



national park service

**The Road Inventory
of
Bighorn Canyon National Recreation Area
BICA – 1320
Cycle 4**



**Prepared By:
Federal Highway Administration
Road Inventory Program
Cycle 4**



Bighorn Canyon National Recreation Area in Montana & Wyoming





TABLE OF CONTENTS

	<u>SECTION</u>	<u>PAGE</u>
1.	INTRODUCTION	1 - 1
2.	PARK SUMMARY INFORMATION	
	Paved Route Miles and Percentages by Functional Class and PCR	2 - 1
	ARAN Road Condition Summary	2 - 2
	Parkwide Condition Summary	2 - 7
	Cycle 2 vs Cycle 3 vs Cycle 4 Condition Comparisons	2 - 8
3.	PARK ROUTE LOCATION / CONDITION MAPS	
	Route Location Key Map	3 - 1
	Route Location Area Map	3 - 2
	Route Condition Key Map – PCR Mile by Mile	3 - 7
	Route Condition Area Map – PCR Mile by Mile	3 - 8
4.	PARK ROUTE INVENTORY	
	Route Identification Report	4 - 1
5.	PAVED ROUTE CONDITION RATING SHEETS (CRS)	
	CRS Pages	5 - 1
6.	MANUALLY RATED PAVED ROUTE CONDITION RATING SHEETS (MRR)	
	MRR Pages	6 - 1
7.	PARKING AREA CONDITION RATING SHEETS	
	Paved Parking Area Pages	7 - 1
8.	PARKWIDE / ROUTE MAINTENANCE FEATURES SUMMARIES	
	Parkwide Maintenance Features Summary	8 - 1
	Route Maintenance Features Summary	8 - 2
	Structure List	8 - 7
9.	PARK ROUTE MAINTENANCE FEATURES ROAD LOGS	
	Route Maintenance Features Road Logs	9 - 1
10.	APPENDIX	
	A. Glossary of Terms and Abbreviations	10 - 1
	B. Description of Rating System	10 - 2
	C. General Information on RIP Systems	10 - 8
	D. Metadata	10 - 11

Bighorn Canyon National Recreation Area



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

FHWA/EFLHD
21400 Ridgetop Circle
Sterling, VA 20166
(703) 404-6371

FHWA/CFLHD
12300 West Dakota Ave.
Lakewood, CO 80228
(720) 963-3560

Bighorn Canyon National Recreation Area



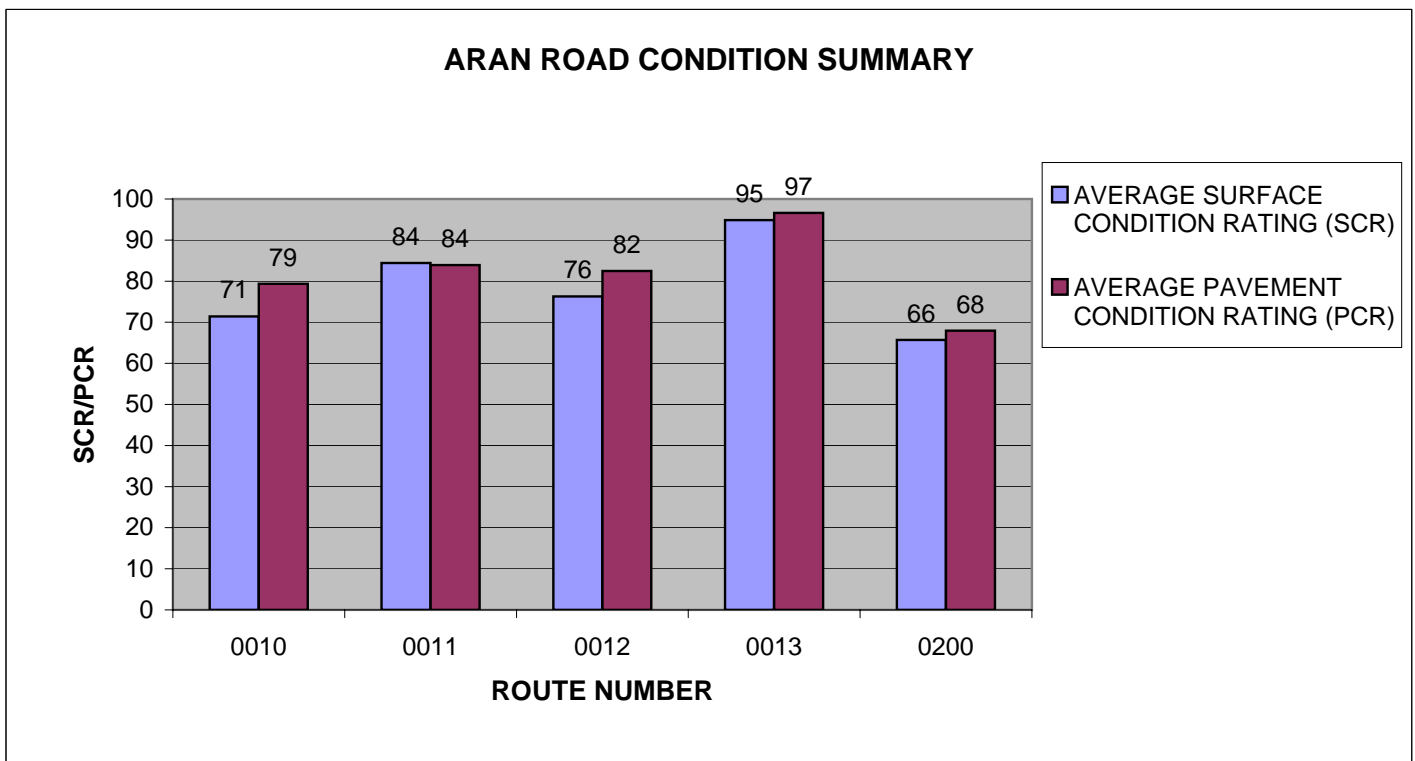
Section 2 **Park Summary Information**

**BICA: 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	0.91	2.23%	7.73	18.97%	9.72	23.86%	11.81	28.99%	30.17
2									
3	1.91	4.69%	2.32	5.69%	1.38	3.39%	3.42	8.39%	9.03
4									
5	1.28	3.14%	0.26	0.64%					1.54
6									
7									
8									
Totals	4.10	10.06%	10.31	25.31%	11.10	27.25%	15.23	37.38%	40.74

