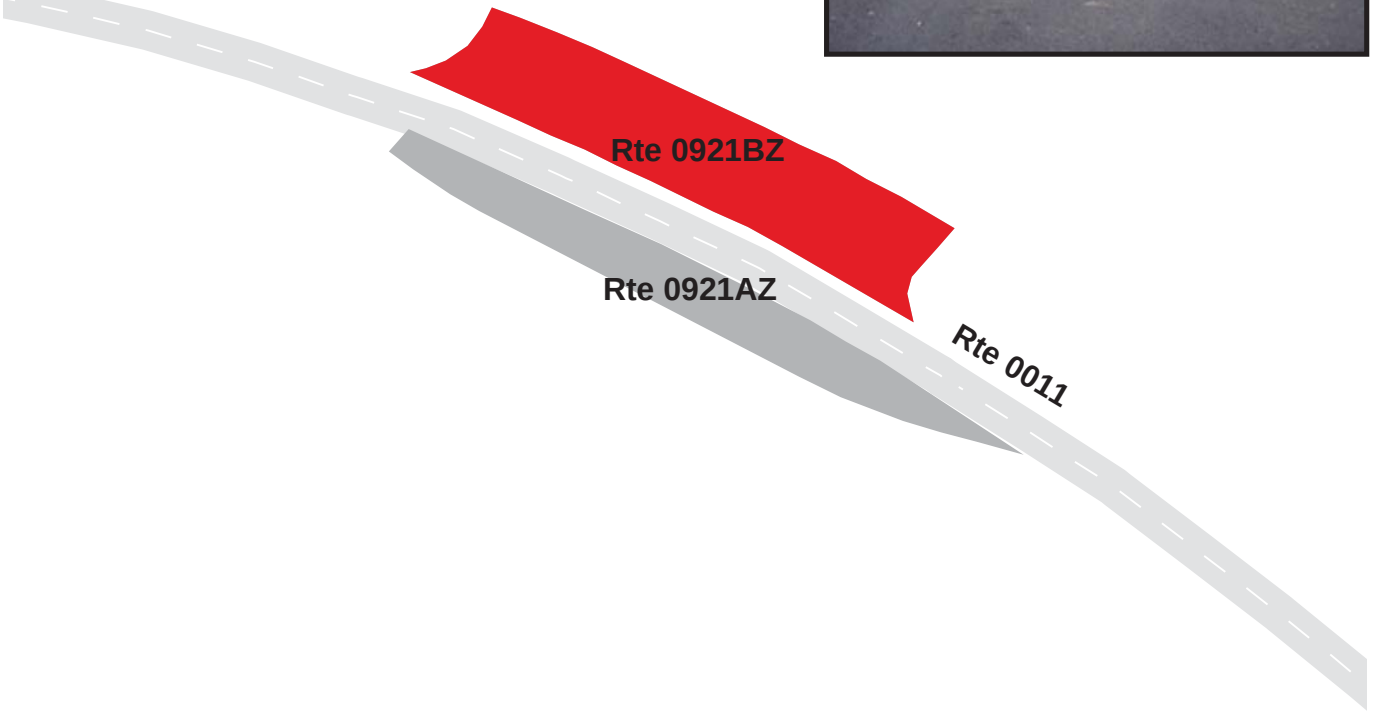
BLOODY ANGLE BUS PARKING

ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST) AT M.P. 0.98 (ON LEFT)

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0921BZ	PUBLIC	12/9/2008		3,474	0.06	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



100 50 0 100 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0923

CHEWNING FARM PARKING

ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 1.48 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0923	PUBLIC	12/10/2008		1,521	0.03	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

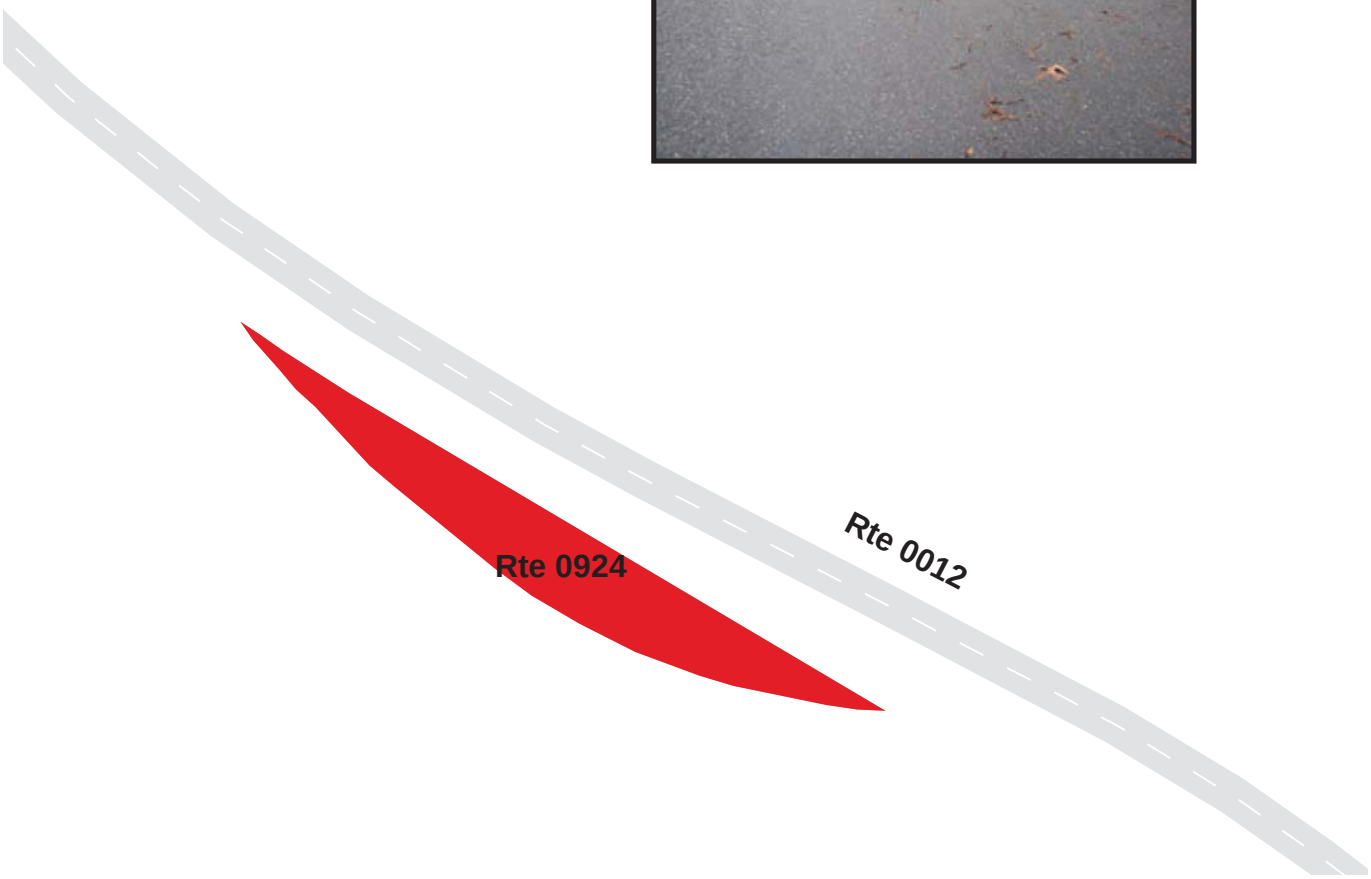
Route 0924

WADSWORTH'S DIVISION

ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 2.37 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0924	PUBLIC	12/10/2008		818	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

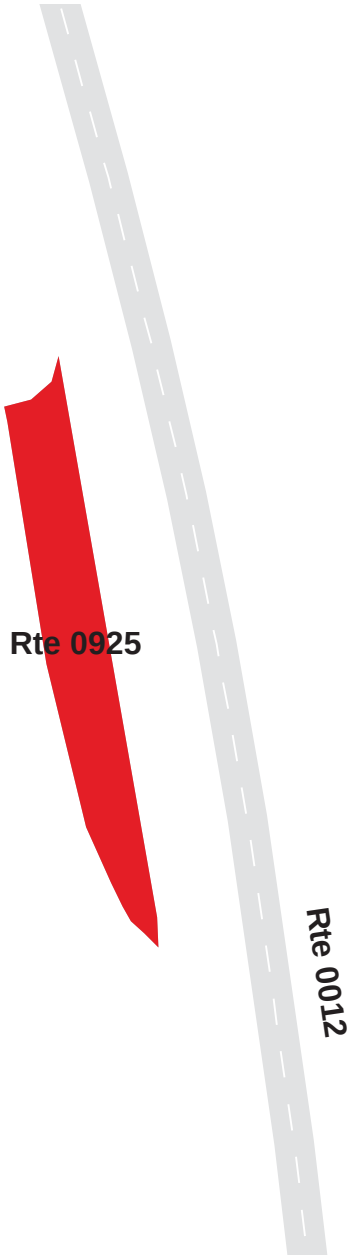
Route 0925

HIGGERSON FARM

ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE) AT MP 2.53 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0925	PUBLIC	12/10/2008		663	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



40 20 0 40 Feet

N

7-24

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0927

WESTERN RANGER OFFICE PARKING

ADJACENT TO ROUTE 0405 (RANGER LANE) ON LEFT

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0927	PUBLIC	12/10/2008		826	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths

30 15 0 30 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0929

FAIRVIEW PARKING

FROM END OF ROUTE 0015 (BERRY - PAXTON DRIVE)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0929	PUBLIC	12/10/2008		7,306	0.13	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

100 50 0 100 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0931

LEE DRIVE PARKING 4 (MEADE MONUMENT)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 4.15 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0931	PUBLIC	12/9/2008		1,630	0.03	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0932A

LEE DRIVE PARKING 5A (BERNARD'S CABIN)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 3.21 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0932A	PUBLIC	12/9/2008		2,484	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

125 62.5 0 125 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

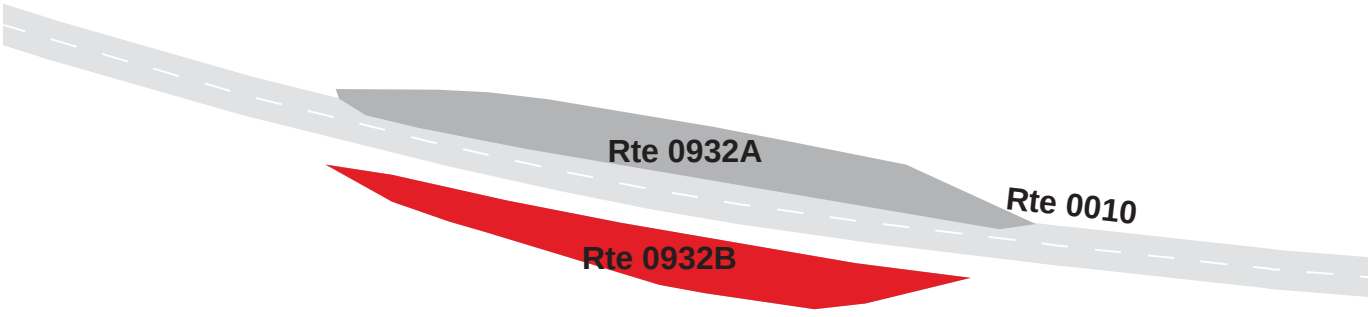
Route 0932B

LEE DRIVE PARKING 5B (BERNARD'S CABIN)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 3.21 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0932B	PUBLIC	12/10/2008		1,981	0.03	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

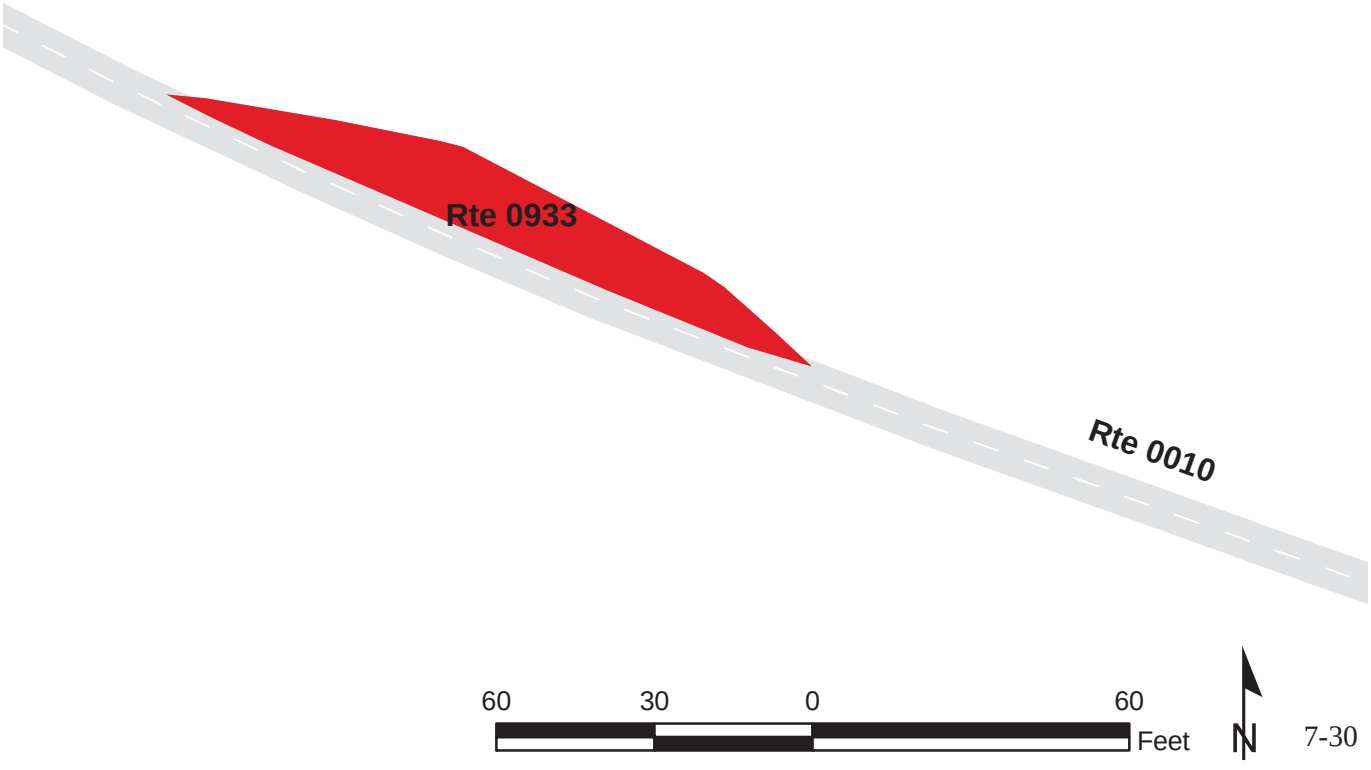
Route 0933

LEE DRIVE PARKING 6 (LANSDOWNE ENTRANCE)

ADJACENT TO ROUTE 0010 (LEE DRIVE) AT MP 2.61 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0933	PUBLIC	12/9/2008		951	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0935

WILDERNESS TAVERN PARKING

FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)
TO PRIVATE DRIVE (GRAVEL, PROVIDES ACCESS TO FARM)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0935	PUBLIC	12/10/2008		809	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0936

SAUNDERS FIELD PARKING

ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0936	PUBLIC	12/9/2008		814	0.01	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths

60 30 0 60 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

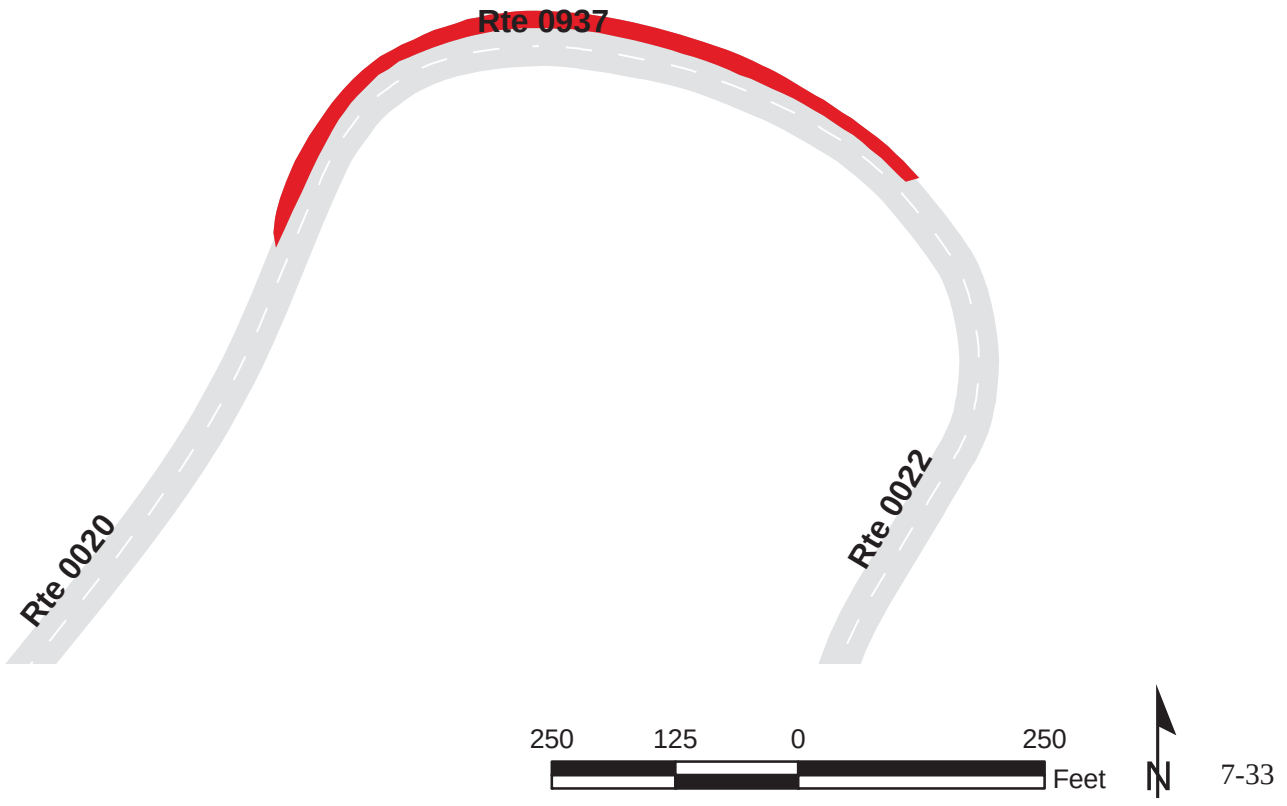
Route 0937

EAST ANGLE PARKING

ADJACENT TO ROUTE 0022 (BURNSIDE DRIVE) AND ROUTE 0020 (GORDON DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0937	PUBLIC	12/9/2008		10,122	0.17	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