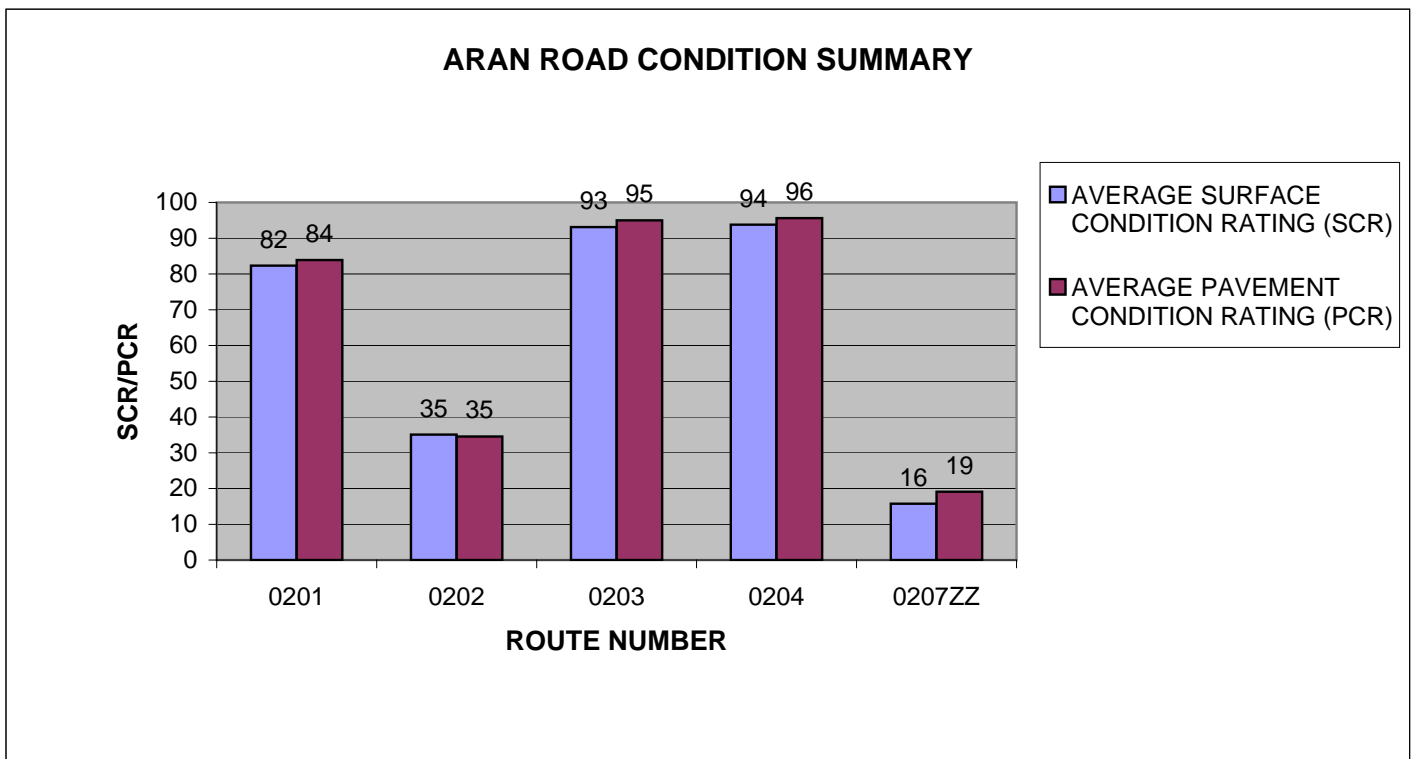
BICA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0010	FORT SMITH ACCESS ROAD	1	5.29	ASPHALT	71	79
0011	OK-A-BEH ROAD	1	9.37	ASPHALT	84	84
0012	AFTER BAY ROAD	1	1.91	ASPHALT	76	82
0013	BAD PASS ROAD	1	13.60	ASPHALT	95	97
0200	AFTER BAY CAMPGROUND ROAD	3	0.48	ASPHALT	66	68



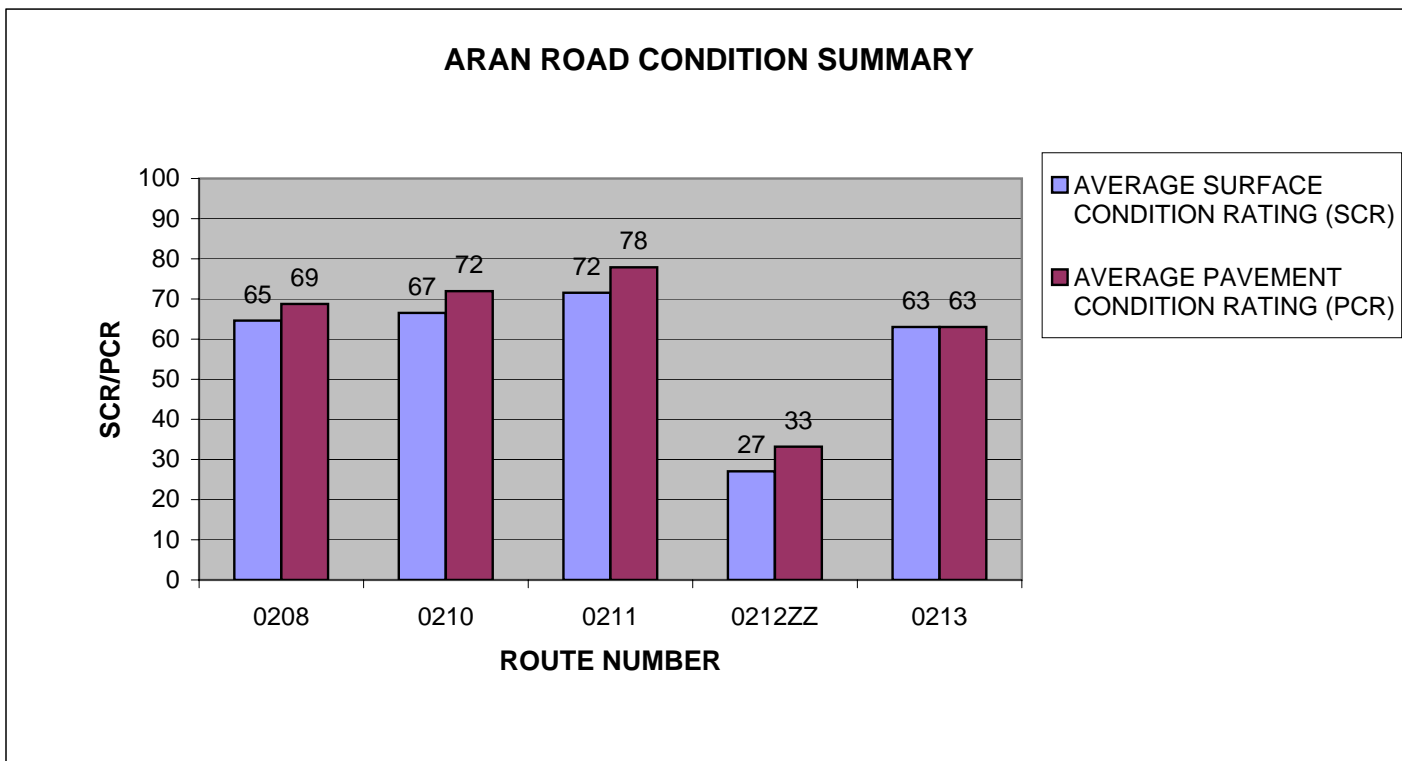
BICA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0201	AFTER BAY BOAT RAMP ROAD	3	0.19	ASPHALT	82	84
0202	M-K HILL PICNIC ROAD	3	0.32	ASPHALT	35	35
0203	HORSESHOE BEND ROAD	3	1.66	ASPHALT	93	95
0204	DEVIL'S CANYON OVERLOOK ROAD	3	0.8	ASPHALT	94	96
0207ZZ	HORSESHOE BEND CAMPGROUND ROADS	3	0.93	ASPHALT	16	19