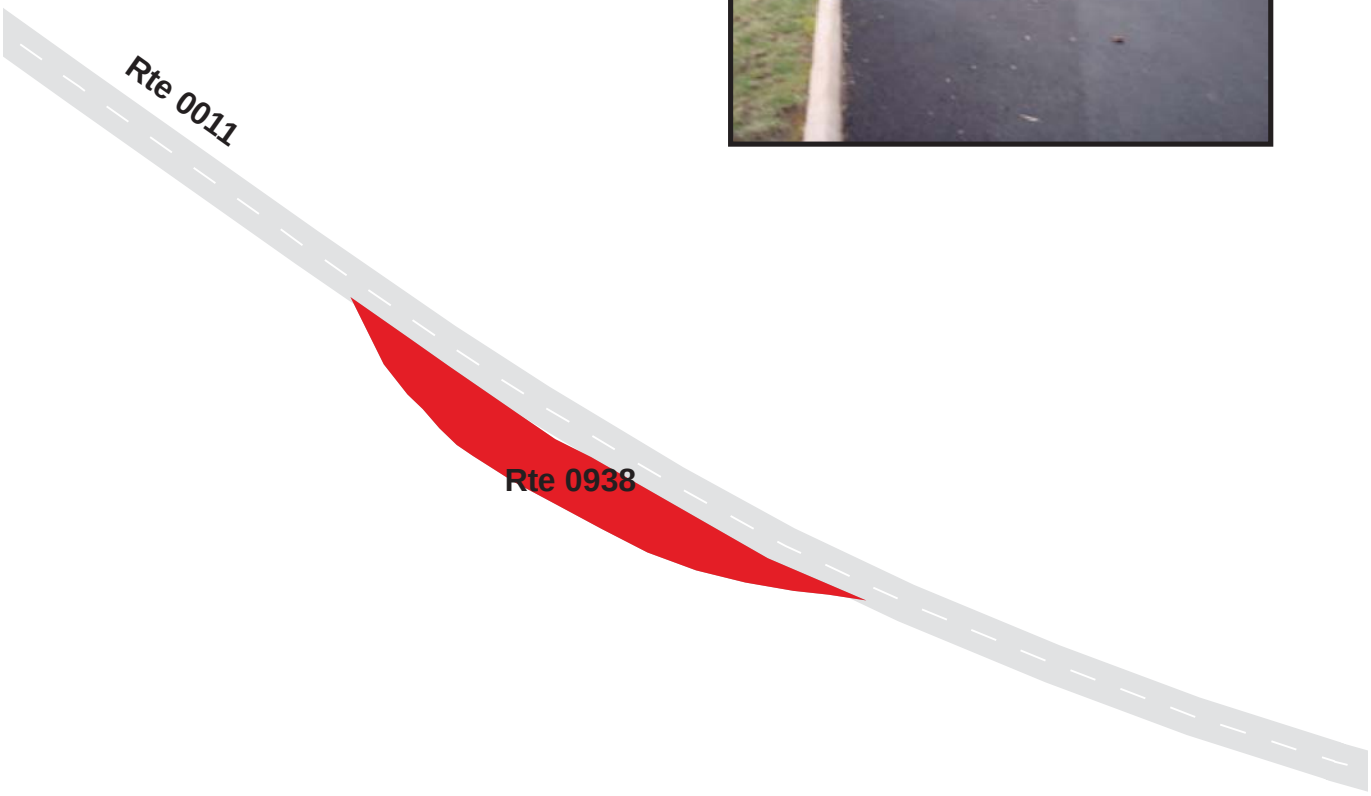
Route 0938

UPTON'S ATTACK PARKING

ADJACENT TO ROUTE 0011 (GRANT DRIVE WEST)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0938	PUBLIC	12/9/2008		965	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



60 30 0 60 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

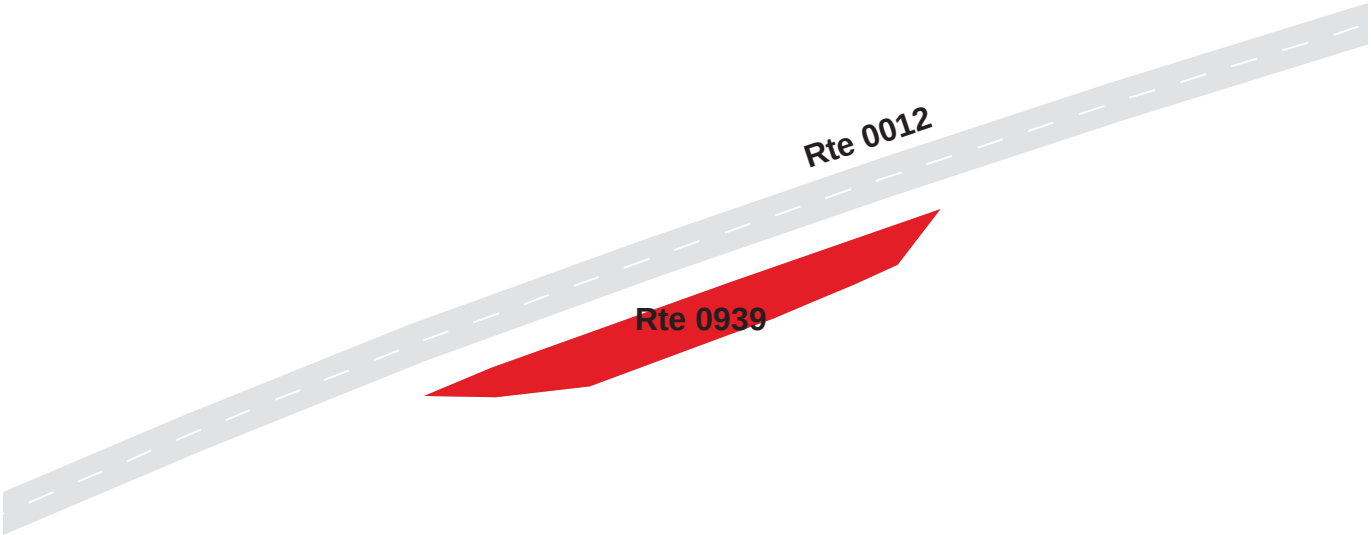
Route 0939

WIDOW TAP FARM FIELD

ADJACENT TO ROUTE 0012 (HILL-EWELL DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0939	PUBLIC	12/9/2008		1,182	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



75 37.5 0 75

Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0940

HAZEL GROVE PARKING

ADJACENT TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0940	PUBLIC	12/10/2008		3,194	0.06	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

100 50 0 100 Feet

N

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0941

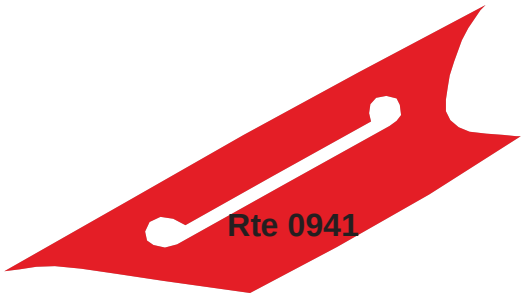
VERMONT MONUMENT PARKING

FROM STATE ROUTE 621 (ORANGE PLANK ROAD)

TO STATE ROUTE 621 (ORANGE PLANK ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0941	PUBLIC	12/10/2008		6,860	0.12	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	CONCRETE CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



120 60 0 120

Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

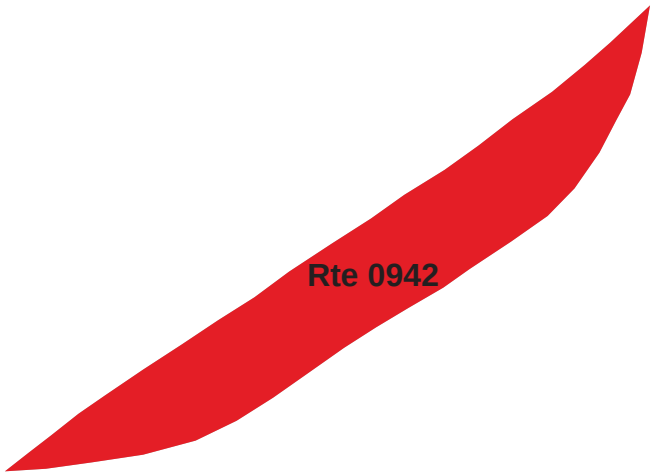
Route 0942

LONGSTREET PARKING

ADJACENT TO STATE ROUTE 621 (ORANGE PLANK ROAD)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0942	PUBLIC	12/10/2008		2,035	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



60 30 0 60 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0944

SALIENT TRENCHES PARKING

ADJACENT TO ROUTE 0020 (GORDON DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0944	PUBLIC	12/9/2008		2,425	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

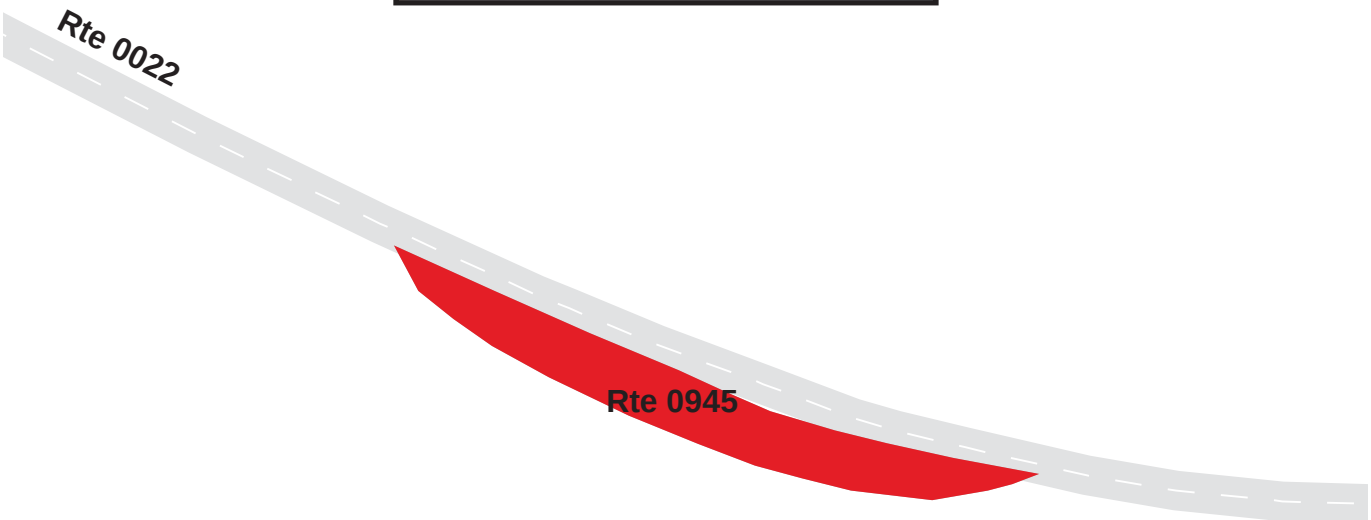
Route 0945

HETH'S SALIENT

ADJACENT TO ROUTE 0022 (BURNSIDE DRIVE)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0945	PUBLIC	12/9/2008		2,511	0.04	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

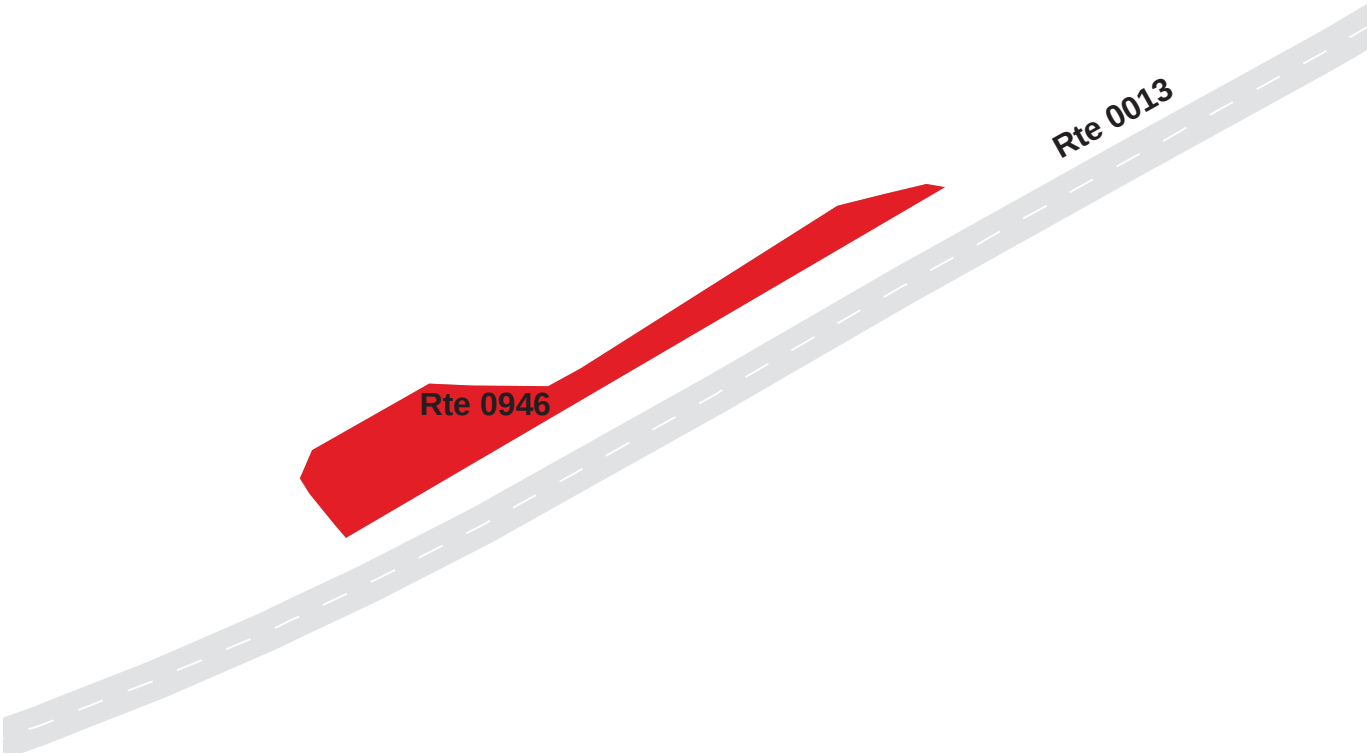
Route 0946

MAURY BIRTHPLACE TRAIL PARKING

ADJACENT TO ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 1.54

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0946	PUBLIC	12/10/2008		1,824	0.03	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	1	0	0	NO CURB AND GUTTER	CONCRETE CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



80 40 0 80 Feet

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

Route 0947

HARRISON HOUSE PARKING

ADJACENT TO ROUTE 0020 (GORDON DRIVE) AT MP 0.02 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0947	PUBLIC	3/23/2009		1,320	0.02	AS
Culverts	**Drop Inlets**	**Gates**	**Fire Hydrants**	**Curb & Gutter**	**Curb**	**PCR**
0	0	0	0	NO CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths

NOTE: GPS DATA WAS NOT COLLECTED IN CYCLE-4 FOR THIS ROUTE.

Fredericksburg and Spotsylvania
National Military Park

Section 8
Parkwide / Route Maintenance
Features Summaries

FRSP: PARKWIDE MAINTENANCE FEATURES SUMMARY

Notice: Drop Inlets along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that lack a BIP assigned Structure Number along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that have a BIP assigned Structure Number along ARAN-driven routes were inventoried by RIP. Culverts and Drop Inlets that are associated with Manually Rated Routes and Paved Parking Areas are included in the Cycle 4 counts. To view the Cycle 3 culvert and drop inlet inventory, please refer to the Cycle 3 RIP Report.

FEATURE	LINEAR FEET	COUNT
BARRIER	723	--
BOLLARD	127	--
BRIDGE	--	3
CABLE	0	--
CATTLE GUARD	--	0
CULVERT	--	7
CURB	850	--
DROP INLET	--	18
FIRE HYDRANT	--	5
GATE	--	10
GUARD/GUIDE RAIL	0	--
GUARD/GUIDE WALL	723	--
INTERSECTION	--	139
LOW WATER CROSSING	0	0
MILE MARKER	--	0
OVERPASS	--	0
OVERHEAD SIGN	--	0
PARK BOUNDARY	--	3
PAVED DITCH	4,435	--
PULLOUT	--	15
RAILROAD CROSSING	--	0
RETAINING WALL	0	0
SIGN	--	271
STATE BOUNDARY	--	0
TEMPORARY BARRIER	0	--
TRAFFIC LIGHT	--	0
TUNNEL	0	0
TURNOUT	0	--

FRSP: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0010 LEE DRIVE	ROUTE 0011 GRANT DRIVE WEST	ROUTE 0012 HILL-EWELL DRIVE	ROUTE 0013 MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE	ROUTE 0014 HOOKER DRIVE	ROUTE 0015 BERRY - PAXTON DRIVE	UNIT
BARRIER	0	100	164	391	0	0	LINEAR FEET
BOLLARD	0	100	0	0	0	0	LINEAR FEET
BRIDGE	0	0	1	2	0	0	EACH
CABLE	0	0	0	0	0	0	LINEAR FEET
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	0	0	0	0	0	0	EACH
CURB	74	296	0	32	0	0	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	0	0	0	0	0	EACH
GATE	1	1	0	2	0	0	EACH
GUARD/GUIDE RAIL	0	0	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	100	164	391	0	0	LINEAR FEET
INTERSECTION	17	8	15	30	6	4	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	0	EACH
OVERHEAD SIGN	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	1	0	0	1	0	0	EACH
PAVED DITCH	2,265	37	1,325	808	0	0	LINEAR FEET
PULLOUT	4	1	3	6	0	1	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	LINEAR FEET
SIGN	55	21	26	73	13	5	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	LINEAR FEET
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Drop Inlets along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that lack a BIP assigned Structure Number along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that have a BIP assigned Structure Number along ARAN-driven routes were inventoried by RIP. To view the Cycle 3 culvert and drop inlet inventory for ARAN-driven routes, please refer to the Cycle 3 RIP Report.

FRSP: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0016 JACKSON TRAIL EAST	ROUTE 0018 SLOCUM DRIVE	ROUTE 0019 ANDERSON DRIVE	ROUTE 0020 GORDON DRIVE	ROUTE 0022 BURNSIDE DRIVE	ROUTE 0402A QUARTERS 2 ACCESS ROAD	UNIT
BARRIER	0	0	0	26	0	0	LINEAR FEET
BOLLARD	0	0	0	26	0	0	LINEAR FEET
BRIDGE	0	0	0	0	0	0	EACH
CABLE	0	0	0	0	0	0	LINEAR FEET
CATTLE GUARD	0	0	0	0	0	0	EACH
CULVERT	0	0	0	0	0	0	EACH
CURB	0	0	0	0	348	0	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	0	0	0	0	0	EACH
GATE	0	1	0	0	1	0	EACH
GUARD/GUIDE RAIL	0	0	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	26	0	0	LINEAR FEET
INTERSECTION	5	5	4	8	8	6	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	0	LINEAR FEET
MILE MARKER	0	0	0	0	0	0	EACH
OVERHEAD SIGN	0	0	0	0	0	0	EACH
OVERPASS	0	0	0	0	0	0	EACH
PARK BOUNDARY	0	0	0	0	0	0	EACH
PAVED DITCH	0	0	0	0	0	0	LINEAR FEET
PULLOUT	0	0	0	0	0	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	LINEAR FEET
SIGN	6	7	2	12	23	1	EACH
STATE BOUNDARY	0	0	0	0	0	0	EACH
TEMPORARY BARRIER	0	0	0	0	0	0	LINEAR FEET
TRAFFIC LIGHT	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	EACH
TUNNEL	0	0	0	0	0	0	LINEAR FEET
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Drop Inlets along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that lack a BIP assigned Structure Number along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that have a BIP assigned Structure Number along ARAN-driven routes were inventoried by RIP. To view the Cycle 3 culvert and drop inlet inventory for ARAN-driven routes, please refer to the Cycle 3 RIP Report.

FRSP: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0403 RANGER HEADQUARTERS ACCESS ROAD	ROUTE 0405 RANGER LANE	ROUTE 0500 CHATHAM LANE	ROUTE 0503A WILLIS HILL ROAD		UNIT
BARRIER	0	0	0	42		LINEAR FEET
BOLLARD	0	0	0	0		LINEAR FEET
BRIDGE	0	0	0	0		EACH
CABLE	0	0	0	0		LINEAR FEET
CATTLE GUARD	0	0	0	0		EACH
CULVERT	0	0	0	0		EACH
CURB	0	0	100	0		LINEAR FEET
DROP INLET	0	0	0	0		EACH
FIRE HYDRANT	0	2	1	1		EACH
GATE	0	0	1	1		EACH
GUARD/GUIDE RAIL	0	0	0	0		LINEAR FEET
GUARD/GUIDE WALL	0	0	0	42		LINEAR FEET
INTERSECTION	5	5	6	7		EACH
LOW WATER CROSSING	0	0	0	0		EACH
LOW WATER CROSSING	0	0	0	0		LINEAR FEET
MILE MARKER	0	0	0	0		EACH
OVERHEAD SIGN	0	0	0	0		EACH
OVERPASS	0	0	0	0		EACH
PARK BOUNDARY	0	0	1	0		EACH
PAVED DITCH	0	0	0	0		LINEAR FEET
PULLOUT	0	0	0	0		EACH
RAILROAD CROSSING	0	0	0	0		EACH
RETAINING WALL	0	0	0	0		EACH
RETAINING WALL	0	0	0	0		LINEAR FEET
SIGN	4	2	18	3		EACH
STATE BOUNDARY	0	0	0	0		EACH
TEMPORARY BARRIER	0	0	0	0		LINEAR FEET
TRAFFIC LIGHT	0	0	0	0		EACH
TUNNEL	0	0	0	0		EACH
TUNNEL	0	0	0	0		LINEAR FEET
TURNOUT	0	0	0	0		LINEAR FEET

Notice: Drop Inlets along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that lack a BIP assigned Structure Number along ARAN-driven routes were NOT marked by NPS nor were they inventoried by RIP. Culverts that have a BIP assigned Structure Number along ARAN-driven routes were inventoried by RIP. To view the Cycle 3 culvert and drop inlet inventory for ARAN-driven routes, please refer to the Cycle 3 RIP Report.