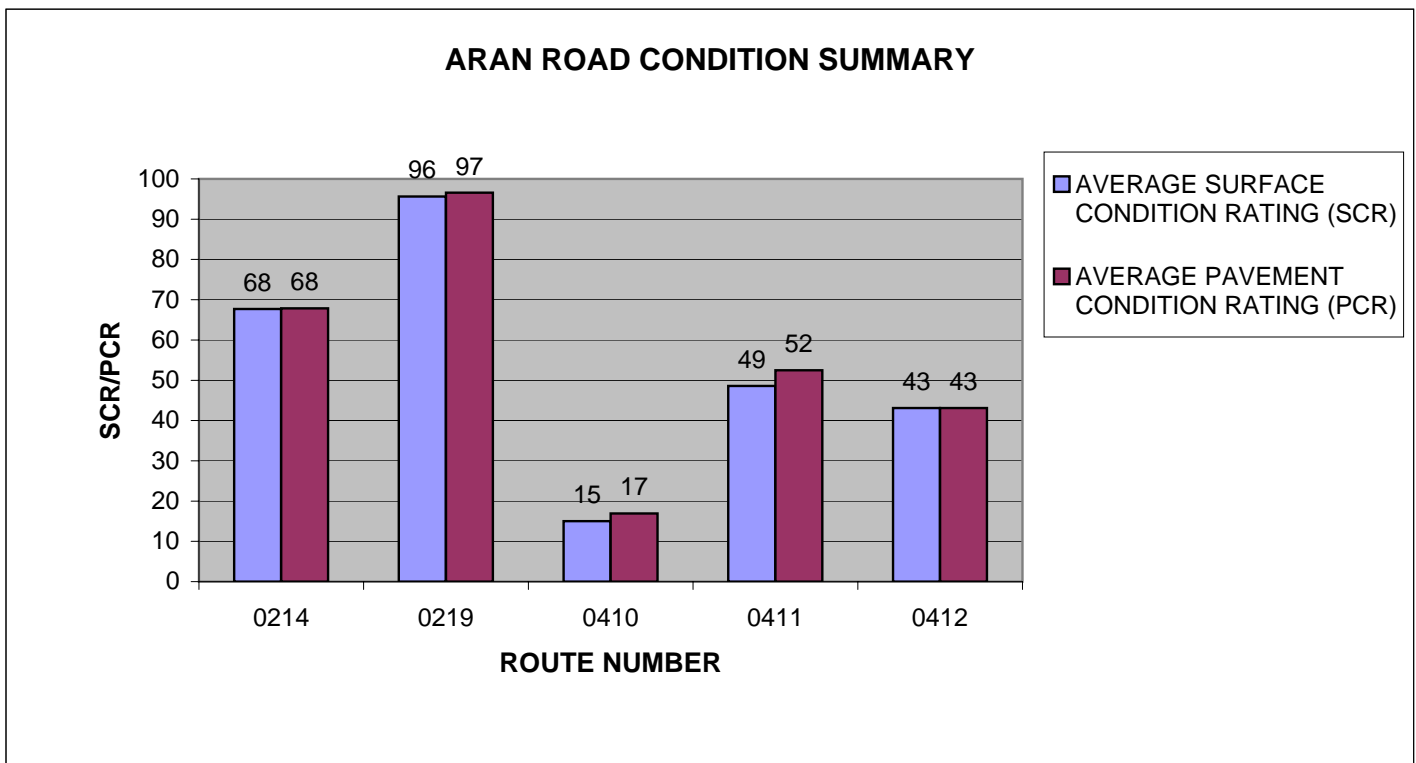
BICA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0208	AIRSTRIP ACCESS ROAD	3	0.13	ASPHALT	65	69
0210	WAPPA UPPER SWITCHYARD ROAD	3	0.81	ASPHALT	67	72
0211	YELLOWTAIL POWER PLANT ROAD	3	1.14	ASPHALT	72	78
0212ZZ	AVENUE B ROADS	3	0.51	ASPHALT	27	33
0213	DITCHRIDER ROAD	3	0.08	ASPHALT	63	63