FRSP: STRUCTURE LIST

ROUTE NUMBER	FUNCTIONAL CLASS	MILEPOST START	MILEPOST END	FEATURE	STRUCTURE NUMBER
0012	1	1.979	1.99	BRIDGE	4370-003
0013	1	2.055	2.066	BRIDGE	4370-001
0013	1	2.544	2.558	BRIDGE	4370-002

Fredericksburg and Spotsylvania
National Military Park

Section 9
Park Route Maintenance Features
Road Logs

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: LEE DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 1 (LAFAYETTE BOULEVARD)
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (STATE ROUTE 1 (LAFAYETTE BOULEVARD) / NON NPS)
0.000	0.000	PARK BOUNDARY	N/A	
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 1 (LAFAYETTE BOULEVARD) / NON NPS)
0.004	0.012	PAVED DITCH	RIGHT	
0.012	0.030	PAVED DITCH	RIGHT	
0.019	0.019	SIGN	RIGHT	REGULATORY, STOP
0.021	0.021	SIGN	RIGHT	WARNING, STOP AHEAD
0.047	0.047	SIGN	RIGHT	REGULATORY, STOP
0.049	0.049	INTERSECTION	LEFT	ROUTE 0010 (LEE DRIVE) SPUR
0.056	0.171	PAVED DITCH	RIGHT	
0.058	0.058	SIGN	RIGHT	WARNING, STOP AHEAD
0.073	0.073	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.073	0.073	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.075	0.075	SIGN	RIGHT	GUIDE, FREDERICKSBURG BATTLEFIELD 0.6 VISITOR CENTER CHANCELLORSVILLE BATTLEFIELD 10 SPOTSYLVANIA BATTLEFIE
0.091	0.091	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.091	0.091	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.109	0.109	SIGN	RIGHT	GUIDE, PARK WATCH
0.109	0.109	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.169	0.169	SIGN	RIGHT	GUIDE, LEE'S HILL
0.171	0.179	CURB	RIGHT	
0.191	0.191	INTERSECTION	RIGHT	ROUTE 0905 (LEE DRIVE PARKING 1 (LEE HILL))
0.207	0.213	CURB	RIGHT	
0.325	0.325	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.325	0.325	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.364	0.364	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
0.382	0.483	PAVED DITCH	RIGHT	
0.402	0.402	SIGN	RIGHT	REGULATORY, RADAR ENFORCED

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: LEE DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.402	0.402	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.471	0.471	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.486	0.523	PAVED DITCH	RIGHT	
0.662	0.662	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.673	0.673	SIGN	RIGHT	GUIDE, HOWISON HILL
0.686	0.686	INTERSECTION	RIGHT	ROUTE 0906 (LEE DRIVE PARKING 2 (HOWINSON HILL))
0.715	0.715	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.719	0.787	PAVED DITCH	RIGHT	
0.804	0.836	PAVED DITCH	RIGHT	
0.853	0.853	INTERSECTION	RIGHT	ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD)
1.025	1.025	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
1.025	1.025	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
1.027	1.027	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
1.027	1.027	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
1.089	1.089	SIGN	RIGHT	REGULATORY, REDUCED SPEED AHEAD
1.453	1.453	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.501	1.501	SIGN	LEFT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
1.501	1.501	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
1.502	1.502	INTERSECTION	LEFT	ROUTE 0910A (PICKET CIRCLE PARKING A)
1.505	1.525	PULLOUT	RIGHT	
1.507	1.524	PULLOUT	LEFT	
1.547	1.547	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.957	1.957	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
1.957	1.957	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
2.474	2.474	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
2.493	2.493	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
2.493	2.493	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
2.496	2.496	SIGN	RIGHT	WARNING, STOP AHEAD
2.511	2.511	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
2.511	2.511	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: LEE DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.590	2.590	SIGN	RIGHT	REGULATORY, STOP
2.596	2.596	INTERSECTION	LEFT	PAVED ROUTE (LANSDOWNE ROAD / NON NPS)
2.596	2.596	INTERSECTION	RIGHT	PAVED ROUTE (LANSDOWNE ROAD / NON NPS)
2.602	2.602	SIGN	RIGHT	REGULATORY, STOP
2.604	2.604	SIGN	N/A	GUIDE, AREA CLOSED DO NOT ENTER
2.604	2.604	GATE	N/A	
2.609	2.622	PULLOUT	RIGHT	
2.614	2.614	INTERSECTION	LEFT	ROUTE 0933 (LEE DRIVE PARKING 6 (LANSDOWNE ENTRANCE))
2.627	2.627	SIGN	RIGHT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
2.645	2.645	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
2.645	2.645	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
2.663	2.663	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
2.663	2.663	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
3.210	3.210	INTERSECTION	LEFT	ROUTE 0932A (LEE DRIVE PARKING 5A (BERNARD'S CABIN))
3.210	3.210	INTERSECTION	RIGHT	ROUTE 0932B (LEE DRIVE PARKING 5B (BERNARD'S CABIN))
3.243	3.243	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
3.563	3.613	PAVED DITCH	LEFT	
4.134	4.134	SIGN	RIGHT	GUIDE, UNION BREAKTHROUGH
4.145	4.145	INTERSECTION	LEFT	ROUTE 0931 (LEE DRIVE PARKING 4 (MEADE MONUMENT))
4.390	4.390	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
4.390	4.390	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
4.479	4.501	PULLOUT	LEFT	
4.648	4.648	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
4.649	4.649	SIGN	RIGHT	GUIDE, PROSPECT HILL
4.658	4.658	INTERSECTION	RIGHT	ROUTE 0907 (LEE DRIVE PARKING 3 (PROSPECT HILL))
4.678	4.678	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
4.678	4.678	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
4.683	4.683	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
4.690	4.690	INTERSECTION	RIGHT	ROUTE 0907 (LEE DRIVE PARKING 3 (PROSPECT HILL))
4.690	4.690	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: LEE DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.690	4.690	INTERSECTION	N/A	DEAD END
4.690	4.690	ROUTE END	N/A	TO ROUTE 0907 (LEE DRIVE PARKING 3 (PROSPECT HILL)) ON RIGHT

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: GRANT DRIVE WEST

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 613 (BROCK ROAD)
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (BROCK ROAD / NON NPS)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (BROCK ROAD / NON NPS)
0.008	0.008	SIGN	RIGHT	REGULATORY, STOP
0.035	0.035	SIGN	RIGHT	GUIDE, PLEASE PACK OUT YOUR TRASH
0.035	0.035	SIGN	RIGHT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
0.035	0.035	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.042	0.042	GATE	N/A	
0.042	0.042	SIGN	N/A	GUIDE, PARK WATCH
0.045	0.045	SIGN	RIGHT	GUIDE, SPOTSYLVANIA HISTORY LOOP TRAIL
0.064	0.064	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.073	0.073	SIGN	RIGHT	GUIDE, 1 SPOTSYLVANIA BATTLEFIELD
0.073	0.073	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.084	0.084	INTERSECTION	LEFT	ROUTE 0912 (SPOTSYLVANIA EXHIBIT PARKING)
0.102	0.102	SIGN	LEFT	GUIDE, BATTLEFIELD EXHIBITS INFORMATION
0.102	0.102	SIGN	RIGHT	GUIDE, BATTLEFIELD EXHIBITS INFORMATION
0.117	0.117	INTERSECTION	LEFT	ROUTE 0912 (SPOTSYLVANIA EXHIBIT PARKING)
0.118	0.118	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.118	0.118	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.123	0.142	GUARD/GUIDE WALL	LEFT	
0.132	0.132	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.132	0.132	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.132	0.132	SIGN	RIGHT	GUIDE, PLEASE PACK OUT YOUR TRASH
0.136	0.136	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.700	0.700	SIGN	RIGHT	GUIDE, UPTON'S ROAD
0.725	0.725	INTERSECTION	RIGHT	ROUTE 0938 (UPTON'S ATTACK PARKING)
0.966	0.966	SIGN	LEFT	GUIDE, BLOODY ANGLE
0.967	0.974	PAVED DITCH	RIGHT	
0.984	0.984	INTERSECTION	RIGHT	ROUTE 0921AZ (BLOODY ANGLE PARKING 1)
0.984	0.984	INTERSECTION	LEFT	ROUTE 0921BZ (BLOODY ANGLE BUS PARKING)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: GRANT DRIVE WEST

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.997	1.053	CURB	LEFT	
1.010	1.010	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.012	1.012	SIGN	LEFT	GUIDE, BLOODY ANGLE
1.050	1.057	PULLOUT	LEFT	
1.060	1.060	INTERSECTION	N/A	ROUTE 0019 (ANDERSON DRIVE)
1.060	1.060	ROUTE END	N/A	TO ROUTE 0019 (ANDERSON DRIVE) ON RIGHT

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0012: HILL-EWELL DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 621 (ORANGE PLANK ROAD)
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (LONGSTREET DRIVE / NON NPS)
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 621 (ORANGE PLANK ROAD) / NON NPS)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 621 (ORANGE PLANK ROAD) / NON NPS)
0.009	0.009	SIGN	RIGHT	REGULATORY, STOP
0.017	0.017	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.019	0.019	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.019	0.019	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.022	0.022	SIGN	RIGHT	GUIDE, VIRGINIA CIVIL WAR TRAILS
0.022	0.022	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.024	0.044	PULLOUT	LEFT	
0.039	0.039	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.039	0.039	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.058	0.058	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.320	0.320	INTERSECTION	LEFT	ROUTE 0939 (WIDOW TAP FARM FIELD)
0.340	0.340	SIGN	RIGHT	GUIDE, TAPP FIELD
0.430	0.442	PAVED DITCH	RIGHT	
0.488	0.528	PAVED DITCH	RIGHT	
1.060	1.077	PAVED DITCH	RIGHT	
1.213	1.275	PAVED DITCH	RIGHT	
1.480	1.480	INTERSECTION	LEFT	ROUTE 0923 (CHEWNING FARM PARKING)
1.495	1.495	INTERSECTION	LEFT	UNPAVED ROUTE
1.522	1.522	INTERSECTION	LEFT	UNPAVED ROUTE
1.534	1.595	PAVED DITCH	RIGHT	
1.977	1.993	GUARD/GUIDE WALL	RIGHT	
1.979	1.990	BRIDGE	N/A	4370-003 (WILDERNESS RUN BRIDGE)
1.979	1.994	GUARD/GUIDE WALL	LEFT	
1.998	1.998	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
2.215	2.215	INTERSECTION	RIGHT	PAVED ROUTE (GRANT COURT / LEE DRIVE / NON NPS)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0012: HILL-EWELL DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.216	2.216	SIGN	RIGHT	GUIDE, LEE DR
2.268	2.268	SIGN	RIGHT	GUIDE, ENTERING SPOTSYLVANIA COUNTY (ESTABLISHED 1721)
2.366	2.366	INTERSECTION	LEFT	ROUTE 0924 (WADSWORTH'S DIVISION)
2.389	2.389	INTERSECTION	LEFT	UNPAVED ROUTE (GENERAL JENKINS DRIVE / NON NPS)
2.532	2.532	INTERSECTION	LEFT	ROUTE 0925 (HIGGERSON FARM)
2.555	2.555	SIGN	RIGHT	GUIDE, HIGGERSON FARM
2.695	2.695	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
2.710	2.710	INTERSECTION	RIGHT	ROUTE 0926 (WILDERNESS BATTLE PICNIC PARKING)
2.711	2.711	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
2.714	2.773	PAVED DITCH	RIGHT	
2.744	2.744	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
3.231	3.257	PULLOUT	LEFT	
3.297	3.297	SIGN	RIGHT	GUIDE, PARK WATCH
3.297	3.297	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
3.309	3.309	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
3.309	3.309	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
3.316	3.316	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
3.316	3.316	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
3.320	3.334	PULLOUT	LEFT	
3.321	3.321	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
3.323	3.323	SIGN	LEFT	GUIDE, SAUNDERS FIELD
3.331	3.331	INTERSECTION	RIGHT	ROUTE 0936 (SAUNDERS FIELD PARKING)
3.350	3.350	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 20 (CONSTITUTION HIGHWAY) / NON NPS)
3.350	3.350	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 20 (CONSTITUTION HIGHWAY) / NON NPS)
3.350	3.350	SIGN	RIGHT	REGULATORY, STOP
3.350	3.350	ROUTE END	N/A	TO STATE ROUTE 20 (CONSTITUTION HIGHWAY)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 3 (GERMANNA HIGHWAY AND PLANK ROAD)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD) / NON NPS)
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD) / NON NPS) CUT-THRU
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD) / NON NPS)
0.000	0.000	PARK BOUNDARY	N/A	
0.004	0.010	CURB	RIGHT	
0.005	0.005	SIGN	RIGHT	REGULATORY, ONE WAY
0.005	0.005	SIGN	RIGHT	REGULATORY, STOP
0.006	0.006	SIGN	LEFT	REGULATORY, ONE WAY
0.009	0.009	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.013	0.013	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD) / NON NPS) SPUR
0.023	0.023	SIGN	RIGHT	GUIDE, ENTERING CHANCELLORSVILLE BATTLEFIELD MCLAWS DRIVE
0.032	0.032	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.032	0.032	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.048	0.048	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.048	0.048	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.065	0.065	SIGN	RIGHT	GUIDE, PARK WATCH
0.065	0.065	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.090	0.104	PULLOUT	RIGHT	
0.136	0.136	INTERSECTION	LEFT	UNPAVED ROUTE
0.282	0.282	SIGN	RIGHT	GUIDE, MCLAWS'S LINE
0.292	0.292	INTERSECTION	RIGHT	UNPAVED ROUTE (MCLAW'S LINE ACCESS)
0.298	0.298	INTERSECTION	LEFT	PAVED ROUTE (MCLAWS LANE / NON NPS)
0.298	0.298	SIGN	RIGHT	GUIDE, MCLAWS LN
0.299	0.299	SIGN	LEFT	GUIDE, MCLAWS LN
0.521	0.521	INTERSECTION	LEFT	PAVED ROUTE (PEMWOOD LANE)
0.673	0.673	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.690	0.690	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.690	0.690	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.707	0.707	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.707	0.707	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.718	0.718	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.719	0.719	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.724	0.724	SIGN	RIGHT	REGULATORY, STOP
0.729	0.729	INTERSECTION	LEFT	PAVED ROUTE (OLD PLANK ROAD / NON NPS)
0.729	0.729	INTERSECTION	RIGHT	PAVED ROUTE (OLD PLANK ROAD / NON NPS)
0.739	0.739	SIGN	RIGHT	REGULATORY, STOP
0.767	0.767	SIGN	RIGHT	GUIDE, LEE - JACKSON BIVOUAC
0.779	0.779	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.779	0.779	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.785	0.785	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.785	0.785	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.792	0.792	INTERSECTION	LEFT	UNPAVED ROUTE (OLD VIRGINIA DRIVE / NON NPS)
0.794	0.794	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.814	0.833	PULLOUT	RIGHT	
0.816	0.816	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
1.169	1.169	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
1.520	1.520	SIGN	RIGHT	GUIDE, MAURY BIRTHPLACE SITE
1.542	1.542	INTERSECTION	RIGHT	ROUTE 0946 (MAURY BIRTHPLACE TRAIL PARKING)
1.791	1.806	PAVED DITCH	LEFT	
1.812	1.880	PAVED DITCH	LEFT	
1.885	1.955	PAVED DITCH	LEFT	
1.900	1.916	PULLOUT	RIGHT	
2.051	2.070	GUARD/GUIDE WALL	RIGHT	
2.052	2.070	GUARD/GUIDE WALL	LEFT	
2.055	2.066	BRIDGE	N/A	4370-001 (SCOTT'S RUN BRIDGE #1)
2.081	2.081	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.089	2.089	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
2.102	2.102	INTERSECTION	LEFT	ROUTE 0016 (JACKSON TRAIL EAST)
2.158	2.158	SIGN	RIGHT	REGULATORY, YIELD
2.160	2.160	INTERSECTION	LEFT	ROUTE 0016 (JACKSON TRAIL EAST) SPUR
2.182	2.182	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
2.183	2.183	GATE	N/A	
2.540	2.558	GUARD/GUIDE WALL	LEFT	
2.541	2.560	GUARD/GUIDE WALL	RIGHT	
2.544	2.558	BRIDGE	N/A	4370-002 (SCOTT'S RUN BRIDGE #2)
2.942	2.942	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
2.960	2.960	INTERSECTION	RIGHT	ROUTE 0018 (SLOCUM DRIVE)
2.998	2.998	INTERSECTION	RIGHT	ROUTE 0018 (SLOCUM DRIVE) SPUR
3.021	3.021	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
3.147	3.147	INTERSECTION	RIGHT	ROUTE 0015 (BERRY - PAXTON DRIVE)
3.194	3.194	SIGN	LEFT	GUIDE, BATTLEFIELD TOUR
3.202	3.202	INTERSECTION	RIGHT	ROUTE 0015 (BERRY - PAXTON DRIVE) SPUR
3.271	3.271	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
3.315	3.315	INTERSECTION	LEFT	ROUTE 0940 (HAZEL GROVE PARKING)
3.348	3.348	SIGN	LEFT	GUIDE, HAZEL GROVE
3.350	3.350	SIGN	RIGHT	GUIDE, CHANCELLORSVILLE BATTLEFIELD HAZEL GROVE
3.653	3.670	PULLOUT	LEFT	
3.722	3.722	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
3.739	3.739	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
3.739	3.739	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
3.757	3.757	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
3.757	3.757	SIGN	RIGHT	GUIDE, FREDERICKSBURG BATTLEFIELD 11 MI WILDERNESS BATTLEFIELD 5 MI CHANCELLORSVILLE VISITOR CENTER .1 MI
3.757	3.757	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
3.770	3.770	GATE	N/A	
3.770	3.770	SIGN	N/A	GUIDE, AREA CLOSED DO NOT ENTER

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE

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FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
3.778	3.778	SIGN	RIGHT	REGULATORY, 3
3.778	3.778	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
3.778	3.778	SIGN	RIGHT	REGULATORY, ONE WAY
3.782	3.782	SIGN	RIGHT	REGULATORY, STOP
3.786	3.786	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD (EASTBOUND)) / NON NPS)
3.786	3.786	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD (EASTBOUND)) / NON NPS)
3.799	3.799	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD (WESTBOUND)) / NON NPS)
3.799	3.799	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 3 (GERMANNA HIGHWAY / PLANK ROAD (WESTBOUND)) / NON NPS)
3.801	3.801	SIGN	LEFT	REGULATORY, 3
3.801	3.801	SIGN	LEFT	REGULATORY, GRAPHIC SIGN, NO TEXT
3.801	3.801	SIGN	LEFT	REGULATORY, ONE WAY
3.804	3.804	SIGN	RIGHT	REGULATORY, STOP
3.811	3.811	SIGN	RIGHT	GUIDE, CHANCELLORSVILLE VISITOR CENTER
3.819	3.819	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
3.819	3.819	SIGN	RIGHT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
3.837	3.837	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
3.837	3.837	SIGN	RIGHT	GUIDE, CHANCELLORSVILLE BATTLEFIELD VISITOR CENTER
3.873	3.873	INTERSECTION	RIGHT	ROUTE 0914 (CHANCELLORSVILLE VISITOR CENTER)
3.884	3.884	INTERSECTION	RIGHT	ROUTE 0914 (CHANCELLORSVILLE VISITOR CENTER)
3.889	3.889	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
3.900	3.900	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
3.900	3.900	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
4.072	4.690	ONE-WAY	N/A	
4.072	4.072	SIGN	RIGHT	GUIDE, RANGER LN
4.072	4.072	INTERSECTION	LEFT	ROUTE 0405 (RANGER LANE)
4.085	4.085	SIGN	RIGHT	REGULATORY, BEGIN ONE WAY
4.085	4.085	SIGN	RIGHT	WARNING, CAUTION
4.134	4.146	PULLOUT	RIGHT	