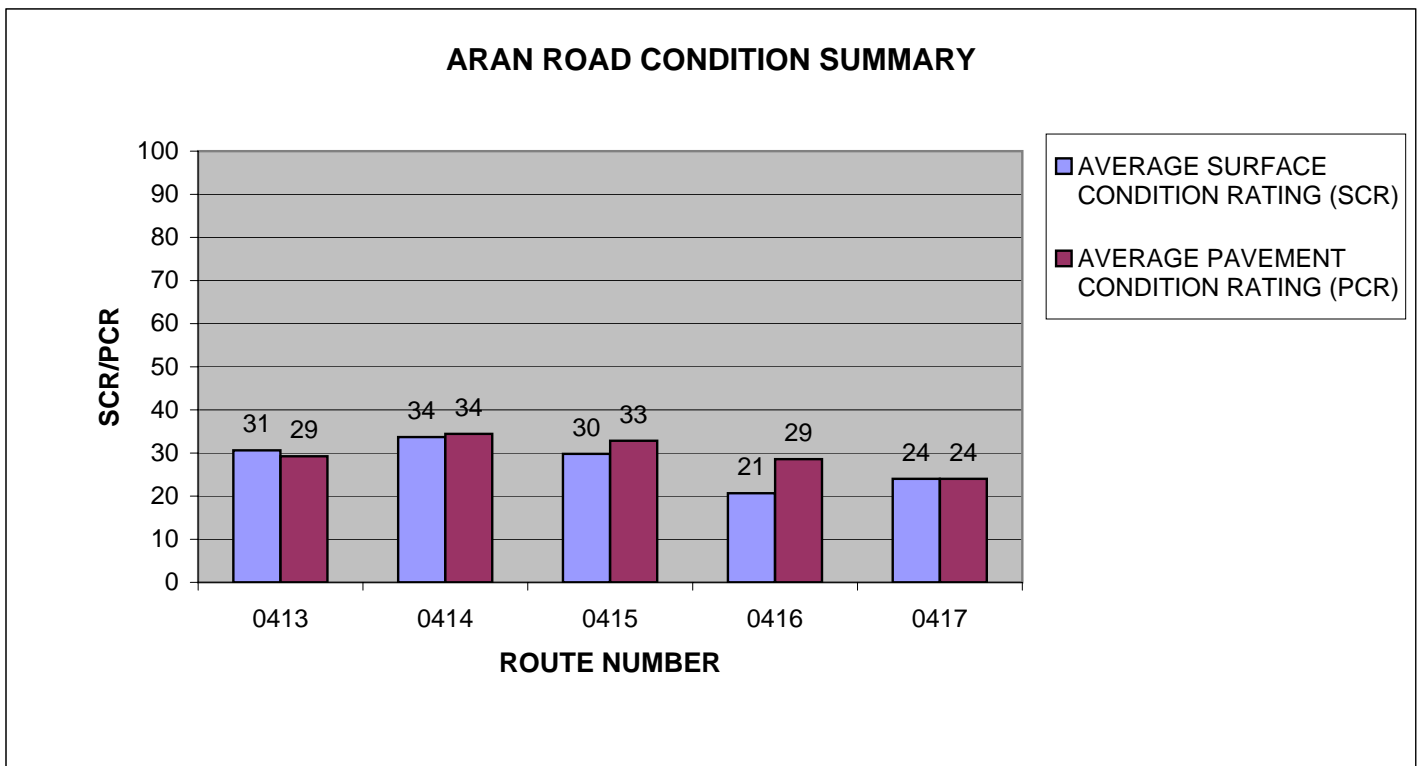
BICA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0214	BIGHORN CANAL ROAD	3	0.14	ASPHALT	68	68
0219	BARRY'S LANDING BOAT RAMP ROAD	3	2.09	ASPHALT	96	97
0410	AVENUE A	5	0.31	ASPHALT	15	17
0411	AVENUE C	5	0.3	ASPHALT	49	52
0412	FIRST STREET	5	0.09	ASPHALT	43	43



BICA: ARAN ROAD CONDITION SUMMARY

ROUTE NUMBER	ROUTE NAME	FUNCT CLASS	ROUTE LENGTH	SURFACE TYPE	AVERAGE SURFACE CONDITION RATING (SCR)	AVERAGE PAVEMENT CONDITION RATING (PCR)
0413	SECOND STREET	5	0.13	ASPHALT	31	29
0414	THIRD STREET	5	0.19	ASPHALT	34	34
0415	FOURTH STREET	5	0.25	ASPHALT	30	33
0416	SIXTH STREET	5	0.18	ASPHALT	21	29
0417	SEVENTH STREET	5	0.09	ASPHALT	24	24

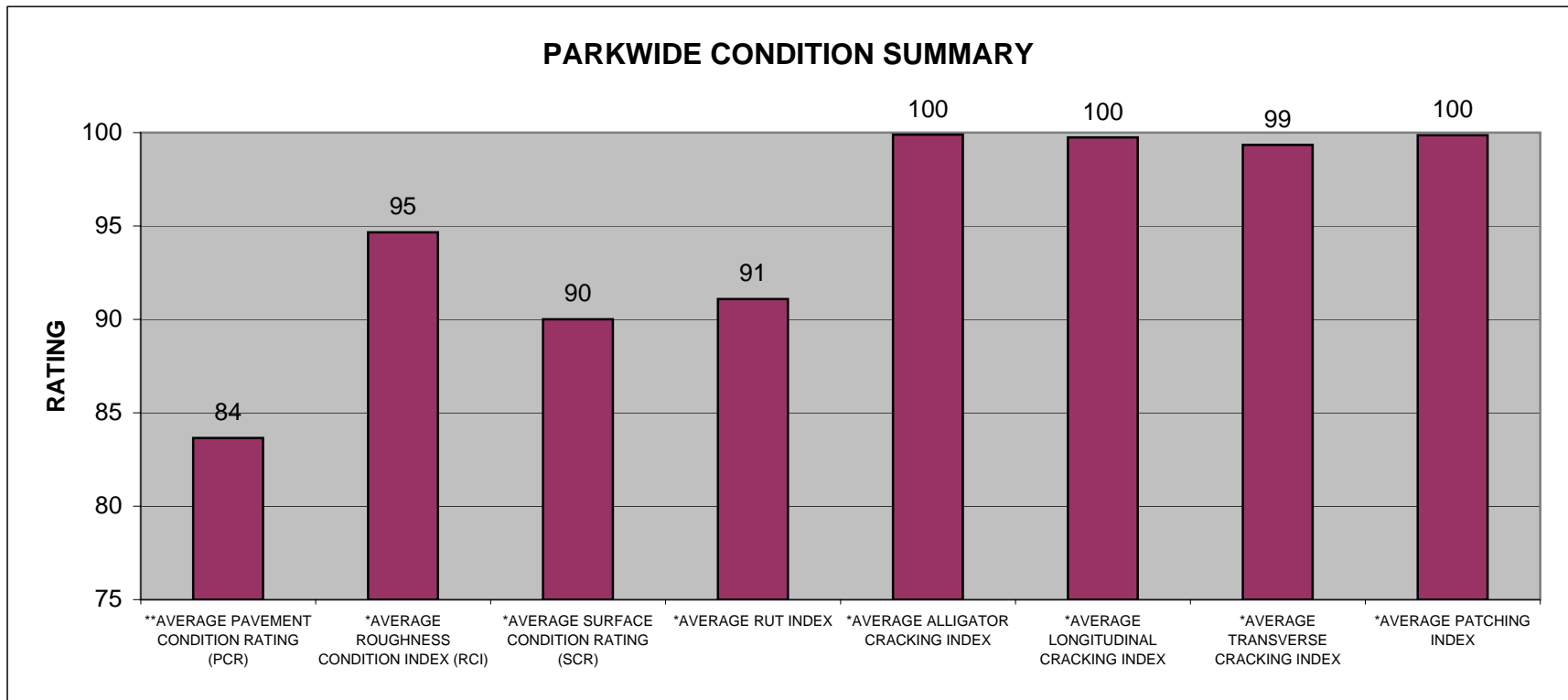


BICA: PARKWIDE CONDITION SUMMARY

**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
84	95	90	91	100	100	99	100

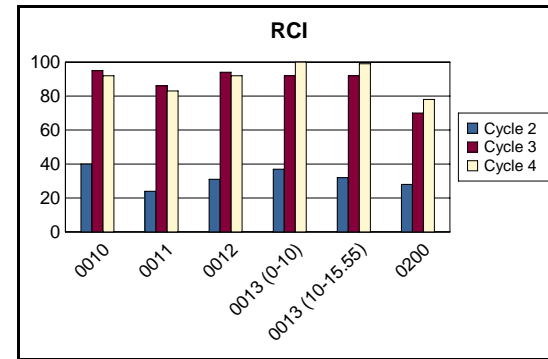
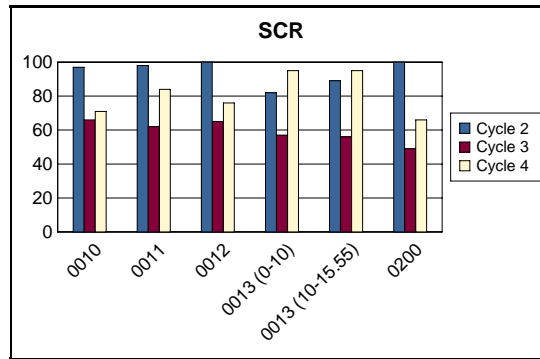
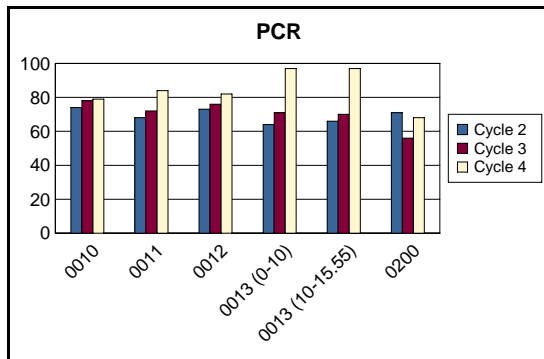
** PCR Index is based on all ARAN-driven roads, parking areas, and manually rated routes.

* Index values are based on ARAN-driven roads only.



BICA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

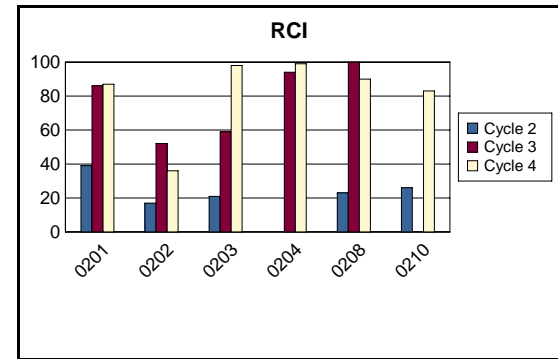
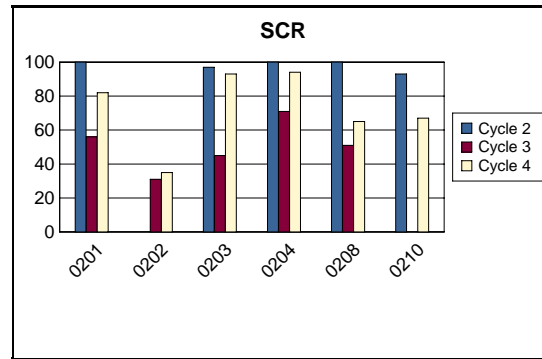
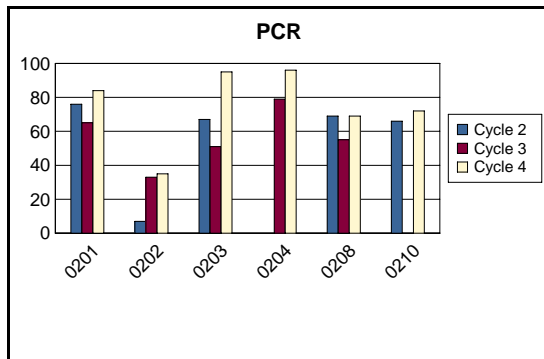
ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0010	5.29	0.00	5.29	74	78	79	+1%	97	66	71	+8%	40	95	92	-3%	
0011	9.37	0.00	9.37	68	72	84	+17%	98	62	84	+35%	24	86	83	-3%	
0012	1.91	0.00	1.91	73	76	82	+8%	100	65	76	+17%	31	94	92	-2%	
0013	10.00	0.00	10.00	64	71	97	+37%	82	57	95	+67%	37	92	100	+9%	
0013	5.55	10.00	15.55	66	70	97	+39%	89	56	95	+70%	32	92	99	+8%	
0200	0.23	0.00	0.23	71	56	68	+21%	100	49	66	+35%	28	70	78	+11%	



Cycle 4 Date Collected (8/15/08 - 8/17/08)

BICA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

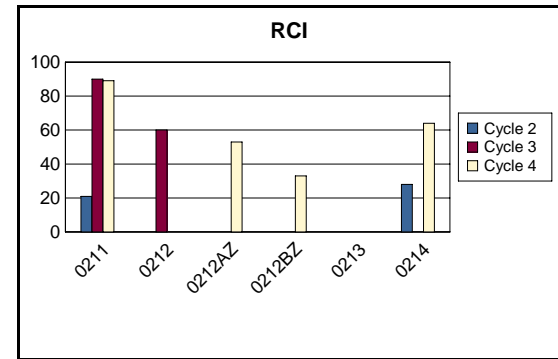
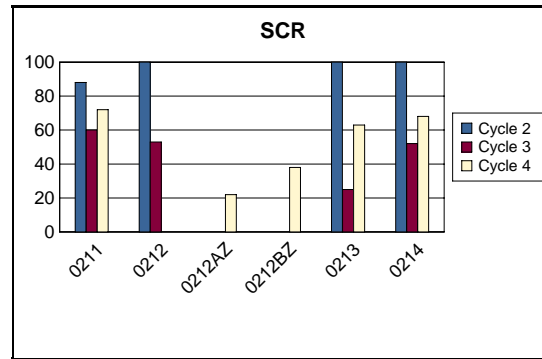
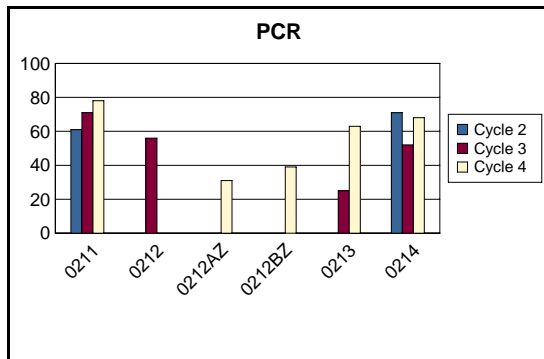
ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0201	0.19	0.00	0.19	76	65	84	+29%	100	56	82	+46%	39	86	87	+1%	
0202	0.40	0.00	0.40	7	33	35	+6%	0	31	35	+13%	17	52	36	-31%	
0203	1.69	0.00	1.69	67	51	95	+86%	97	45	93	+107%	21	59	98	+66%	
0204	0.80	0.00	0.80	N/A	79	96	+22%	100	71	94	+32%	N/A	94	99	+5%	
0208	0.13	0.00	0.13	69	55	69	+25%	100	51	65	+27%	23	100	90	-10%	
0210	0.81	0.00	0.81	66	N/A	72	N/A	93	N/A	67	N/A	26	N/A	83	N/A	Route 0210 was a manually rated route in Cycle 3.