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.143	4.143	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
4.622	4.622	SIGN	RIGHT	GUIDE, BULLOCK HOUSE SITE
4.630	4.659	PULLOUT	RIGHT	
4.635	4.635	SIGN	RIGHT	GUIDE, BULLOCK HOUSE SITE PARKING
4.635	4.635	SIGN	RIGHT	REGULATORY, ONE WAY
4.690	4.690	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
4.690	4.690	SIGN	RIGHT	REGULATORY, STOP
4.690	4.690	INTERSECTION	N/A	UNPAVED ROUTE
4.690	4.690	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 610 (ELYS FORD ROAD) / NON NPS)
4.690	4.690	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 610 (ELYS FORD ROAD) / NON NPS)
4.690	4.690	ROUTE END	N/A	TO STATE ROUTE 610 (ELYS FORD ROAD)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0014: HOOKER DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 610 (ELYS FORD ROAD)
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 610 (ELYS FORD ROAD) / NON NPS)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 610 (ELYS FORD ROAD) / NON NPS)
0.009	0.009	SIGN	RIGHT	REGULATORY, STOP
0.018	0.018	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.018	0.018	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.036	0.036	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.036	0.036	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.057	0.057	INTERSECTION	RIGHT	ROUTE 0928 (CHANCELLORSVILLE MAINTENANCE PARKING)
0.063	0.063	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.093	0.093	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.140	0.140	INTERSECTION	LEFT	UNPAVED ROUTE
0.476	0.476	SIGN	RIGHT	REGULATORY, COMMERCIAL VEHICLES PROHIBITED
0.493	0.493	SIGN	RIGHT	REGULATORY, NO NIGHT PARKING
0.493	0.493	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.511	0.511	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.511	0.511	SIGN	RIGHT	REGULATORY, RADAR ENFORCED
0.522	0.522	SIGN	RIGHT	REGULATORY, STOP
0.530	0.530	INTERSECTION	LEFT	PAVED ROUTE (WILES DRIVE / NON NPS)
0.530	0.530	INTERSECTION	RIGHT	PAVED ROUTE (WILES DRIVE / NON NPS)
0.530	0.530	ROUTE END	N/A	TO STATE ROUTE 618 (WILES DRIVE)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0015: BERRY - PAXTON DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 3.15
0.000	0.000	INTERSECTION	N/A	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.008	0.008	SIGN	RIGHT	REGULATORY, YIELD
0.022	0.022	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.027	0.027	INTERSECTION	LEFT	ROUTE 0015 (BERRY - PAXTON DRIVE) SPUR
0.046	0.046	SIGN	RIGHT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
0.412	0.412	SIGN	RIGHT	GUIDE, FAIRVIEW
0.424	0.443	PULLOUT	RIGHT	
0.434	0.434	SIGN	RIGHT	REGULATORY, BUS PARKING ONLY
0.450	0.450	INTERSECTION	N/A	ROUTE 0929 (FAIRVIEW PARKING)
0.450	0.450	ROUTE END	N/A	TO ROUTE 0929 (FAIRVIEW PARKING)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0016: JACKSON TRAIL EAST

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 2.10
0.000	0.000	INTERSECTION	N/A	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.041	0.041	SIGN	RIGHT	REGULATORY, YIELD
0.048	0.048	INTERSECTION	RIGHT	ROUTE 0016 (JACKSON TRAIL EAST) SPUR
0.063	0.063	SIGN	LEFT	GUIDE, CATHARINE FURNACE RUINS
0.063	0.063	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.069	0.069	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.072	0.072	INTERSECTION	LEFT	ROUTE 0920 (CATHARINE FURNACE PARKING)
0.080	0.080	INTERSECTION	N/A	ROUTE 0016 (JACKSON TRAIL EAST) UNPAVED SECTION
0.080	0.080	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR VISITORS FOLLOWING TOUR MARKERS SHOULD TURN AROUND
0.080	0.080	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.080	0.080	ROUTE END	N/A	TO STATE ROUTE 613 (BROCK ROAD)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0018: SLOCUM DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 2.96
0.000	0.000	INTERSECTION	N/A	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.054	0.054	INTERSECTION	LEFT	ROUTE 0018 (SLOCUM DRIVE) SPUR
0.054	0.800	ONE-WAY	N/A	
0.066	0.066	SIGN	RIGHT	REGULATORY, AREA CLOSED SUNSET TO SUNRISE
0.074	0.074	SIGN	RIGHT	REGULATORY, BEGIN ONE WAY TRAFFIC
0.221	0.221	SIGN	RIGHT	GUIDE, SLOCUM'S LINE
0.768	0.768	GATE	N/A	
0.782	0.782	SIGN	RIGHT	REGULATORY, WRONG WAY
0.791	0.791	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.792	0.792	SIGN	LEFT	REGULATORY, DO NOT ENTER
0.796	0.796	SIGN	RIGHT	REGULATORY, STOP
0.800	0.800	INTERSECTION	LEFT	PAVED ROUTE (OLD PLANK ROAD / NON NPS)
0.800	0.800	INTERSECTION	RIGHT	PAVED ROUTE (OLD PLANK ROAD / NON NPS)
0.800	0.800	ROUTE END	N/A	TO OLD PLANK ROAD

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0019: ANDERSON DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM END OF ROUTE 0011 (GRANT DRIVE WEST)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0011 (GRANT DRIVE WEST)
0.255	0.255	SIGN	RIGHT	GUIDE, SAFETY
0.400	0.400	INTERSECTION	LEFT	ROUTE 0020 (GORDON DRIVE)
0.400	0.400	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.463	0.463	INTERSECTION	LEFT	ROUTE 0020 (GORDON DRIVE) SPUR
0.720	0.720	INTERSECTION	N/A	ROUTE 0913 (ANDERSON DRIVE PARKING)
0.720	0.720	ROUTE END	N/A	TO ROUTE 0913 (ANDERSON DRIVE PARKING)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0020: GORDON DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0019 (ANDERSON DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0019 (ANDERSON DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0019 (ANDERSON DRIVE)
0.012	0.012	SIGN	RIGHT	GUIDE, HARRISON HOUSE
0.020	0.020	INTERSECTION	RIGHT	ROUTE 0947 (HARRISON HOUSE PARKING)
0.031	0.036	GUARD/GUIDE WALL	RIGHT	
0.037	0.037	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.037	0.037	SIGN	RIGHT	REGULATORY, YIELD
0.041	0.041	INTERSECTION	RIGHT	ROUTE 0020 (GORDON DRIVE) SPUR
0.107	0.107	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.107	0.107	SIGN	RIGHT	GUIDE, MCCOULL HOUSE SITE
0.116	0.116	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.120	0.120	INTERSECTION	LEFT	ROUTE 0300 (MCCOULL HOUSE ROAD)
0.120	0.710	ONE-WAY	N/A	
0.137	0.137	SIGN	RIGHT	REGULATORY, BEGIN ONE WAY TRAFFIC
0.252	0.252	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.442	0.442	INTERSECTION	RIGHT	ROUTE 0944 (SALIENT TRENCHES PARKING)
0.648	0.648	SIGN	RIGHT	REGULATORY, KEEP RIGHT
0.659	0.659	SIGN	LEFT	GUIDE, EAST FACE OF SALIENT
0.688	0.688	INTERSECTION	LEFT	ROUTE 0937 (EAST ANGLE PARKING)
0.710	0.710	INTERSECTION	N/A	ROUTE 0022 (BURNSIDE DRIVE)
0.710	0.710	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.710	0.710	SIGN	RIGHT	GUIDE, BURNSIDE DRIVE
0.710	0.710	ROUTE END	N/A	TO ROUTE 0022 (BURNSIDE DRIVE) AND ROUTE 0937 (EAST ANGLE PARKING) ON LEFT

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0022: BURNSIDE DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM END ROUTE 0020 (GORDON DRIVE) AND ROUTE 0937 (EAST ANGLE PARKING) ON LEFT
0.000	0.000	INTERSECTION	N/A	ROUTE 0020 (GORDON DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0937 (EAST ANGLE PARKING)
0.000	1.110	ONE-WAY	N/A	
0.003	0.069	CURB	LEFT	
0.005	0.005	SIGN	RIGHT	GUIDE, BATTLEFIELD TOUR
0.005	0.005	SIGN	RIGHT	GUIDE, BURNSIDE DRIVE
0.032	0.032	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
0.069	0.069	INTERSECTION	LEFT	UNPAVED ROUTE
0.414	0.414	SIGN	LEFT	REGULATORY, ONE WAY
0.627	0.627	SIGN	RIGHT	GUIDE, HETH'S SALIENT
0.641	0.641	INTERSECTION	RIGHT	ROUTE 0945 (HETH'S SALIENT)
1.089	1.089	SIGN	LEFT	REGULATORY, WRONG WAY
1.093	1.093	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.100	1.100	SIGN	RIGHT	REGULATORY, WRONG WAY
1.101	1.101	GATE	N/A	
1.102	1.102	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.110	1.110	INTERSECTION	LEFT	UNPAVED ROUTE
1.312	1.312	SIGN	RIGHT	GUIDE, FREDERICKSBURG ROAD
1.361	1.361	SIGN	RIGHT	GUIDE, NO PARKING ON ROAD SHOULDERS
1.367	1.367	SIGN	RIGHT	GUIDE, END OF TOUR FREDERICKSBURG SPOTSYLVANIA COURT HOUSE
1.379	1.379	SIGN	RIGHT	GUIDE, ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY
1.379	1.379	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
1.386	1.386	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.386	1.386	SIGN	RIGHT	GUIDE, VIRGINIA CIVIL WAR TRAILS
1.388	1.388	SIGN	RIGHT	REGULATORY, STOP
1.390	1.390	SIGN	LEFT	REGULATORY, GRAPHIC SIGN, NO TEXT
1.390	1.390	SIGN	LEFT	REGULATORY, ONE WAY
1.390	1.390	SIGN	LEFT	REGULATORY, 208

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0022: BURNSIDE DRIVE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.390	1.390	SIGN	LEFT	GUIDE, COURTHOUSE RD
1.390	1.390	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 208 (COURTHOUSE ROAD) / NON NPS)
1.390	1.390	INTERSECTION	N/A	PAVED ROUTE (WILD TURKEY DRIVE / NON NPS)
1.390	1.390	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 208 (COURTHOUSE ROAD) / NON NPS)
1.390	1.390	SIGN	LEFT	REGULATORY, STOP
1.390	1.390	SIGN	LEFT	GUIDE, COURTHOUSE
1.390	1.390	ROUTE END	N/A	TO STATE ROUTE 208 (COURTHOUSE ROAD)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0402A: QUARTERS 2 ACCESS ROAD

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD) AT MP 0.01
0.000	0.000	INTERSECTION	LEFT	ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0403 (RANGER HEADQUARTERS ACCESS ROAD)
0.001	0.001	SIGN	RIGHT	REGULATORY, STOP
0.052	0.052	INTERSECTION	RIGHT	ROUTE 0402B (QUARTERS 2 ACCESS ROAD SPUR)
0.058	0.058	INTERSECTION	LEFT	ROUTE 0402A (QUARTERS 2 ACCESS ROAD)
0.090	0.090	INTERSECTION	LEFT	ROUTE 0402A (QUARTERS 2 ACCESS ROAD)
0.090	0.090	INTERSECTION	N/A	ROUTE 0402A (QUARTERS 2 ACCESS ROAD)
0.090	0.090	ROUTE END	N/A	TO END OF LOOP

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0403: RANGER HEADQUARTERS ACCESS ROAD

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (LEE DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (LEE DRIVE)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (LEE DRIVE)
0.004	0.004	SIGN	RIGHT	REGULATORY, STOP
0.010	0.010	INTERSECTION	RIGHT	ROUTE 0402A (QUARTERS 2 ACCESS ROAD)
0.013	0.013	SIGN	RIGHT	REGULATORY, AUTHORIZED VEHICLES ONLY
0.013	0.013	SIGN	RIGHT	GUIDE, 604 602
0.044	0.044	SIGN	RIGHT	GUIDE, VISITOR PARKING
0.049	0.049	INTERSECTION	LEFT	ROUTE 0908B (RANGER HEADQUARTERS EMPLOYEE PARKING)
0.060	0.060	INTERSECTION	N/A	ROUTE 0908A (RANGER HEADQUARTERS PARKING)
0.060	0.060	ROUTE END	N/A	TO ROUTE 0908A (RANGER HEADQUARTERS PARKING)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0405: RANGER LANE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE) AT MP 4.07
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (MCLAWS-FURNACE-SICKLES-STUART-BULLOCK DRIVE)
0.006	0.006	SIGN	RIGHT	REGULATORY, AUTHORIZED VEHICLES ONLY
0.007	0.007	SIGN	RIGHT	REGULATORY, STOP
0.017	0.017	INTERSECTION	RIGHT	UNPAVED ROUTE (WATER TOWER ACCESS)
0.059	0.059	FIRE HYDRANT	LEFT	
0.086	0.086	INTERSECTION	LEFT	ROUTE 0927 (WESTERN RANGER OFFICE PARKING)
0.099	0.099	FIRE HYDRANT	LEFT	
0.110	0.110	INTERSECTION	N/A	DEAD END
0.110	0.110	ROUTE END	N/A	TO END OF PAVEMENT

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0500: CHATHAM LANE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE ROUTE 218 (CHATHAM HEIGHTS ROAD)
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (STATE ROUTE 218 (CHATHAM HEIGHTS ROAD) / NON NPS)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (STATE ROUTE 218 (CHATHAM HEIGHTS ROAD) / NON NPS)
0.000	0.000	PARK BOUNDARY	N/A	
0.003	0.003	SIGN	LEFT	GUIDE, CHATHAM HEIGHTS RD
0.004	0.006	CURB-AND-GUTTER	RIGHT	
0.004	0.007	CURB-AND-GUTTER	LEFT	
0.004	0.004	SIGN	RIGHT	GUIDE, CHATHAM HEIGHTS RD
0.006	0.006	SIGN	RIGHT	REGULATORY, STOP
0.075	0.075	INTERSECTION	RIGHT	PAVED ROUTE (PRATT STREET / NON NPS)
0.079	0.079	FIRE HYDRANT	RIGHT	
0.079	0.079	SIGN	RIGHT	GUIDE, CHATHAM LN
0.079	0.079	SIGN	RIGHT	GUIDE, PRATT
0.080	0.080	SIGN	LEFT	GUIDE, PRATT
0.146	0.146	SIGN	RIGHT	GUIDE, CHATHAM MANOR
0.146	0.146	SIGN	RIGHT	REGULATORY, FREDERICKSBURG BATTLEFIELD 2
0.146	0.146	SIGN	RIGHT	GUIDE, FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATI
0.177	0.177	SIGN	RIGHT	GUIDE, PARK WATCH
0.178	0.178	GATE	N/A	DIAGONAL AND HORIZONTAL BAR
0.178	0.178	SIGN	LEFT	GUIDE, CHATHAM OPEN DAILY 9:00 AM - 4:30 PM
0.178	0.178	SIGN	N/A	GUIDE, DO NOT BLOCK GATE
0.178	0.178	SIGN	N/A	REGULATORY, STOP
0.197	0.211	CURB	RIGHT	
0.198	0.198	INTERSECTION	LEFT	ROUTE 0903 (CHATHAM HOUSE ADMINISTRATIVE PARKING)
0.199	0.199	SIGN	RIGHT	GUIDE, CARETAKER'S HOUSE
0.201	0.201	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.201	0.201	SIGN	LEFT	GUIDE, VISITOR PARKING
0.207	0.207	SIGN	RIGHT	GUIDE, EXCEPT BUSES-CAMPERS

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0500: CHATHAM LANE

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.207	0.207	SIGN	RIGHT	REGULATORY, DO NOT ENTER
0.213	0.213	INTERSECTION	RIGHT	ROUTE 0902 (CHATHAM LANE VISITOR PARKING)
0.220	0.220	INTERSECTION	N/A	ROUTE 0500 (CHATHAM LANE) UNPAVED SECTION
0.220	0.220	ROUTE END	N/A	TO STATE ROUTE 607 (RIVER ROAD)

FRSP: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0503A: WILLIS HILL ROAD

Notice: Notice: Culverts and drop inlets were NOT marked by NPS nor inventoried by RIP in Cycle 4, therefore no culverts or drop inlets are reported in any Road Log. Culverts and drop inlets were inventoried in paved parking areas and can be found in the Parking Lot Condition Rating Sheets (Section 7) and Parkwide Maintenance Features Summary (Section 8).

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM SUNKEN ROAD
0.000	0.000	INTERSECTION	LEFT	PAVED ROUTE (SUNKEN ROAD / NON NPS)
0.000	0.000	INTERSECTION	RIGHT	PAVED ROUTE (SUNKEN ROAD / NON NPS)
0.004	0.008	GUARD/GUIDE WALL	LEFT	
0.004	0.008	GUARD/GUIDE WALL	RIGHT	
0.005	0.005	SIGN	LEFT	GUIDE, MARTEN HEIGHTS TRAIL VISITOR CENTER
0.010	0.010	GATE	N/A	
0.010	0.010	SIGN	N/A	GUIDE, DO NOT BLOCK GATE
0.092	0.092	SIGN	LEFT	GUIDE, TRAIL
0.098	0.098	INTERSECTION	LEFT	ROUTE 0503B (WILLIS HILL ROAD SPUR)
0.100	0.100	INTERSECTION	RIGHT	ROUTE 0503A (WILLIS HILL ROAD)
0.127	0.127	FIRE HYDRANT	LEFT	
0.150	0.150	INTERSECTION	LEFT	ROUTE 0503A (WILLIS HILL ROAD)
0.150	0.150	INTERSECTION	N/A	ROUTE 0503B (WILLIS HILL ROAD SPUR)
0.150	0.150	INTERSECTION	RIGHT	ROUTE 0503A (WILLIS HILL ROAD)
0.150	0.150	ROUTE END	N/A	TO END OF LOOP

Fredericksburg and Spotsylvania National Military Park

Section 10
Appendix

APPENDIX A: GLOSSARY OF TERMS AND ABBREVIATIONS

TERM OR ABBREVIATION	DESCRIPTION OR DEFINITION
AADT	(Annual Average Daily Traffic) The estimate of typical daily traffic on a road segment for all days of the week over the period of one year.
CRS	Condition Rating Sheets. (Section 5)
Excellent	Excellent rating with an index value of 95 or greater
Fair	Fair rating with an index value from 61 to 84
Func. Class	Funtional Classification (see Route ID, Section 4)
Good	Good rating with an index value from 85 to 94
IRI	International Roughness Index
Lane Width	Width from road centerline to fogline, or from centerline to edge-of-pavement when no fogline exists
MRR	Manually Rated Route
N/A	Not Applicable
NC	Not Collected
Paved Width	Width from edge-of-pavement to edge-of-pavement
PCR	Pavement Condition Rating (Appendix B, Section 10)
Poor	Poor Rating with an index value of 60 or less
RCI	Roughness Condition Index
SADT	(Seasonal Annual Daily Traffic) The AADT adjusted to represent just the period of the year containing 80 percent of the total annual traffic.
SCR	Surface Condition Rating (Appendix B, Section 10)
Shoulder Width	Distance from fogline to hinge point, or if no fogline, from edge-of-pavement to hinge point.

APPENDIX B: DESCRIPTION OF RATING SYSTEM

A numerical roadway rating system is used to describe the overall condition of the paved roadways and paved parking areas. In this system, a numerical rating between 0 and 100 is ascribed to each 0.02 miles of road. This numerical rating is called a Pavement Condition Rating (PCR). A "perfect" road, newly constructed with no surface distresses and a smooth surface, would be assigned a PCR rating of 100. Based on the type, severity, and extent of surface distresses points are deducted from 100 to arrive at the final PCR.

Data is collected on the following distresses and conditions:

- **Alligator Cracking** - a series of interconnecting cracks resembling alligator skin or chicken wire, which can occur anywhere in the lane.
- **Longitudinal Cracking** - cracks which are parallel to the pavement centerline or asphalt lay-down direction.
- **Transverse Cracking** - cracks perpendicular to the pavement centerline.
- **Pothole (patch)** - a bowl-shaped hole in the pavement surface. May be patched or not.
- **Rutting** - surface depressions in the wheel paths.
- **Roughness** is collected as International Roughness Index (IRI) and is used in the PCR formula. Roughness is measured in inches of vertical displacement of the vehicle per mile traveled.