Cycle 4 Date Collected (8/15/08 - 8/17/08)

BICA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

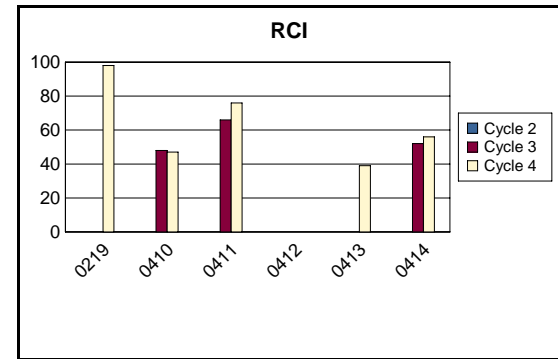
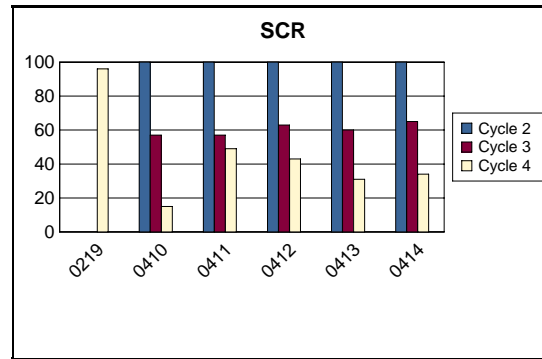
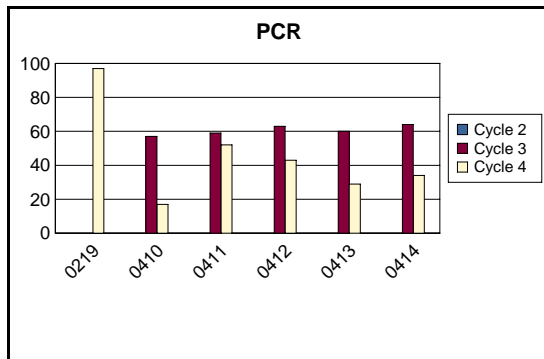
ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)				SURFACE CONDITION RATING (SCR)				ROUGHNESS CONDITION INDEX (RCI)				COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	CYCLE 2	CYCLE 3	CYCLE 4	PERCENT CHANGE	
0211	1.14	0.00	1.14	61	71	78	+10%	88	60	72	+20%	21	90	89	-1%	
0212	0.44	0.00	0.44	N/A	56	N/A	N/A	100	53	N/A	N/A	N/A	60	N/A	N/A	Route 0212 was split into Route 0212AZ & 0212BZ in Cycle 4.
0212AZ	0.35	0.00	0.35	N/A	N/A	31	N/A	N/A	N/A	22	N/A	N/A	N/A	53	N/A	Route 0212AZ was part of Route 0212 in Cycle 3.
0212BZ	0.16	0.00	0.16	N/A	N/A	39	N/A	N/A	N/A	38	N/A	N/A	N/A	33	N/A	Route 0212BZ was part of Route 0212 in Cycle 3.
0213	0.08	0.00	0.08	N/A	25	63	+152%	100	25	63	+152%	N/A	N/A	N/A	N/A	No RCI was collected in Cycle 3 or Cycle 4.
0214	0.14	0.00	0.14	71	52	68	+31%	100	52	68	+31%	28	N/A	64	N/A	No RCI was collected in Cycle 3.



Cycle 4 Date Collected (8/15/08 - 8/17/08)

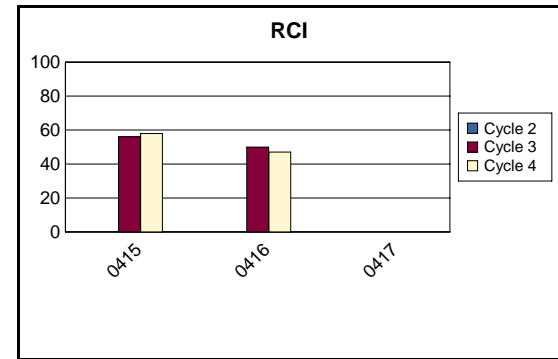
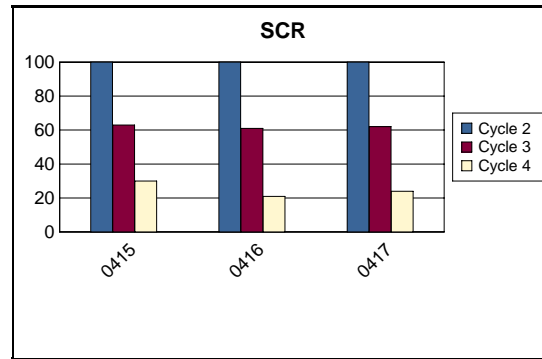
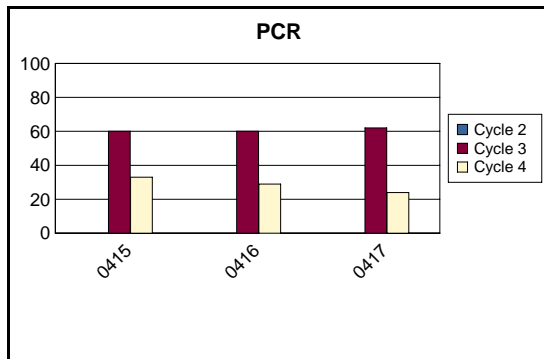
BICA CYCLE 2 vs CYCLE 3 vs CYCLE 4 CONDITION COMPARISONS