A Distress Rating Index value is calculated for each of the individual distresses at the 0.02 mile, or every 105.6 feet.

Calculation of Index Values

Note: Index values < 0 default to 0. Index values > 100 default to 100.
For all indices, a higher value indicates a better road condition, and a lower value indicates a poorer road condition.
All severity protocols are taken from the SHRP Distress Identification Manual.

Condition Ranges for all Indices

Excellent	>=95
Good	>=85 and <95
Fair	>60 and <85
Poor	<=60

Alligator Crack Index

AC_INDEX = 100 – 40 * [(%LOW / 70) + (%MED / 30) + (%HI / 10)]

Where :

The values %LOW, %MED and %HI describe the percent of the total WX measured area that is affected by alligator cracking of each severity level. These values range from ≥ 0 to ≤ 100.

%LOW = (Total square area WX measured low severity alligator cracking) / (Section length * WX measured lane width)

%MED = (Total square area WX measured medium severity alligator cracking) / (Section length * WX measured lane width)
%HI = (Total square area WX measured high severity alligator cracking) / (Section length * WX measured lane width)

The denominators 70, 30, and 10 are the maximum allowable extents for the numerator value in the same units. For example, low severity alligator cracking totaling 70% of the measured section area would alone fail that section of road for this index.

The threshold for failure for this index is AC_INDEX = 60.

Severity Levels:

Low severity alligator cracking describes an area of cracks with no or only a few connecting cracks; cracks are not spalled (cracked, broken, chipped, frayed along the cracks); pumping (water seepage from beneath the pavement through the cracks) is not evident. Any sealed alligator cracks are low severity alligator cracks, as long as the sealant is still in good condition. If the sealant has reopened, and the crack is visible and can be measured, the crack severity is assigned according to that measurement.

Medium severity alligator cracking describes an area of interconnected cracks forming a complete pattern; cracks may be slightly spalled; pumping is not evident.

High severity alligator cracking describes an area of moderately or severely spalled interconnected cracks forming a complete pattern; pieces may move when subjected to traffic; pumping may be evident.

Longitudinal Crack Index

LC_INDEX = 100 – 40 * [(%LOW / 350) + (%MED / 200) + (%HI / 75)]

Where:

The values %LOW, %MED and %HI describe the length of longitudinal cracking of each severity as a percent of the section length. These values are ≥ 0 and can exceed 100.

%LOW = (Total linear feet WX measured low severity longitudinal cracking) / (Section length in linear feet)
%MED = (Total linear feet WX measured medium severity longitudinal cracking) / (Section length in linear feet)
%HI = (Total linear feet WX measured high severity longitudinal cracking) / (Section length in linear feet)

The denominators 350, 200, and 75 are the maximum allowable extents for the numerator value in the same units. For example, medium severity longitudinal cracking with a total length that is 200% of the length of the section would alone fail that section of road for this index.

The threshold for failure for this index is LC_INDEX = 60.

Severity Levels:

Low severity longitudinal cracks have a mean width ≤ ¼”, or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity longitudinal cracks have a mean width > ¼” and ≤ ¾”.

High severity longitudinal cracks have a mean width > ¾”.

Transverse Crack Index

TC_INDEX = 100 – {[20 * ((LOW / 15.1) + (MED / 7.5))] + [40 * (HI / 1.9)]}

Where:

The values LOW, MED and HI describe a count of the total number of transverse cracks of each severity level, where one transverse crack unit is equal to the WX measured lane width. These values are ≥ 0.

LOW = (Total linear feet WX measured low severity transverse cracking) / (WX measured lane width)
MED = (Total linear feet WX measured medium severity transverse cracking) / (WX measured lane width)
HI = (Total linear feet WX measured high severity transverse cracking) / (WX measured lane width)

The denominators 15.1, 7.5, and 1.9 are the maximum allowable extents for the numerator value in the same units. For example, high severity transverse cracking with a total length that amounts to 1.9 times the WX measured lane width would alone fail that section of road for this index.

The threshold for failure for this index is TC_INDEX = 60.

Severity Levels:

Low severity transverse cracks have a mean width ≤ ¼", or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity transverse cracks have a mean width > ¼" and ≤ ¾".

High severity transverse cracks have a mean width > ¾".

Patching Index

PATCH_INDEX = 100 – 40 * (%PATCHING / 80)

Where:

The value %PATCHING describes the percent of the total WX measured area that is affected by patching. This value ranges from ≥ 0 to ≤ 100.

%PATCHING = (Total area WX measured patching) / (Section length * WX measured lane width)

The denominator 80 is the maximum allowable extent for the numerator value in the same units. Patching totaling 80% or more of the measured section area fails a section of road for this index.

The threshold for failure for this index is PATCH_INDEX = 60.

There are no severity levels for patching.

Rutting Index

RUT_INDEX = 100 – 40 * [(%LOW / 160) + (%MED / 80) + (%HI / 40)]

Where:

10 ARAN rut depth measurements are taken per full .02 section for each of 2 wheel paths (left and right), resulting in a total of 20 measurements taken for both wheel paths. The values %LOW, %MED and %HI describe the number of ARAN rut depth measurements of both wheel paths in the section whose values are of each severity level, calculated as a percentage of the total number of ARAN rut depth measurements taken for a single wheel path in the section. These values range from ≥ 0 to ≤ 200.

%LOW = (Total number of ARAN measured low severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)
%MED = (Total number of ARAN measured medium severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)
%HI = (Total number of ARAN measured high severity ruts in section for both wheel paths) / (Total number of ARAN rut measurements in section for a single wheel path)

The denominators 160, 80, and 40 are the maximum allowable extents for the numerator value in the same units. For example, low severity ruts recorded in 16 of the 20 total readings (or 160% of a full wheel path's worth of readings) for a full .02 section would fail that section for this index.

The threshold for failure for this index is RUT_INDEX = 60.

Severity Levels:

Ruts with an ARAN measured depth < 0.20" are not included in the distress calculations.

Low severity ruts have an ARAN measured depth ≥ 0.20" and ≤ 0.49".

Medium severity ruts have an ARAN measured depth ≥ 0.50" and ≤ 0.99".

High severity ruts have an ARAN measured depth ≥ 1.00".

Roughness Condition Index

RCI **= 32 * [5 * (2.718282 ^ (-0.0041 * AVG IRI))]**

Where:

The value AVG IRI describes the average value of the Left IRI and Right IRI measurements for the section. This value can range from approximately 40 to over 1000.

AVG IRI = (ARAN measured Left IRI + ARAN measured Right IRI) / 2

There is no applicable threshold for failure for this index.

NOTE: Collection of roughness data is dependent on the data collection vehicle traveling at a minimum speed of 12 mph. In the event that a route cannot be safely traveled at this minimum speed, and results in no roughness data, the SCR only will be calculated.

Surface Condition Rating Index

SCR = 100 - [(100 - AC_INDEX) + (100 - LC_INDEX) + (100 - TC_INDEX) + (100 - PATCH_INDEX) + (100 - RUT_INDEX)]

Where:

See above for determinations of AC_INDEX, LC_INDEX, TC_INDEX, PATCH_INDEX and RUT_INDEX.

The threshold for failure for this index is SCR = 60.

Pavement Condition Rating Index Asphaltic Concrete Pavement (AS)

PCR = (0.60 * SCR) + (0.40 * RCI)

Where:

See above for determinations of SCR and RCI.

The values 0.60 and 0.40 function as weights within the formula.

If SCR equals zero (which means that the road surface condition is very poor), then the formula simply reduces to: PCR = 0.40 * RCI.

If RCI equals zero (which means that this value was not available for some reason), then the formula becomes: PCR = SCR.

The threshold for failure for this index is PCR = 60.

Pavement Condition Rating Index Portland Cement Concrete Pavement (CO)

Concrete PCR = -0.0012(IRI^2)+0.0499(IRI)+99.542

Where:

The threshold for failure for this index is PCR = 60.

Parking Lot and Manually Rated Road Condition Rating

Surface Condition Distresses- Chip Seal:

Raveling – loss of surface rock chips revealing previous surface
Bleeding – asphalt or tar is bleeding through to the surface where surface looks slick with asphalt
Rutting
Potholes/Patching

Ratings - Chip Seal:

Excellent – None of the surface affected by the above (recently constructed)
Good – Less than 10% of surface affected by the above
Fair – Between 10% and 40% of surface affected by the above
Poor – More than 40% of surface affected by the above

Surface Condition - Asphalt:

Cracking of any type
Rutting
Potholes/Patching

Ratings - Asphalt:

Excellent – None of the surface affected by the above (recently constructed)
Good – Less than 10% of surface affected by the above
Fair – Between 10% and 40% of surface affected by the above
Poor – More than 40% of surface affected by the above

Index Values of Visual Ratings on Parking Lots and Manually Rated Roads

Under Construction 100

Excellent 97

Good 90

Fair 73

Poor 45

APPENDIX C: GENERAL INFORMATION ON RIP SYSTEMS

DMI (Distance Measuring Instrument)

The DMI (Distance Measuring Instrument) obtains road length measurements that are highly accurate (to 0.001 miles). The DMI is connected to the outside of the rear wheel on the driver's side, and is wired into the antilock braking system (ABS). The number of pulses recorded for each wheel rotation by the ABS is registered by the DMI, which transmits a measurement of distance traveled to the processing computers in the ARAN. The DMI distance measurements are the foundation to which all the other subsystems are tied.

Digital Image Information

All images collected in Cycle 4 are digital images in .jpg format. These images provide adequate resolution for identifying sign and feature inventories and pavement evaluations. The images can be viewed with an interactive software program called VisiData. Each park will receive a copy of the VisiData program. Cycle 4 data, as well as Cycle 3 data, can be viewed using the Visi-Data software program. This program is a data presentation and analysis tool that can be accessed either at the individual park, park region or at NPS headquarters. The data is organized in a hierarchical manner and presented in tabular and graphical formats. The user is able to perform queries and drill down through the data to find the particular information they are looking for. Associated digital right-of-way images from either the LAN, USB port, individual DVD can be presented along with GPS locations.

Right-of-way (ROW) Video

Three digital cameras are mounted above the vehicle's windshield that point directly forward and slightly to the left and right. These cameras each collect one image every 0.002 miles (10.56 feet) in the primary-direction lane, to give a panoramic field-of-view of about 160 degrees. (Forward-facing video from the center camera only is collected in the opposite-direction lane of travel.)

If data collection speed exceeds 35-40 mph, the network and storage computers may become overwhelmed and may begin to drop individual video frames. Occasional common video quality issues include sun glare and rapid changes between sunlight and shadow. The camera system is equipped with auto risers that sometimes cannot adjust quickly enough to collect optimal video images.

FHWA ARAN CAMERA SPECIFICATIONS **Forward-Facing Cameras (ROW)**	
Focal length	10 mm
Chip size	8.71mm X 6.90mm
Naming convention of each image	chainage.jpg
Image resolution	1300 X 1030
Image pixel size	depends on distance
Relative position of the GPS unit to each camera	2.104 meters from front-center rutbar to camera
The ARAN has a lever arm setting which tells the POS system where the center of the rutbar is with respect to the GPS antennas.	

Pavement Video

Pavement video images are collected by the data collection vehicle to use in later analysis to determine extents and severities of different types of pavement distress. The pavement in the primary-direction road lane is filmed continuously by two analog cameras attached to booms extended from the rear of the ARAN on the left and right sides. Strobe lights fire synchronously with the opening of the camera shutters to eliminate shadows and motion blur. The images from the two cameras overlap, and are stitched together in real time to create a continuous strip image of the pavement in the primary direction lane. This strip has a maximum width of 3.0 meters (actual width depends on pavement camera calibration) and is sectioned for ease of file management every 0.010 miles (52.8 feet).

The cameras both have a resolution of 640 x 480, making the threshold of visible pavement cracks about 3 mm. Because the cameras are triggered by time and not distance traveled, this subsystem requires a minimum operating speed of 6 mph, otherwise images are taken on top of one another and result in checkered or black pavement video.

FHWA ARAN CAMERA SPECIFICATIONS **Pavement Cameras**	
Image Pixel size	3.135 mm /side
Image Resolution	640 X 480
Area that images cover	1.5 m X 1.2 m
Full color or grayscale	grayscale
Vehicle speed limitations	80km/h
Aperture setting	Auto-iris
Exposure setting	1/50000

FHWA ARAN GPS & Inertial System

GPS is collected by a NovAtel MiLLenium, 12 channel, dual frequency L1/L2, DGPS ready receiver with a MiLLennium 502 GPS antenna. An OmniStar 3000 LR provides real-time differential correction. An Applanix POS/LV is the inertial system that fills in when GPS is unavailable. The antenna is mounted in the center of the roof, slightly toward the rear of the vehicle, but a lever arm is applied to place the operational location of GPS recording at the center of the rutbar on the front bumper of the vehicle. Expected accuracy under ideal conditions is sub meter.

GPS Collected on Manually Rated Routes

Parking areas and roads that are not fully drivable with the ARAN data collection vehicle are collected manually by field technicians. GPS is collected for these routes using GPS field data collection utilizes Trimble ProXRS or ProXH Receivers matched with Trimble TSC1 or Ranger handheld Data Loggers, connected to Trimble Hurricane Antennas giving sub meter accuracy in ideal conditions. This collection equipment has varied as technology has improved over the years of RIP data collection. Some GPS files collected as early as 1998 have been verified for accuracy and perpetuated through the current cycle of data collection.

GPS SHAPEFILES

Type of Route and Collection Shape Filename		
Roads driven by ARAN	Line	park_road_04.dbf/.shp/.shx
Parking Areas	Polygon	park_pkg_04.dbf/.shp/.shx
Roads Manually Rated as Lines (not in every park)	Line	park_mrl_04.dbf/.shp/.shx
Roads Manually Rated as Polygons (not in every park)	Polygon	park_mrp_04.dbf/.shp/.shx

• Datum for all GPS shapefiles is LL_WGS84_DD (Latitude Longitude _World Geodetic Survey 1984_Decimal Degrees)
• In filename, “park” is NPS four-letter alphabetic code.
• The source for route data required for data processing and report production is the PARK_RouteInfo.mdb.

Condition Photos Taken of Manually Rated Roads

One or more digital photos are taken by Canon Power Shot G2 4.0 Mega Pixel digital camera for each manually rated route in a National Park. They are stored in .jpg format named with the four-letter NPS park alphabetic code, route number, and the photo number assigned by the camera. For example, YOSE_0900_4434.jpg is the filename of the photo named 4434 by the camera that was taken of Yosemite National Park route 0900.

Scenic Photos

Scenic photos are taken by Canon Power Shot G2 4.0 Mega Pixel digital camera throughout each park and are named with the four-letter NPS park alphabetic code and the count of the photo taken in that park. For example, GRCA003.jpg is the filename of the third scenic photo taken in Grand Canyon National Park. The number of scenic photos provided will vary between parks.

APPENDIX D: METADATA

FHWA – NPS Road Inventory Program Cycle 4 Metadata

The purpose of these sheets is to provide users of the Road Inventory Program's data with data accuracies and tolerances to help users define ways in which the RIP data can and cannot be used. For further information on specifics of data collection equipment, data collection procedures, equipment calibrations, or quality control/quality assurance procedures, please contact Jim Kennedy, Project Manager, Data Quality Assurance, at 720-963-3560 or jim.kennedy@fhwa.dot.gov.

All Road Inventory Program data undergoes quality control and quality assurance testing. This document represents the known data accuracies and tolerances for the data collection equipment, data collection procedures, and data processing procedures currently in use. Many additional tests conducted on the park databases during the quality assurance phase to ensure data integrity are not listed as a part of this document. Before it is delivered, a park database undergoes a large set of table design consistency, field data format consistency, data completeness, uniqueness of key fields, data reasonableness, acceptable data range, within-field data consistency, between-field data consistency, and between-table data consistency tests. Additional data sampling checks are conducted to ensure proper data upload from raw files into the park database and to quality check the pavement crack analysis. Further information is detailed in the FHWA – NPS RIP Quality Assurance Manual, available upon request.

This description of metadata includes only the known accuracies with which a data field matches its expected value. The tables that follow this page show each database field's:

- Field – field name
- Format – data type and number of characters of field
- Expected Value – meaning of value assigned to field
- Source – when in process field value obtained
- Validation – how field value obtained
- Expected Accuracy – accuracy with which contents of field match Expected Value

Verifying and continually improving the accuracy of Road Inventory Program data is an ongoing goal of the Federal Highway Administration and the National Park Service. Field testing and post-collection analysis of ARAN (Automatic Road ANalyzer) -collected data will continue in Cycle 4. Data quality is expected to improve as the FHWA – NPS Road Inventory Program continues to operate, due to the fact that future data collection cycles will consist in large part of data updates. Also, technological improvements are expected to render the data increasingly consistent with actual roadway conditions as data collection cycles progress.

Specific Caveats

- MUTCD based on contents & colors of sign, not on size
- Database records that show a Portland Cement Concrete (CO) surface type sometimes include distress index values that seem to show a perfect roadway. Condition assessments on concrete pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.
- On the USB drive, in the Database folder, parks are provided with intersection lists and exceptions lists. These documents should be treated as raw files and are not accurate. Refer to the final database for accurately post-processed intersection data.
- Most roadway data is collected in the primary direction lane of a roadway. To save data storage space and to reduce data analysis efforts, the assumption was made that the paved surface condition of a route's primary lane adequately represents the surface condition of the full roadway. Therefore, in the database, opposite-direction records in the PMS_Tenth table do not include assessed values for roadway surface distresses. Values such as 0, N/A, -1, or a repeat of the primary-direction assessed value indicate that no assessment was performed. The PMS_20 and PMS_Mile tables simply exclude all opposite routes.

- Roadway Data is collected in intervals of 0.010 miles (52.8feet) constituting a "station".
- Most roadway features are collected relative to the primary direction lane of a roadway, using the primary-direction video and mileage. Signs and Mile Markers are the only features collected using the opposite-direction video with mileage location referenced to the primary direction lane of the roadway.
- Route_GPS table contains GPS positional information collected by the ARAN and post processed with Applanix POSPac Land 5.0 post-processing software. No manual adjustments have occurred on this table.
- Modifications to the Park_ROAD_04.dbf/.shp/.shx files may have been necessary for report esthetics.
- Modifications to the Park_PKG_04. dbf/.shp/.shx files may have been necessary for report esthetics.
- Cycle 4 utilizes the Microsoft Office 2003 suite of products and Crystal Reports XI for document and data file generation and reporting.
- All PDF files are in Adobe Acrobat 7.0 Professional format.
- All ArcGIS files are created using ESRI Version 9.x software.
- Thumbnail images are created at 1/10 original image size for Right-of-Way and Pavement Images.
- FHWA is investigating the rutting methodology and calculated values it currently reports. Equipment limitations and analysis methods may be over reporting, low severity rutting.

Key to Notes in Tables

(1): Note that only one value fits in field, so even if this value varies throughout the route, only predominant value is recorded here.
(2): Shoulder width is measured at route start and every half-mile along the route in the primary direction. Width is the entire width of the drivable shoulder, regardless of the presence or absence of pavement, from the fog line to the shoulder hinge point, or if no fog line exists, from the edge of pavement to the hinge point. Identification of shoulder hinge point can be problematic using video analysis. Some paved ditches may be mistakenly recorded as shoulders where the shoulder hinge point and change in slope are not easily distinguished from the video.
(3): Mileage is measured by the ARAN (Automatic Road ANalyzer) data collection vehicle out to the 0.001 decimal place. The DMI (distance measuring instrument) is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration.
(4): Features are measured differently depending on whether they are visible in the forward-facing video of the roadway, but every feature milepost measurement depends on the baseline measurement of the data collection vehicle's mileage. The ARAN (Automatic Road ANalyzer) data collection vehicle's mileage is measured by the DMI (distance measuring instrument) out to the 0.001 decimal place. The DMI is very accurate, with extremely slight variations in measurement due to air temperature, tire inflation, curves, hills, and equipment calibration. If a feature will not be visible in the forward-facing video, its milepost is determined by the data collectors' key press tagging the milepost when the ARAN passes the feature. Key presses are entered into the ARAN software when the vehicle travels typically between 15 and 45 miles/hour, so a delay of a single second as the vehicle passes a feature would result in an inaccuracy of 0.004 miles (22 feet) to 0.012 miles (66 feet). If a feature is visible in the video, its milepost is determined during post-processing using a video measurement software called Surveyor.
(5): Condition assessments on concrete (PCC) pavements are not conducted for Alligator Cracking, Transverse or Longitudinal Cracking, Patching, or Rutting. Perfect values for concrete road sections for these indexes are default values and do not represent a condition assessment of the concrete surfaces.
(6): Roadway cracking presence, type, severity, and extent are determined by filming the roadway in the primary lane continuously with two overlapping analog cameras of 640 x 480 resolutions. The images from both cameras are stitched together in real time to create a continuous strip image of the roadway pavement in the primary lane. Cracks 3 mm or greater in width are visible in this video. A semi-automatic process running the WiseCrax software with additional input by human operators provides the cracking quantities recorded in these database fields. Quality checks have determined that a consistent 80% or better of the visible cracks are recorded.