ROUTE NUMBER	PAVED MILES	FROM MILEPOST	TO MILEPOST	PAVEMENT CONDITION RATING (PCR)			PERCENT CHANGE	SURFACE CONDITION RATING (SCR)			PERCENT CHANGE	ROUGHNESS CONDITION INDEX (RCI)			PERCENT CHANGE	COMMENT
				CYCLE 2	CYCLE 3	CYCLE 4		CYCLE 2	CYCLE 3	CYCLE 4		CYCLE 2	CYCLE 3	CYCLE 4		
0219	2.09	0.00	2.09	N/A	N/A	97	N/A	N/A	N/A	96	N/A	N/A	N/A	98	N/A	Route 0219 was part of Route 0013 in Cycle 3.
0410	0.31	0.00	0.31	N/A	57	17	-70%	100	57	15	-74%	N/A	48	47	-2%	
0411	0.30	0.00	0.30	N/A	59	52	-12%	100	57	49	-14%	N/A	66	76	+15%	
0412	0.09	0.00	0.09	N/A	63	43	-32%	100	63	43	-32%	N/A	N/A	N/A	N/A	No RCI was collected in Cycle 3 or Cycle 4.
0413	0.13	0.00	0.13	N/A	60	29	-52%	100	60	31	-48%	N/A	N/A	39	N/A	No RCI was collected in Cycle 3.
0414	0.19	0.00	0.19	N/A	64	34	-47%	100	65	34	-48%	N/A	52	56	+8%	



BICA 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	
0415	0.25	0.00	0.25	N/A	60	33	-45%	100	63	30	-52%	N/A	56	58	+4%	
0416	0.18	0.00	0.18	N/A	60	29	-52%	100	61	21	-66%	N/A	50	47	-6%	
0417	0.09	0.00	0.09	N/A	62	24	-61%	100	62	24	-61%	N/A	N/A	N/A	N/A	No RCI was collected in Cycle 3 or Cycle 4.



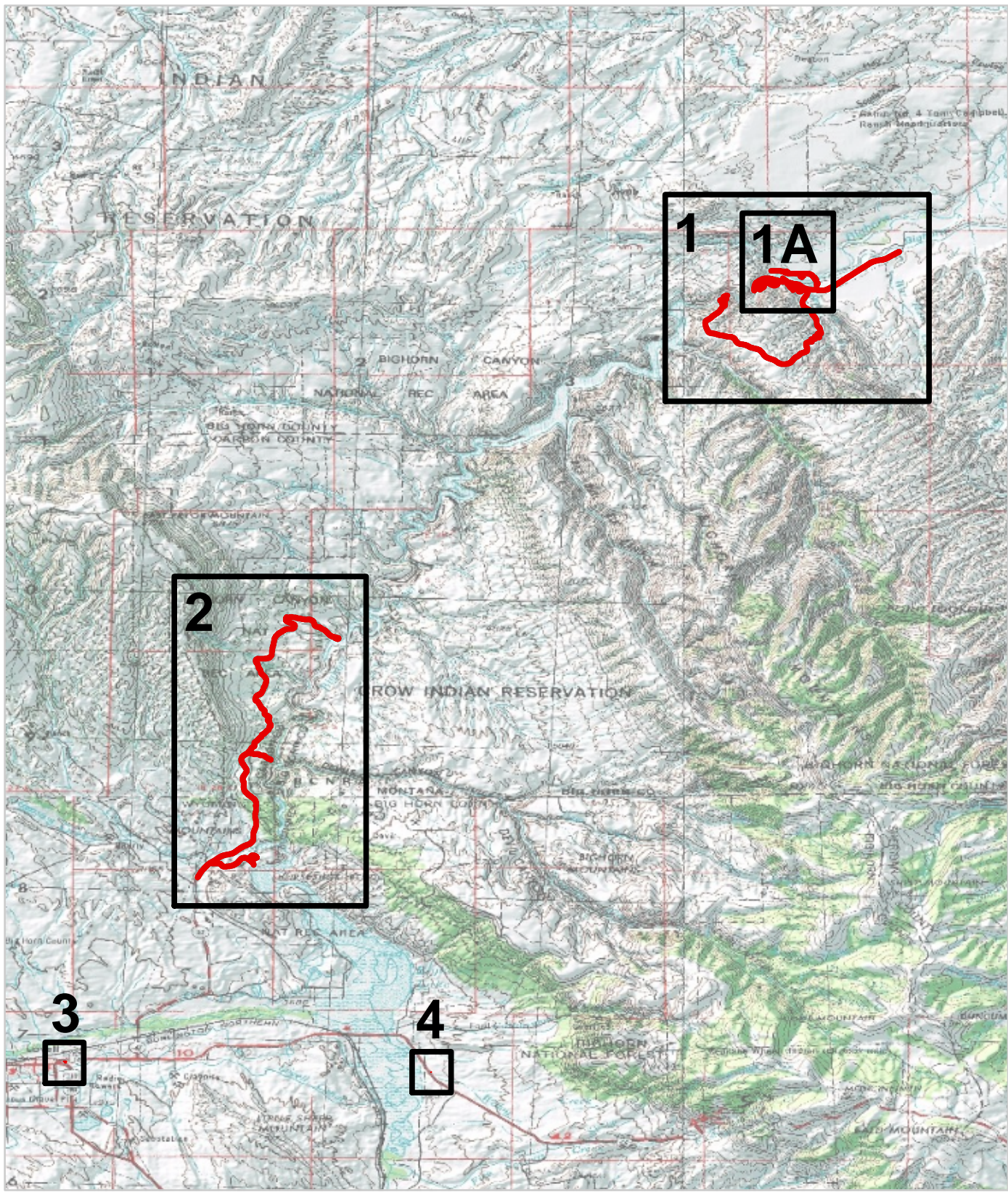
Cycle 4 Date Collected (8/15/08 - 8/17/08)