Access Database Metadata

MASTER Table Metadata:

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for data collection cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input / FHWA Determination	100%, Referenced to other tables (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100%, Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100%, Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input / FHWA Classification	100%, Referenced to other tables
6	RTE_NAME	(Text)	Route name	Route ID Meeting	Park Input	100%, Referenced to other tables. 100 characters fit in field
7	FUNCT_CLASS	X	Route functional classification	Route ID Meeting	Park Input / FHWA Classification	100%, Referenced to other tables
8	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input / FHWA Determination	100%,
9	BEG_MP_EST	999.999 (miles)	Estimated starting MP	Route ID Meeting	Park Input / FHWA Determination	Estimated before data collected
10	END_MP_EST	999.999 (miles)	Estimated ending MP	Route ID Meeting	Park Input / FHWA Determination	Estimated before data collected
11	RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100%
12	FROM_DESC	(Text)	Beginning terminus of route	Route ID Meeting	Park Input / FHWA Determination	100% Referenced to other tables
13	TO_DESC	(Text)	Ending terminus of route	Route ID Meeting	Park Input / FHWA Determination	100% Referenced to other tables
14	NO_LANES	X	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
15	SURF_TYPE	XX	Surface type of route	ARAN Data Collection	Survey Crew Input	100%, Referenced to other tables (1)
16	COMP_DIR	XX	Compass direction of route's primary lane (nearest cardinal direction)	Route ID Meeting	Park Input / FHWA Determination	Untested
17	COMMENTS	(Text)	Special information, if any	Contractor Post-processing	Contractor Input	Untested
18	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
19	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%

20	FKEY	9999999	Unique record ID	Contractor Post-processing	Database Processing	100%
21	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
22	BEG_MP	999.999 (miles)	Beginning MP collected	ARAN Data Collection	Automatic Output	100% (3)
23	END_MP	999.999 (miles)	Ending MP collected	ARAN Data Collection	Automatic Output	100% (3)

PMS_FEATURE Table Metadata:

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for data collection cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input / FHWA Determination	Untested (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input / FHWA Classification	100% Referenced to other tables
6	FMSS_EQUIP	XXXXXXX	Facility Management Software System Equipment number	NPS FMSS application	NPS References	Untested
7	FUNCT_CLASS	X	Route functional class	Route ID Meeting	Park Input / FHWA Classification	100% Referenced to other tables
8	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input / FHWA Determination	100%
9	MP	999.999 (miles)	Feature location along route	ARAN Data Collection/Contractor Post-processing	Video Analysis	<=0.001 mile
10	BEG_MP	999.999 (miles)	Feature Beginning location along route	Contractor Post-processing	Video Analysis	<=0.001 mile
11	END_MP	999.999 (miles)	Feature Ending location along route	Contractor Post-processing	Video Analysis	<=0.001 mile
12	FEATURE_LENGTH	999.99 (Feet)	Linear Feature Length	Contractor Post-processing	Database Processing	100%
13	EVENT	XXXX	Event category of feature	Contractor Post-processing	Video Analysis	Untested
14	EVENT_CODE	XXXX	Event sub-category of feature	Contractor Post-processing	Video Analysis	Untested
15	FEATURE_TYPE	(Text)	Feature designation: LINEAR or POINT	Contractor Post-processing	Video Analysis	Untested
16	EVENT_DESC	(Text)	Description of feature/contents of sign	Contractor Post-processing	Video Analysis	Untested
17	MUTCD	(Text)	MUTCD Code of Sign	Contractor Post-processing	Database Processing	95%
18	CONDITION	“N/A”	Sign condition. N/A. Not to be populated	Contractor Post-processing	Video Analysis	Values inaccurate, defaulted to “N/A”
19	COMMENT	(Text)	Sign label, intersecting route, etc.	Contractor Post-processing	Database Processing	Untested
20	OFFSET	“N/A”	Offset from Road Edge. N/A. Not to be populated	Contractor Post-processing	Database Processing	Values inaccurate, defaulted to “N/A”

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
21	SIDE	(Text)	Side of route relative to lane driven	Contractor Post-processing	Video Analysis	95%
22	STR_NUMBER	(Text)	FHWA bridge structure number	FHWA Post-processing	Database Processing	Untested
23	BARR_MAT	(Text)	Barrier Material Type	Contractor Post-processing	Video Analysis	Untested
24	BARR_TYPE	(Text)	Barrier Type	Contractor Post-processing	Video Analysis	Untested
25	BARR_POST_MAT	(Text)	Barrier Post Materials	Contractor Post-processing	Video Analysis	Untested
26	BARR_BEG_TERM	(Text)	Barrier Approach Treatment	Contractor Post-processing	Video Analysis	Untested
27	BARR_END_TERM	(Text)	Barrier End Treatment	Contractor Post-processing	Video Analysis	Untested
28	CURB_MAT	(Text)	Curb Material Type	Contractor Post-processing	Video Analysis	Untested
29	PAVED_DITCH_MAT	(Text)	Paved Ditch Material Type	Contractor Post-processing	Video Analysis	Untested (2)
30	GATE_MAT	(Text)	Gate Material Type	Contractor Post-processing	Video Analysis	Untested
31	GATE_STYLE	(Text)	Gate Style	Contractor Post-processing	Video Analysis	Untested
32	BEG_GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
33	BEG_GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
34	BEG_GPS_ELEV	99999.9	GPS Elevation Feet	Contractor Post-processing	Video Analysis	Untested
35	BEG_GPS_MODE	(Text)	GPS Satellite Mode	Contractor Post-processing	Video Analysis	Untested
36	END_GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
37	END_GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	Contractor Post-processing	Video Analysis	<= 3.00 feet
38	END_GPS_ELEV	99999.9	GPS Elevation Feet	Contractor Post-processing	Video Analysis	Untested
39	END_GPS_MODE	(Text)	GPS Satellite Mode	Contractor Post-processing	Video Analysis	Untested
40	DATUM	(Text)	LL_WGS84_DD	Contractor Post-processing	Database Processing	100%
41	VIDEO	<*Park*>C04VID<#>	Removable USB video hard drive number	Contractor Post-processing	Database Processing	Untested
42	IMAGE	(Text)	Filename of .jpg image showing feature	Contractor Post-processing	Automatic Output	Untested
43	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
44	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
45	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
46	FKEY	(Numeric)	Unique record ID	Contractor Post-processing	Database Processing	100%
47	VISI_FROM	999999 (millimiles)	Raw MP of first video frame showing feature	Contractor Post-processing	Database Processing	Untested
48	VISI_TO	999999 (millimiles)	Raw MP of last video frame showing feature	Contractor Post-processing	Database Processing	Untested

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
49	IDKEY	(Text)	Unique record ID used by VisiData	Contractor Post-processing	Database Processing	Untested
50	MP_REF	(Text)	Range of mileage to play in VisiData	Contractor Post-processing	Database Processing	Untested

List of Roadway Features

#	EVENT	EVENT_CODE	FEATURE_TYPE	EVENT_DESC	STRUCTURE #	COLLECTED BY
1	BRIDGE	BRDG	LINEAR	BRIDGE	ALWAYS	ARAN
2	CATTLE GUARD	CGD	POINT	CATTLE GUARD	-	VIDEO RATING
3	CONSTRUCTION	CNST	LINEAR	CONSTRUCTION WORK ZONE	-	ARAN
4	CULVERT	CUL	POINT	CULVERT	SOMETIMES	ARAN
5	CURB	CRBL	LINEAR	CURB ON LEFT	-	VIDEO RATING
	""	CRBR	LINEAR	CURB ON RIGHT	-	VIDEO RATING
6	CURB-AND-GUTTER	CAGL	LINEAR	CURB-AND-GUTTER ON LEFT	-	VIDEO RATING
	""	CAGR	LINEAR	CURB-AND-GUTTER ON RIGHT	-	VIDEO RATING
7	DROP INLET	DINL	POINT	DROP INLET ON LEFT	-	ARAN
	""	DINR	POINT	DROP INLET ON RIGHT	-	ARAN
8	GATE	GATE	POINT	GATE	-	VIDEO RATING
9	FIRE HYDRANT	FHDL	POINT	FIRE HYDRANT ON LEFT	-	VIDEO RATING
	""	FHDR	POINT	FIRE HYDRANT ON RIGHT	-	VIDEO RATING
10	GUARD/GUIDE WALL	GGWL	LINEAR	GUARD/GUIDE WALL ON LEFT	-	VIDEO RATING
	""	GGWR	LINEAR	GUARD/GUIDE WALL ON RIGHT	-	VIDEO RATING
11	GUARD/GUIDE RAIL	GGRL	LINEAR	GUARD/GUIDE RAIL ON LEFT	-	VIDEO RATING
	""	GGRR	LINEAR	GUARD/GUIDE RAIL ON RIGHT	-	VIDEO RATING
12	INTERSECTION	INTL	POINT	INTERSECTION ON LEFT	-	ARAN
	""	INTR	POINT	INTERSECTION ON RIGHT	-	ARAN
	""	INTN	POINT	INTERSECTION SIDE N/A	-	ARAN

13	LANE DEVIATION	LADV	LINEAR	LANE DEVIATION	-	ARAN
14	LOW WATER CROSSING	LWCR	LINEAR	LOW WATER CROSSING	SOMETIMES	VIDEO RATING
15	MILE MARKER	MML	POINT	MILE MARKER ON LEFT	-	VIDEO RATING
	""	MMR	POINT	MILE MARKER ON RIGHT	-	VIDEO RATING
16	OVERPASS	OPV	POINT	OVERPASS VEHICULAR	SOMETIMES	ARAN
	""	OPP	POINT	OVERPASS PEDESTRIAN	SOMETIMES	ARAN
	""	OPRX	POINT	OVERPASS RAILROAD CROSSING	SOMETIMES	ARAN
17	PARK BOUNDARY	PRK	POINT	PARK BOUNDARY	-	ARAN
18	PAVED DITCH	PVDL	LINEAR	PAVED DITCH ON LEFT	-	VIDEO RATING
	""	PVDR	LINEAR	PAVED DITCH ON RIGHT	-	VIDEO RATING
19	PULLOUT	PLOL	LINEAR	PULLOUT ON LEFT	-	VIDEO RATING
	""	PLOR	LINEAR	PULLOUT ON RIGHT	-	VIDEO RATING
20	RAILROAD CROSSING	RRX	POINT	RAILROAD CROSSING	-	VIDEO RATING
21	RETAINING WALL	RTWL	LINEAR	RETAINING WALL ON LEFT	-	VIDEO RATING
	""	RTWR	LINEAR	RETAINING WALL ON RIGHT	-	VIDEO RATING
22	ROUTE BEGIN	RBEG	POINT	ROUTE BEGIN	-	ARAN
23	ROUTE END	REND	POINT	ROUTE END	-	ARAN
24	SIGN	REGU, WARN, GUID, UNKN	POINT	DOCUMENT CONTENTS OF SIGN. (WHAT THE SIGN SAYS) FOR GRAPHICS ONLY SIGNS POPULATED WITH ("GRAPHIC SIGN, NO TEXT") FOR UNREADABLE TEXT POPULATED WITH ("UNABLE TO READ FROM VIDEO")	-	VIDEO RATING
25	STATE BOUNDARY	STB	POINT	STATE BOUNDARY	-	ARAN
26	TRAFFIC LIGHT	TRF	POINT	TRAFFIC LIGHT	-	VIDEO RATING
27	TUNNEL	TUN	LINEAR	TUNNEL	ALWAYS	ARAN

PMS_20, PMS_MILE, & PMS_TENTH Tables Metadata:

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested. (1)
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
6	FUNCT_CLASS	X	Route functional class	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
7	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	100%
8	BEG_MP	999.999 (miles)	MP at start of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
9	END_MP	999.999 (miles)	MP at end of road interval described by database record	Contractor Post-processing	Database Processing	100% (3)
10	INT_LENGTH	999.9 (ft)	Length of road interval as aggregated for data table	Contractor Post-processing	Database Processing	100%
11	RTE_LENGTH	999.999 (miles)	Collected route length	ARAN Data Collection	Automatic Output	100% (3)
12	NO_LANES	99	Number of lanes in route	ARAN Data Collection	Survey Crew Input	Untested. (1)
13	LANE_NO	99	Data collection lane	Contractor Post-processing	Database Processing	Untested
14	D_LANE_WIDTH	99.999 (ft)	WiseCrax (crack detection software) analysis width	Contractor Post-processing	Automatic Output	Untested
15	LANE_WIDTH	99.9 (ft)	Width of lane	Contractor Post-processing	Video Analysis	95%, <=1.0 foot
16	PAVE_WIDTH	99.9 (ft)	Full pavement width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot
17	SHLD_WIDTH_L	99.9 (ft)	Left shoulder width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot (2)
18	SHLD_WIDTH_R	99.9 (ft)	Right shoulder width	Contractor Post-processing	Video Analysis	95%, <=1.0 foot (2)
19	SHLD_COND_L	N/A	N/A. Intended to be Left shoulder condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to “N/A”
20	SHLD_COND_R	N/A	N/A. Intended to be Right shoulder condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to “N/A”
21	DRAIN_COND_L	N/A	N/A. Intended to be Left drainage condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to “N/A”
22	DRAIN_COND_R	N/A	N/A. Intended to be Right drainage condition	ARAN Data Collection	Survey Crew Input	Values inaccurate, defaulted to “N/A”

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
23	SURF_TYPE	XX	Surface type of route	ARAN Data Collection	Survey Crew Input	Untested. (1)
24	PCR	999	Pavement Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (6)
25	RCI	999	Roughness Condition Index; -1 if invalid IRI	Contractor Post-processing	Database Processing	100% for calculation
26	SCR	999	Surface Condition Rating	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
27	IRI_AVG	999.9 (inches/mile)	Average IRI	Contractor Post-processing	Database Processing	Untested
28	IRI_SD	999.9 (inches/mile)	IRI standard deviation	Contractor Post-processing	Database Processing	Untested
29	IRI_L	999.9 (inches/mile)	Left wheel path IRI	ARAN Data Collection	Automatic Output	Untested
30	IRI_R	999.9 (inches/mile)	Right wheel path IRI	ARAN Data Collection	Automatic Output	Untested
31	IRI_FLAG	0 or -1	-1 if invalid IRI data	Contractor Post-processing	Database Processing	Untested
32	RUT_INDEX	999	Rut index	Contractor Post-processing	Database Processing	100% for calculation (5)
33	RUT_AVG	99.99 (inches)	Average rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
34	RUT_MAX	99.99 (inches)	Maximum rut depth of both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
35	RUT_SD	9.9	Rut depth standard deviation	Contractor Post-processing	Database Processing	Untested (5)
36	RUT_LOW	999 (%)	Percent of low severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
37	RUT_MED	999 (%)	Percent of medium severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
38	RUT_HI	999 (%)	Percent of high severity ruts (on a 0-200% scale) in both wheelpaths	Contractor Post-processing	Database Processing	Untested (5)
39	XFALL	999.9 (% slope)	Cross fall at start of road interval	ARAN Data Collection	Automatic Output	Untested
40	GRADE	999.9 (% slope)	Grade at start of road interval	ARAN Data Collection	Automatic Output	Untested
41	AC_INDEX	999	Alligator cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
42	AC_LOW	999.9999 (%)	Percent of WiseCrax measured lane area with low-severity alligator cracking	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
43	AC_MED	999.9999 (%)	Percent of WiseCrax measured lane area with medium-severity alligator cracking	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
44	AC_HI	999.9999 (%)	Percent of WiseCrax measured lane area with high-severity alligator	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			cracking			
45	LC_INDEX	999	Longitudinal cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
46	LC_LOW	999.99 (%)	Low-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
47	LC_MED	999.99 (%)	Medium-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
48	LC_HI	999.99 (%)	High-severity longitudinal cracking in lane as a percentage of road interval length	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
49	TC_INDEX	999	Transverse cracking index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
50	TC_LOW	999.99 (cracks)	Count of low-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
51	TC_MED	999.99 (cracks)	Count of medium-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
52	TC_HI	999.99 (cracks)	Count of high-severity transverse cracks, where one crack unit equals the WiseCrax measured lane width	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
53	PATCH_INDEX	999	Patching index	Contractor Post-processing	Database Processing	100% for calculation (5) (6)
54	PATCHING	999.9999 (%)	Percent of WiseCrax measured lane area affected by patching	Contractor Post-processing	Pavement Video Analysis	As a Computed 95% Confidence Level (5) (6)
55	GPS_LAT	999.999999	Latitude coordinate	ARAN Data Collection	Automatic Output	<= 3.00 feet
56	GPS_LON	-999.999999	Longitude coordinate	ARAN Data Collection	Automatic Output	<= 3.00 feet
57	GPS_ELEV	99999.9	Elevation	ARAN Data Collection	Automatic Output	Untested
58	GPS_MODE	XXX	GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	Untested
59	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Database Processing	100%
60	VIDEO	<*Park*>C04VID<#>	Removable USB video hard	Contractor Post-processing	Database Processing	Untested

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			drive number			
61	IMAGE	(Text)	Filename of .jpg image showing road interval	Contractor Post-processing	Automatic Output	Untested
62	SPEED	999 (miles/hour)	Average ARAN speed during data collection	ARAN Data Collection	Automatic Output	Untested
63	BRIDGE_FLAG	0 or 1	Flag indicating presence of bridge in interval	ARAN Data Collection	Survey Crew Input	Untested
64	CONSTR_FLAG	0 or 1	Flag indicating construction in interval	ARAN Data Collection	Survey Crew Input	Untested
65	LANEDEV_FLAG	0 or 1	Flag indicating lane deviation in interval	ARAN Data Collection	Survey Crew Input	Untested
66	DATE	MM/DD/YY	Data collection date	ARAN Data Collection	Automatic Output	100%
67	NODISTRESS	0 OR 1	Flag indicating absence of pavement distress	Contractor Post-processing	Database Processing	100%
68	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	100%
69	SECTION	(Text)	Route section ID	Route ID Meeting/ARAN Data Collection	Survey Crew Input/Automatic Output	100%
70	FKEY	(Numeric)	Unique record ID	Contractor Post-processing	Database Processing	100%
71	CONTRACTOR1	(Numeric)	Raw MP of first video frame in section	Contractor Post-processing	Database Processing	Untested
72	CONTRACTOR2	(Numeric)	Raw MP of last video frame in section	Contractor Post-processing	Database Processing	Untested
73	CONTRACTOR3	(Text)	Unique record ID used by VisiData	Contractor Post-processing	Database Processing	Untested
74	CONTRACTOR4	(Text)	Range of mileage to play in VisiData	Contractor Post-processing	Database Processing	Untested

ROUTE_GPS table metadata:

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	XX	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% referenced to other tables
2	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested
3	PARK_ALPHA	XXXX	Park alpha code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	XXXX	Park numeric code	Route ID Meeting	NPS References	100% Referenced to other tables
5	RTE_NO	9999XXX	Route number	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
6	FUNCT_CLASS	X	Route functional classification	Route ID Meeting	Park Input/FHWA Classification	100% Referenced to other tables
7	RTE_NAME	(Text)	Route name	Route ID Meeting	Park Input	100% Referenced to other tables . 100 characters fit in field
8	LANE_NUMBER	99	Data collection lane	Contractor Post-processing	Database Processing	Untested
9	DIRECTION	XXX	Survey lane: PRI (primary) or OPP (opposite)	Route ID Meeting	Park Input/FHWA Determination	Untested
10	MP	999.999	Mile Post (at 0.01 record)	ARAN Data Collection, Contractor Post-processing	Survey Crew Input/GPS Processing	Untested (3)
11	GPS_LAT	999.999999	GPS Latitude Co-ordinate (decimal degrees)	ARAN Data Collection, Contractor Post-processing	Automatic Output	<= 3.00 feet
12	GPS_LON	-999.999999	GPS Longitude Co-ordinate (-decimal degrees)	ARAN Data Collection, Contractor Post-processing	Automatic Output	<= 3.00 feet
13	GPS_ELEV	99999.9	Elevation	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
14	GPS_MODE	XXX	GPS Satellite Mode during collection	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
15	XFALL	999.9	Cross Fall: % Slope at GPS Location (Caution, Data not Validated)	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
16	GRADE	999.9	Grade: % Slope at GPS Location (Caution, Data not Validated)	ARAN Data Collection, Contractor Post-processing	Automatic Output	Untested
17	HEADING	999.9	Heading Relative to True North	ARAN Data Collection	Automatic Output	Untested
18	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Database Processing	Untested
19	FILENAME	(Text)	Filename of raw data files	ARAN Data Collection	Automatic Output	Untested
20	FKEY	9999999	Unique record ID	Contractor Post-processing	Database Processing	Untested

21	DATE	MM/DD/YY	ARAN Data Collection Date	ARAN Data Collection	Automatic Output	Untested
22	COMMENT	(Text)	Source of Any Digitized Data	ARAN Data Collection	Database Processing	Untested
23	CONTRACTOR1	(Numeric)	Visi_from	Contractor Post-processing	Database Processing	Untested
24	CONTRACTOR2	(Numeric)	Visi_to	Contractor Post-processing	Database Processing	Untested
25	CONTRACTOR3	(Text)	Visi_dir (ipdated to chapter 1)	Contractor Post-processing	Database Processing	Untested
26	CONTRACTOR4	(Text)	Comments/exceptions	Contractor Post-processing	Database Processing	Untested

FHWA "Route ID Program" Database
Database Name: ROUTEINFO.mdb
Table Name: ROUTE_ID

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	ROUTE_IDENT	XXXX-9999XXX	The Park's Alpha Code + "-" + RTE_NO (below).	Route ID Meeting	Automatic Output	100%, Reference source for all tables
2	RIP_CYCLE	99	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100%, Reference source for all tables
3	PARK_ALPHA	XXXX	Park Alpha Code	Route ID Meeting	NPS References	100%, Reference source for all tables
4	GROUP_ALPHA	XXXX	Group Alpha Code	Route ID Meeting	NPS References	100%, Reference source for all tables
5	PARK_NO	9999	Park Numeric Code	Route ID Meeting	NPS References	100%, Reference source for all tables
6	PARK_NAME	(text)	NPS Name of Park	Route ID Meeting	NPS References	100%, Reference source for all tables
7	RTE_NO	9999XXX	Route Number	Route ID Meeting	Park Input	100%, Reference source for all tables
8	RTE_NAME	(Text)	Route Name	Route ID Meeting	Park Input	100%, Reference source for all tables
9	FROM_DESC	(Text)	Beginning terminus of route	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
10	TO_DESC	(Text)	Ending terminus of route	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
11	INSP_DATE	MM/DD/YYYY	Collection Date	ARAN Data Collection	FHWA Determination	100%, Reference source for all tables
12	FUNCT_CLASS	XX	Functional Class	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
13	STATE	XX	State where route is located	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
14	STATE2	XX	Additional State Park Route traverses	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
15	FMSS_NO	(Text)	NPS's Facility Management Software System (FMSS) Asset number	Route ID Meeting	Park Input	100%, Reference source for all tables
16	FMSS_SUR_EQP	(Text)	FMSS Surface Equipment Number	Route ID Meeting	Park Input	Untested
17	M_DISTRICT	(Text)	Park Maintenance District Route resides in	Route ID Meeting	Park Input	100%, Reference source for all tables (1)
18	TOPOGRAPHY	(Text)	Predominate Terrain condition for	Route ID Meeting	FHWA Determination	100%, Reference source for all

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
			Route. (FLAT, ROLLING, MOUNTAINOUS, or URBAN)			tables (1)
19	POSTED_SPEED	99	Posted Speed Limit for Route (Value is Predominate Speed Limit along Route)	Route ID Meeting	Park Input/FHWA Determination	Untested (1)
20	ARAN_ROUTE	XXX	Yes/No	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
21	PARKING_AREA	XXX	Yes/No	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
22	CONCESSION	XXX	Yes/No	Route ID Meeting	Park Input	100%, Reference source for all tables
23	PAVED_MI	999.999	Paved mileage (to the nearest 0.001)	ARAN Data Collection	Automatic Output	100%, Reference source for all tables
24	UNPAVED_MI	999.999	Unpaved mileage (to the nearest 0.001)	Route ID Meeting	Automatic Output	100%, Reference source for all tables
25	RTE_LENGTH	999.999	Official Route Length	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
26	SURF_TYPE	XX	Surface type (PAVED: AS (asphalt, includes composite), CO (concrete), BR (brick/pavers), CB (cobblestone), OT (other))	Route ID Meeting	Survey Crew Input	100%, Reference source for all tables (1)
27	UNPAVED	XXXX	Unpaved Route (Yes/No/Both)	Route ID Meeting	Automatic Output	100%, Reference source for all tables
28	UNPAVED_CAT	XXX	Unpaved Road Category	Route ID Meeting	Automatic Output	Untested
29	CURB	(Text)	Parking Area with Curb around perimeter.	Route ID Meeting	Park Input/FHWA Determination	Untested
30	CURB_GUTTER	(Text)	Parking Area with Curb and Gutter around perimeter.	Route ID Meeting	Park Input/FHWA Determination	Untested
31	ADJ_ROUTE	9999XXX	Route number	Route ID Meeting	Automatic Output	100%, Reference source for all tables
32	USER_ACCESS	(Text)	Access Designation for Parking	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
33	PHOTO_NO	(Text)	Photo or Image	Route ID Meeting	Survey Crew Input	100%, Reference source for all tables
34	PLOT_SIZE	(Text)	Unpaved Parking Area Size	Route ID Meeting	Automatic Output	100%, Reference source for all tables
35	SQ_FEET	999.999	Route Square Footage	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
36	M_RATING	(Text)	Manual Rating	Route ID Meeting	Automatic Output	100%, Reference source for all tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
37	SQ_YARDS	999.999	Route Square Yardage	Contractor Post-processing	Automatic Output	100%, Reference source for all tables
38	LANES	XX	Route travel lanes	Route ID Meeting	Automatic Output	Untested (1)
39	PAVE_WIDTH	999.99	Pavement Width (Weighted average)	RIP Post-processing	Automatic Output	100% Referenced to other tables
40	LANE_MILES	999.999	Route Equivalent Lane Miles	RIP Post-processing	Automatic Output	100%, Reference source for all tables
41	AREA_MAP	(Text)	1 or 2-digit number	Contractor Post-processing	FHWA/Contractor Input	100%, Reference source for all tables
42	REMARKS	(Memo)	General remarks on Park route and data collection operations.	Contractor Post-processing	FHWA/Contractor Input	Untested
43	SUMMARY_REC	XXXX-9999XXX	ROUTE_IDENT of summary Park Asset	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
44	NPS_REGION	(Text)	Park Region	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
45	DIVISION	(Text)	FHWA Division	Route ID Meeting	Park Input/FHWA Determination	100%, Reference source for all tables
46	PCR	999.99	Route Weighted Average PCR value	RIP Post-processing	Automatic Output	100% Referenced to other tables
47	SCR	999.99	Route Weighted Average SCR value	RIP Post-processing	Automatic Output	100% Referenced to other tables
48	AADT	999	Average Adjusted Daily Traffic	RIP	Automatic Output	Untested
49	SADT	999	Seasonal Adjusted Daily Traffic	RIP	Automatic Output	Untested
50	ADT_DATE	MM/DD/YYYY	Traffic Date of Collection	RIP	Automatic Output	Untested
51	BEG_LAT	999.999999	Route Begin GPS Latitude Co-ordinate (decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
52	BEG_LON	-999.999999	Route Begin GPS Longitude Co-ordinate (-decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
53	BEG_ELEV	99999.9	Route Begin Elevation	ARAN Data Collection	Automatic Output	100% Referenced to other tables
54	BEG_MODE	XXX	Route Begin GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	100% Referenced to other tables
55	END_LAT	999.999999	Route End GPS Latitude Co-ordinate (decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
56	END_LON	-999.999999	Route End GPS Longitude Co-ordinate (-decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
57	END_ELEV	99999.9	Route End Elevation	ARAN Data Collection	Automatic Output	100% Referenced to other tables
58	END_MODE	XXX	Route End GPS Satellite Mode during collection	ARAN Data Collection	Automatic Output	100% Referenced to other tables
59	DATUM	(Text)	LL_WGS84_DD	ARAN Data Collection	Automatic Output	100% Referenced to other tables
60	CHILD_ROUTE	XXX	Yes/No	Route ID Meeting	Automatic Output	100% Reference source for all tables
61	CULVERT_CNT	999	Route Culvert Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
62	DROP_INLET_CNT	999	Route Drop Inlet Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
63	GATE_CNT	999	Route Gate Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
64	TRAFLIGHT_CNT	999	Route Traffic Light Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
65	SIGN_CNT	999	Route Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
66	LWCROSS_CNT	999	Route Low Water Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
67	BRIDGE_CNT	999	Route Bridge Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
68	TUNNEL_CNT	999	Route Tunnel Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
69	PULLOUT_CNT	999	Route Pullout Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
70	INTERSEC_CNT	999	Route Intersection Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
71	ST_BNDRY_CNT	999	Route State Boundary Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
72	PRK_BNDRY_CNT	999	Route Park Boundary Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
73	RETWALL_CNT	999	Route Retaining Wall Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
74	RR_CROSS_CNT	999	Route RR Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
75	CATTLE_CNT	999	Route Cattle Guard Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
76	OVHDSIGN_CNT	999	Route Overhead Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
77	MILEMARK_CNT	999	Route Mile Marker Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
78	FHYD_CNT	999	Route Fire Hydrant Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
79	OVERPASS_CNT	999	Route Overpass Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
80	CABLE_TLNG	9999.999 (ft)	Route Total Length Cable Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
81	GDRAIL_TLNG	9999.999 (ft)	Route Total Length Guard/Guide Rail Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
82	GDWALL_TLNG	9999.999 (ft)	Route Total Length Guard/Guide Wall Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
83	TEMP_BARR_TLNG	9999.999 (ft)	Route Total Length Temporary Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
84	BOLLARD_TLNG	9999.999 (ft)	Route Total Length Bollard Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
85	BARRIER_TLNG	9999.999 (ft)	Route Total Length All Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
86	CURB_TLNG	9999.999 (ft)	Route Total Length Curbing (excludes Parking Areas)	RIP Post-processing	Automatic Output	100% Referenced to other tables
87	LWCROSS_TLNG	9999.999 (ft)	Route Total Length Low Water Crossings	RIP Post-processing	Automatic Output	100% Referenced to other tables
88	PAVDITCH_TLNG	9999.999 (ft)	Route Total Length Paved Ditch	RIP Post-processing	Automatic Output	100% Referenced to other tables (2)
89	TURNOUT_TLNG	9999.999 (ft)	Route Total Length Turnouts	RIP Post-processing	Automatic Output	100% Referenced to other tables
90	LANE_NUMBER	99	Number of Lane Tested	RIP Post-processing	Automatic Output	100% Referenced to other tables
91	LOCAL_FACTOR	9.9999	Park Location Factor	NPS Partner	Automatic Output	100% Reference source for all tables
92	E_ZONE	XXX	Route Environmental Zone	FHWA HPMA	Automatic Output	100% Reference source for all tables
93	PAVEMENT_DM	$99,999,999.99	Pavement Deferred Maintenance	FHWA HPMA	Automatic Output	100% Reference source for all tables
94	CRV	$99,999,999.99	Current Replacement Value	RIP Post-processing	Automatic Output	100% Reference source for all tables

Database Name: ROUTEINFO.mdb
Table Name: PARK_TOTALS

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
1	RIP_CYCLE	99	4, for RIP data collection Cycle 4	Route ID Meeting	FHWA Determination	100% Referenced to other tables
2	PARK_ALPHA	XXXX	Park Alpha Code	Route ID Meeting	FHWA Determination	100% Referenced to other tables
3	GROUP_ALPHA	XXXX	Group Alpha Code	Route ID Meeting	NPS References	100% Referenced to other tables
4	PARK_NO	9999	Park Numeric Code	Route ID Meeting	NPS References	100% Referenced to other tables
5	PARK_NAME	XXXX	NPS Name of Park	Route ID Meeting	NPS References	100% Referenced to other tables
6	INSP_DATE	MM/DD/YYYY	Date that data was collected in the park (completion date).	Route ID Meeting and ARAN Data Collection	FHWA Determination	100% Referenced to other tables
7	NPS_REGION	XXXX	Park Region	Route ID Meeting	Park Input	100% Referenced to other tables
8	DIVISION	XXXX	FHWA Division	Route ID Meeting	FHWA Determination	100% Referenced to other tables
9	T_PAVED_MI	999.999	Total Park Paved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
10	T_UNPAVED_MI	999.999	Total Park Unpaved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
11	T_ROUTE_MILES	999.999	Total Park Route Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
12	T_ARAN_DRIVEN	999.999	Total Park ARAN Driven Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
13	T_ARAN_LMILES	999.999	Total Park ARAN Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
14	T_CONCESS_PAVED	999.999	Total Park Concession Paved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
15	T_CONCESS_UNPAVED	999.999	Total Park Concession Unpaved Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
16	T_PRK_PAVEDSQFT	999.999	Total Park Parking Paved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
17	T_PRK_UNPAVEDSQFT	999.999	Total Park Parking Unpaved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
18	T_CPRK_PAVEDSQFT	999.999	Total Park Concession Parking Paved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
19	T_CPRK_UNPAVEDSQFT	999.999	Total Park Concession Parking Unpaved Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
20	T_PARKING_SQFT	999.999	Total Park Parking Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
21	T_PARKING_LMILES	999.999	Total Park Parking Equivalent Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
22	T_MRR_SQFT	999.999	Total Park Manually Rated Road Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
23	T_CMRR_SQFT	999.999	Total Park Concession Manually Rated Road Square Feet	RIP Post-processing	Automatic Output	100% Referenced to other tables
24	T_MRR_LMILES	999.999	Total Park Manually Rated Road Equivalent Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
25	T_LMILES	999.999	Total Park Lane Miles	RIP Post-processing	Automatic Output	100% Referenced to other tables
26	T_CULVERT_CNT	999	Total Park Culvert Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
27	T_DROP_INLET_CNT	999	Total Park Drop Inlet Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
28	T_GATE_CNT	999	Total Park Gate Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
29	T_TRAFLIGHT_CNT	999	Total Park Traffic light Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
30	T_SIGN_CNT	999	Total Park Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
31	T_LWCROSS_CNT	999	Total Park Low Water Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
32	T_BRIDGE_CNT	999	Total Park Bridge Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
33	T_TUNNEL_CNT	999	Total Park Tunnel Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
34	T_PULLOUT_CNT	999	Total Park Pullout Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
35	T_INTERSEC_CNT	999	Total Park Intersections Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
36	T_ST_BNDRY_CNT	999	Total Park State Boundaries Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
37	T_PRK_BNDRY_CNT	999	Total Park Boundaries Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
38	T_RETWALL_CNT	999	Total Park Retaining Wall Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
39	T_RR_CROSS_CNT	999	Total Park RR Crossing Count	RIP Post-processing	Automatic Output	100% Referenced to other

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
						tables
40	T_CATTLE_CNT	999	Total Park Cattle Guard Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
41	T_OVHDSIGN_CNT	999	Total Park Overhead Sign Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
42	T_MILEMARK_CNT	999	Total Park Mile Marker Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
43	T_FHYD_CNT	999	Total Park Fire Hydrant Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
44	T_OVERPASS_CNT	999	Total Park Overpass Count	RIP Post-processing	Automatic Output	100% Referenced to other tables
45	T_CABLE_TLNG	9999.999 (ft)	Total Length Park Cable Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
46	T_GDRAIL_TLNG	9999.999 (ft)	Total Length Park Guard/Guide Rail Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
47	T_GDWALL_TLNG	9999.999 (ft)	Total Length Park Guard/Guide Wall Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
48	T_TEMP_BARR_TLNG	9999.999 (ft)	Total Length Park Temporary Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
49	T_BOLLARD_TLNG	9999.999 (ft)	Total Length Park Bollard Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
50	T_BARRIER_TLNG	9999.999 (ft)	Total Length All Park Barriers	RIP Post-processing	Automatic Output	100% Referenced to other tables
51	T_CURB_TLNG	9999.999 (ft)	Total Length Park Curbing	RIP Post-processing	Automatic Output	100% Referenced to other tables
52	T_LWCROSS_TLNG	9999.999 (ft)	Total Length Park Low Water Crossings	RIP Post-processing	Automatic Output	100% Referenced to other tables
53	T_PAVDITCH_TLNG	9999.999 (ft)	Total Length Park Paved Ditches	RIP Post-processing	Automatic Output	100% Referenced to other tables (2)
54	T_TURNOUT_TLNG	9999.999 (ft)	Total Length Park Turnouts	RIP Post-processing	Automatic Output	100% Referenced to other tables
55	PARK_PCR	99.99	Overall Park PCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
56	PARK_RCI	99.99	Overall Park RCI Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
57	PARK_SCR	99.99	Overall Park SCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
58	PARK_RUT_INDEX	99.99	Overall Park Rutting Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
59	PARK_AC_INDEX	99.99	Overall Park Alligator Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables

	FIELD	FORMAT	EXPECTED VALUE	SOURCE	VALIDATION	EXPECTED ACCURACY
60	PARK_LC_INDEX	99.99	Overall Park Longitudinal Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
61	PARK_TC_INDEX	99.99	Overall Park Transverse Cracking Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
62	PARK_PATCH_INDEX	99.99	Overall Park Patching Index Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables
63	PARK_CONC_PCR	99.99	Overall Park Concession PCR Rating	RIP Post-processing	Automatic Output	100% Referenced to other tables

Business Practices for Route Numbering and Roadway Asset Identification

Introduction and Background:
Beginning in November 2006, inventory and condition information gathered by the Federal Highway Administration (FHWA) has been stored in FMSS to enable NPS to report Deferred Maintenance (DM) and Current Replacement Value (CRV) for NPS paved roads, paved parking areas, bridges, and tunnels. The NPS Roads Working Group (RWG) has been tasked with developing and implementing the procedures necessary to transfer DM and CRV from FHWA's databases to NPS' Facility Management Software System (FMSS).

Current business practices for roadway definition in national parks involve face-to-face meetings between FHWA personnel and individual park staff known as "Route ID" meetings. These meetings have been ongoing for several years and have been performed within the context of the Road Inventory Program (RIP) executed mainly by FHWA. The primary focus of these meetings has been on defining roadway static information such as route names, numbers, functional class, etc. The FHWA personnel are the primary individuals responsible for implementing the RIP and the route ID meetings are an integral and fundamental part of that process. The RIP process provides route numbers for each individual road and parking area in each park. After the route ID meetings establish a given park's roadway asset base, various types of condition and inventory data are collected either manually or with a data collection van that drives each individual road with an individual route number.

The FMSS requires asset numbers as unique identifiers for all asset types including roadways. **The current practice is that all roadways that are assigned a route number at route ID, also are defined as assets and therefore also receive an FMSS asset number** (Route names and functional classes are also collaboratively assigned during the face-to-face route ID meetings). This practice began midway through the third RIP data collection cycle (ending in 2003) and was further reinforced during an asset alignment process conducted in the summer of 2006. The alignment process ensured that each route number in RIP and each asset number in FMSS were matched to the correct road and parking area.

Issue Statement:
As a result of various pre-existing business practices associated with the RIP, which predates FMSS by several years, route numbers are assigned for routes that are often very small. In tandem with the current business practice that all routes with route numbers are considered assets, this has caused a proliferation of asset numbers within FMSS. Over the past year, the RWG has learned that this business practice has significantly increased time and resources that parks must dedicate to administering FMSS data entry and management. This additional work effort is due to the fact that tying FMSS asset records to the more detailed, granular RIP route numbers has generated numerous new assets that require additional database and work order management. This has led to a situation where assets are not being defined the way they are managed.

The following proposed practices seek to create an asset definition process that is dictated by to how road assets are managed at the park level, not according to the pre-existing practices used in RIP for collecting detailed road information. RIP practices assign route numbers mainly based on how data are collected and driven with a data collection device. These procedures will disassociate the driving of roads with the data collection van from the process of assigning them asset status. **The end goal is to only assign asset numbers based on how parks manage their facilities within guidelines set up within FMSS and herein.** Driving the road with the data collection van allows for the collection of higher quality data as well as the ability to view road segments with video viewing software (Visidata). By de-linking driving the roads with the assignment of "asset status", we are able to get the best quality data without the proliferation of assets that has serious negative ramifications for managing roadways in parks using asset management tools.

Proposed Actions:

1. Make a distinction within the route number field in the RIP database between those route numbers that represent assets, those that are subcomponents of assets and those that are groups of sub-components. The route number field in the RIP database will be expanded from 6 to 7 characters. The additional character will denote the asset status of the route in question. Combined routes will be designated with a double "zz", while subcomponents will be designated with one "z". Whenever possible, a combined route should use the lowest route number to be combined as the combined route number.
2. Only show assets, whether a group of subcomponents or a single component, on the Route ID report. Assets that are composed of subcomponents will have "zz" in the route number. Individual routes will have no additional characters in the route number. Subcomponents (designated in RIP with a "z") will not be listed on the route ID report. Only assign asset numbers to those routes listed on the route ID report.
3. Provide a separate reporting function (other than the Route ID report) to identify and display information for route numbers not representing assets. Specific reporting requirements and format TBD.
4. Add a new field to the RIP database to indicate the "asset status" of a route number. The flag will have three possible values:
    a. Asset with no subcomponents.
    b. Asset with subcomponents.
    c. Non-asset (i.e. subcomponent).

    Both a change in the route number and a new "asset ID" field in the RIP database are recommended. It is easier to perform queries and other database manipulations using a separate field instead of a character within the route number field. The character in the route number field allows for rapid identification of the asset status of a road without having to access the database as a whole. Even thought non-asset routes will not be included in the route ID report (the primary location for parks to view road information in RIP), there are many other reports as well as the Visidata application where the route number is

displayed. In these cases, the character in the route number will clearly identify the asset status of the roadway.

5. Focus asset definition practices on NPS asset management needs. Create roadway assets based on how parks manage these assets within the following guidelines:
    a. Individual road segments (asset subcomponents) may be combined into a single asset**. Note that all the attributes of individual subcomponents (paved area, equipment, work orders, etc) will be included in the combined asset.**
    b. In general, combination should be used in complex circulatory environments such as campground areas, housing and other administrative areas, maintenance areas, etc.
    c. Public and non-public segments may not be combined.
    d. Segments with differing functional classes may not be combined.
    e. Discrete parking areas may be combined into a single asset where they service the same facility or resource and are within walking distance of each other.
    f. Parking areas and roads may not be combined. This includes short road segments that may be near or adjacent to parking areas. See 5h below for exceptions to this.
    g. Where the primary purpose of a road is to provide access to a parking area, and that road segment is approximately 0.25 miles in length or shorter, the access road should be considered part of the parking area (Note that this is an existing RIP business practice).
    h. Particularly long routes may be divided into multiple assets based on how a park manages the roadway network. This should not be confused with the use of sub-components listed in 5a.
    i. Roads that are actively managed by concession operations may not be combined with those managed by the NPS.

Discussion:
The first four items listed above are actions required by FHWA RIP to allow for the adoption of the practices shown in 5a-i. The following will provide additional direction and examples for guidelines listed.

<u>Individual road segments (asset subcomponents) may be combined into a single asset.</u>
Where previous route ID practices have generated more assets (routes) than are practical from an asset management standpoint, small, discrete road lengths may be designated as asset subcomponents and then combined into a larger single asset. A subcomponent is NOT an FMSS term. Subcomponents will be used in RIP to indicate which routes are small, drivable individual road segments and which routes may include these segments. Once a piece of road is designated a subcomponent of another route, it will no longer have any individual identity in FMSS. Only those routes listed on the RIP Route ID report will have asset numbers in FMSS. As stated in business rule 2 above, subcomponents will not be listed on the route ID. The quantity information (length, area) will be included into the larger route of which they are a part. See Figures 1 and 2 for an example of how existing assets may be combined using subcomponents. Note that

subcomponents will have an identity in the RIP database and, if driven by RIP team, may be referenced in RIP reports, Visidata, or other RIP documentation.

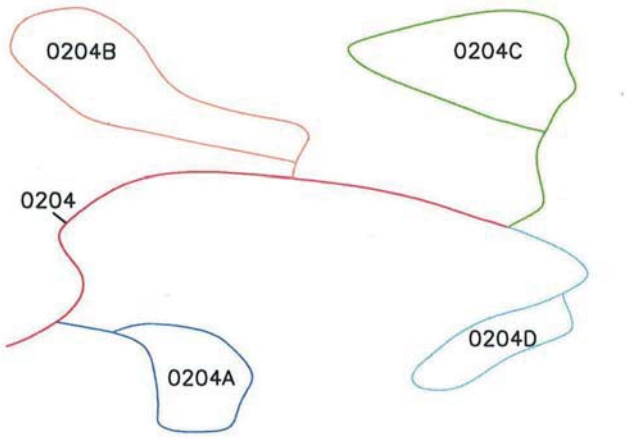

Figure 1: Campground with five routes and five assets

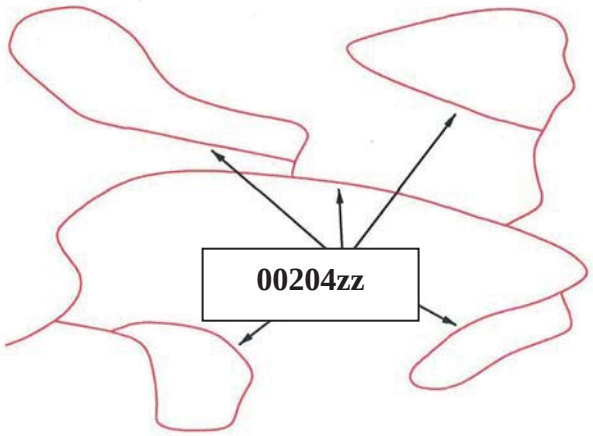

Figure 2: Campground with all loops combined into one route and one asset. This has eliminated four assets.

In general, combination should occur in complex circulatory environments such as campground areas, housing and other administrative areas, maintenance areas, etc.

Typically these complex situations are where too many assets have been used to define roadways. Combining simple "point A to point B" roads that are clearly defined and provide access to different facilities or locations may not be done.

Public and non-public segments may not be combined. Roads that are posted as closed to the public or are intended as administrative access only (maintenance areas, housing areas, fire roads, etc) can not be combined with roads open to the public.

Segments with differing functional classes may not be combined. The roadway functional class is found on the Route ID report. Functional class indicates the type of circulatory function a given road provides. Functional class is used in a variety of applications (engineering, safety, funding) so it is important to maintain the correct functional class attributes of individual roads/assets. There are some cases where functional class was erroneously assigned in prior Route ID meetings such as where campground loops have a different functional class than the campground road. Functional classes of individual roads may be modified to correct discrepancies. The functional class definitions may not be modified.

Discrete parking areas may be combined into a single asset where they service the same facility or resource and are within walking distance of each other. These combined areas should be maintained as one asset. There are many instances where small (5-10 space), discrete parking areas have been separated into individual assets even though they provide parking for the same area or facility. These may be combined into a single asset. Figures 3 and 4 shows examples of combining parking areas.

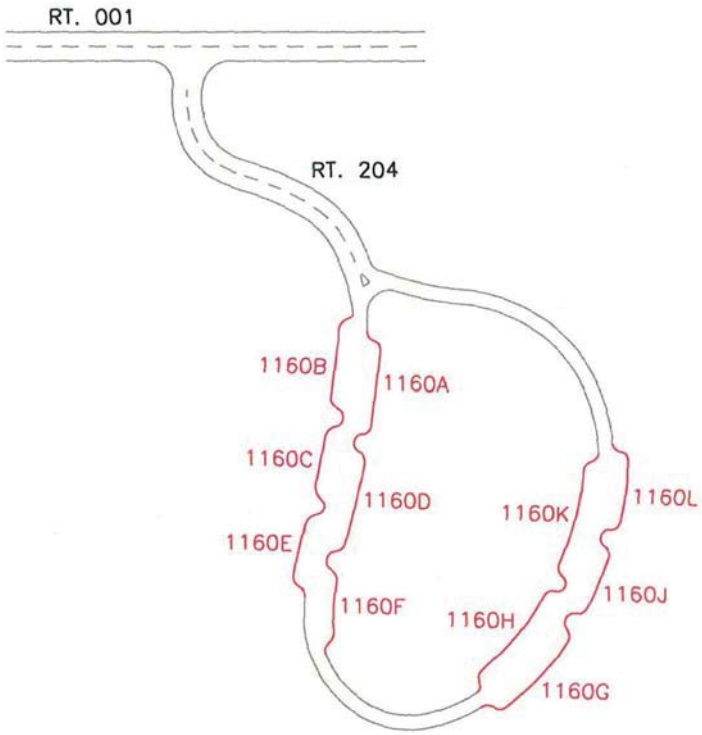

Figure 3: Parking with access route 204 and multiple parking areas (1160 A-L). Currently, this parking area is 12 routes and 12 assets (one 1100 asset and 11 1300 assets).

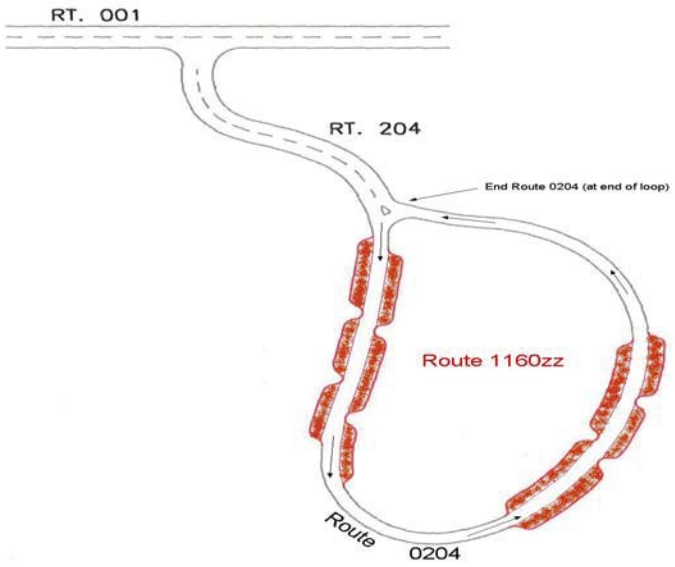

Figure 4: Parking with access route 204 and one parking area 1160zz. Route 204 is assumed longer than 0.25 miles. There are now 2 assets (one 1100 asset, one 1300 asset) instead of 12.

Parking areas and roads may not be combined. Parking areas and roads are tracked as separate asset types (1300 vs. 1100) in FMSS and as such should not be combined except in situations described by 5g. In Figure 5, Route 207 is a spur road from the main route running through parking area 1102. Since the spur road continues through and beyond the parking area, it will remain a separate route.

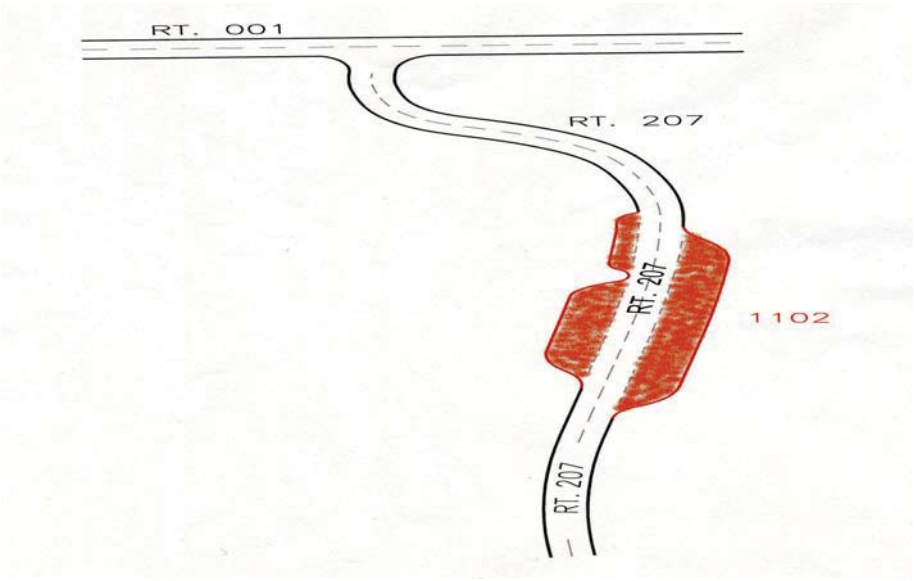

Figure 5: Parking with access route 207 running through and continuing beyond parking 1102. This access route cannot be considered a part of the parking area and two routes and two assets continue to exist.

Where the primary purpose of a road is to provide access to a parking area, and that road segment is less than 0.25 miles in length, the access road should be considered part of the parking area. See Figures 8. Where a road continues on past a parking area to another facility or destination, even if it is less than 0.25 miles to the initial parking area, the road and parking area may not be combined.

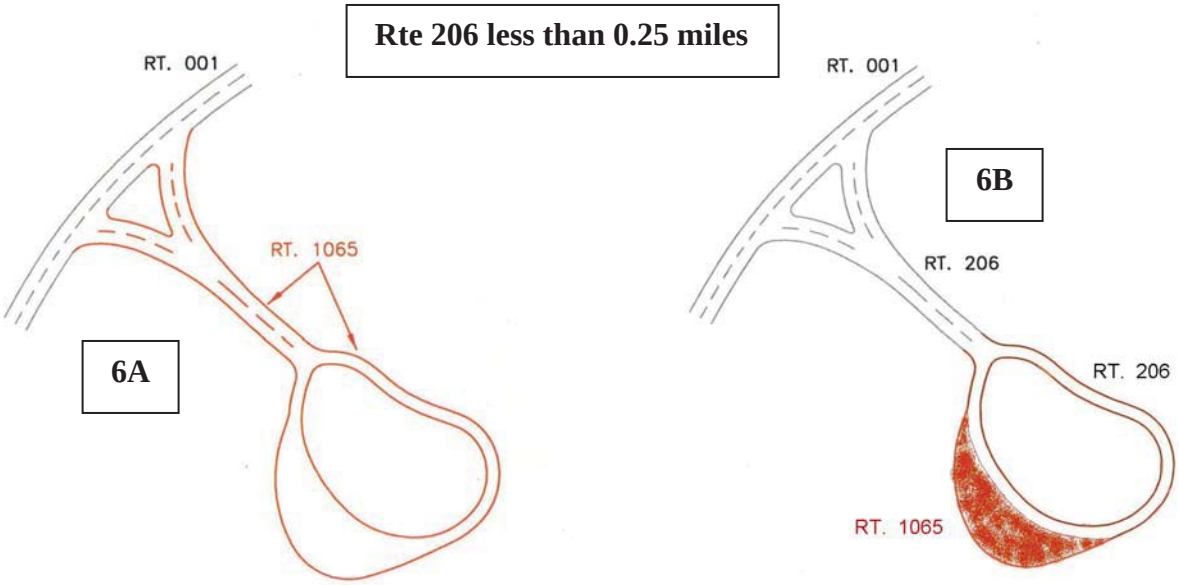

Figure 6: Since the access route is less than .25 miles in length and the only use of the access is to the parking, one route for both the access and the parking area can be established.

Particularly long routes may be divided into multiple assets based on how a park manages the roadway network. This should not be confused with the use of sub-components listed in 5a. Routes like the Blue Ridge Parkway or the Yellowstone Grand Loop may not lend themselves to management as a single asset by virtue of their length. Often management districts are created for sections of these routes and maintenance activities occur primarily within these districts. Parks may break routes up into separate assets during the Route ID process if the road is managed as discrete sections. This should only be done for very long roads.

The following example illustrates a complex road system and how the proposed business practice and several of the guidelines could be applied to create fewer assets that are consistent with local management.

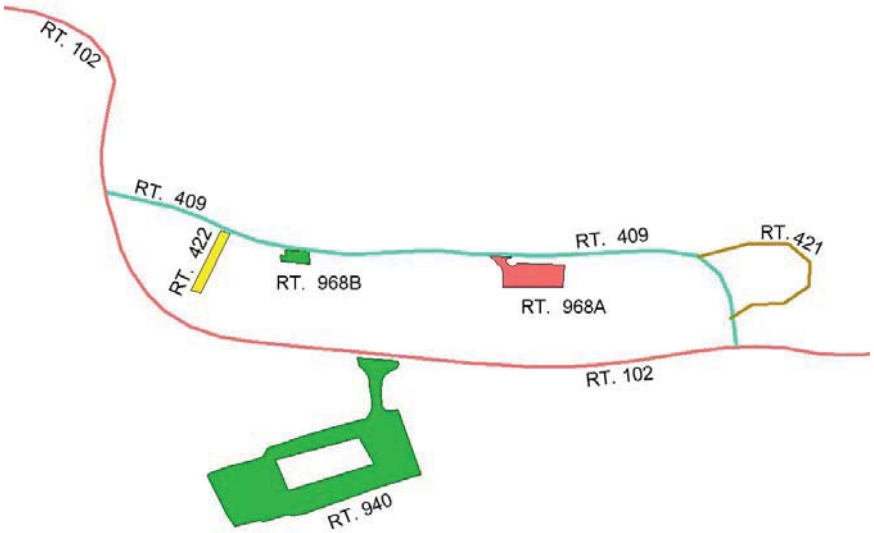

Figure 7 – Current Housing area access configuration. Route 409 is less than 0.25 miles long.

The area serviced by Routes 409, 421, 422, 968A, and 968B is all employee housing. Route 940 provides access to visitor services and not to the housing area. Routes may be combined to create assets that reflect local management. Routes 409, 421, and 422 are all the same functional class, provide access to one type of activity (housing) and are all posted as non-public. These routes may be combined. They should not be combined with any parking areas even though they are all less than 0.25 miles long. This is because their main function is not to provide access to parking. Routes 968A and B provide parking for access to the same facility (housing). Even though these discrete areas may provide parking to different housing units, it's reasonable to manage them as a single asset. They may also be combined.

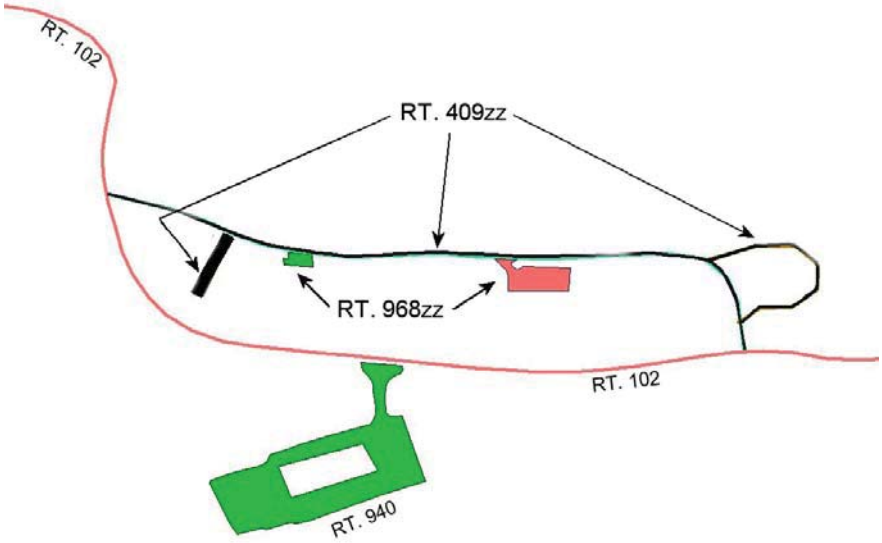

Figure 8 – Combined housing area access configuration – Parking and road assets combined to eliminate 3 assets.