Bighorn Canyon National Recreation Area

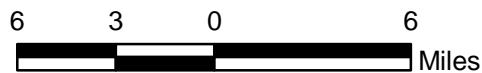


Section 3 **Park Route Location / Condition** **Maps**

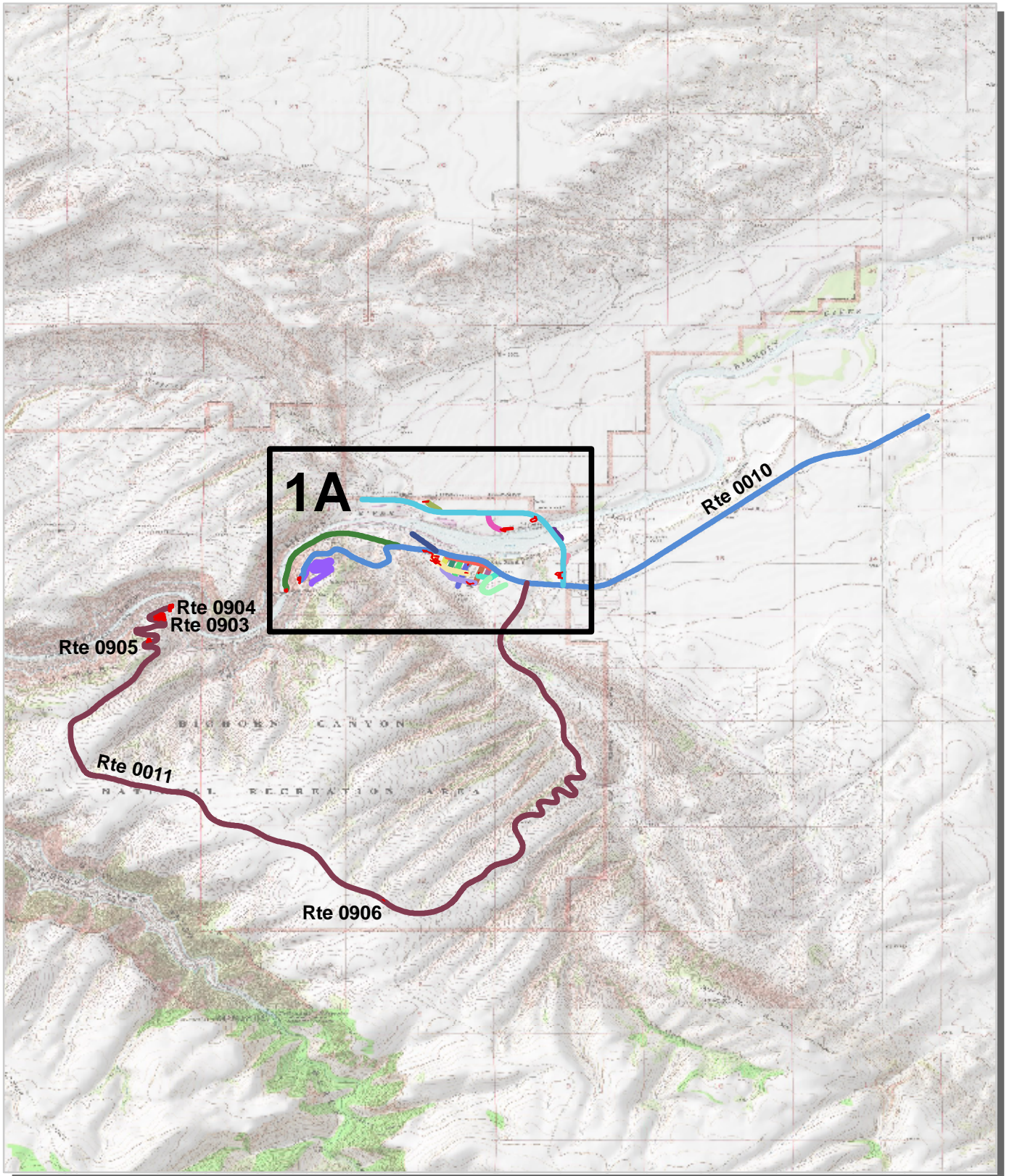
Bighorn Canyon National Recreation Area Route Location Map Key Map



 Park Owned Routes



**Bighorn Canyon National Recreation Area
Route Location Map
Area 1**

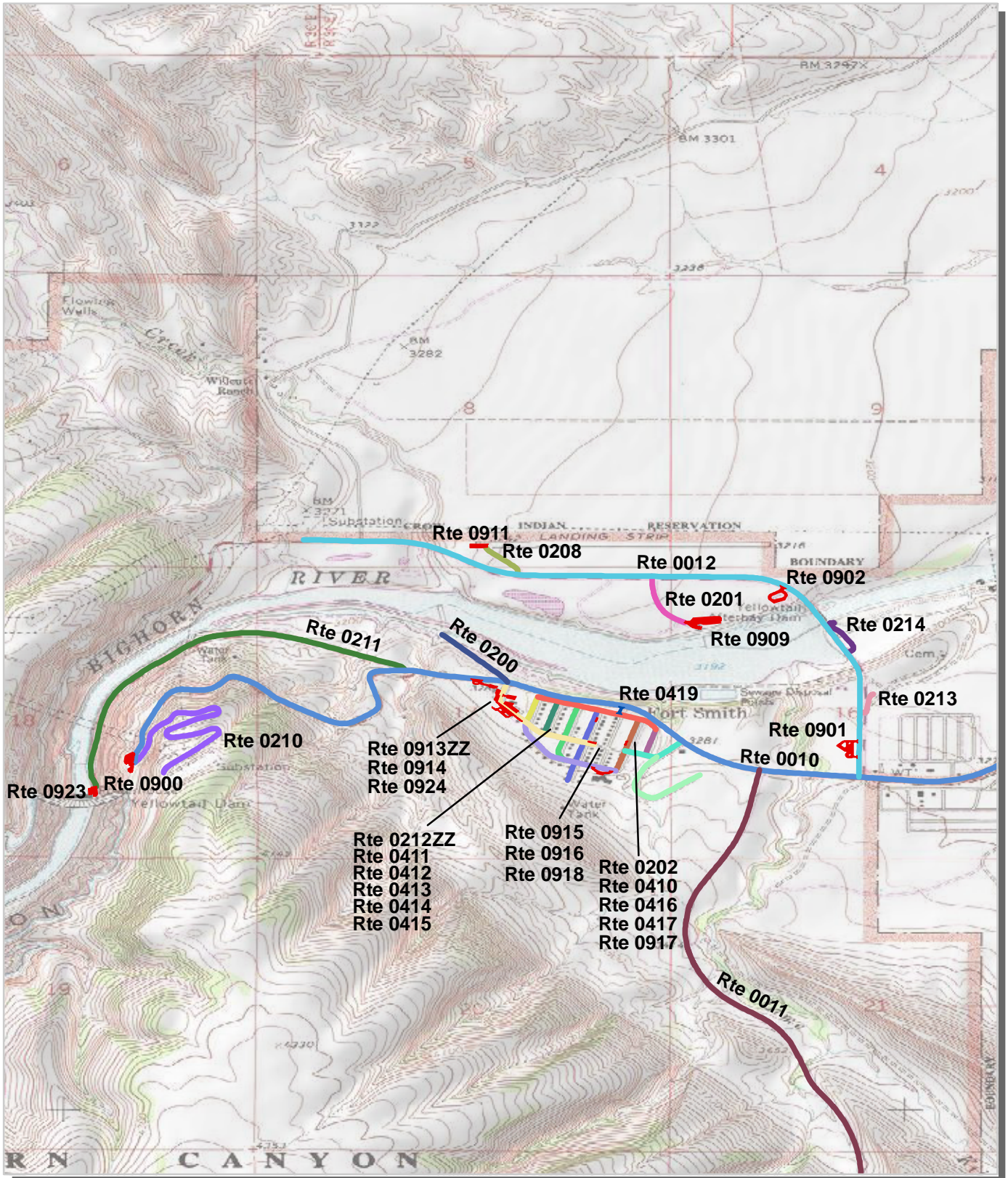


Unique colors used to differentiate routes



0

Bighorn Canyon National Recreation Area Route Location Map Area 1A

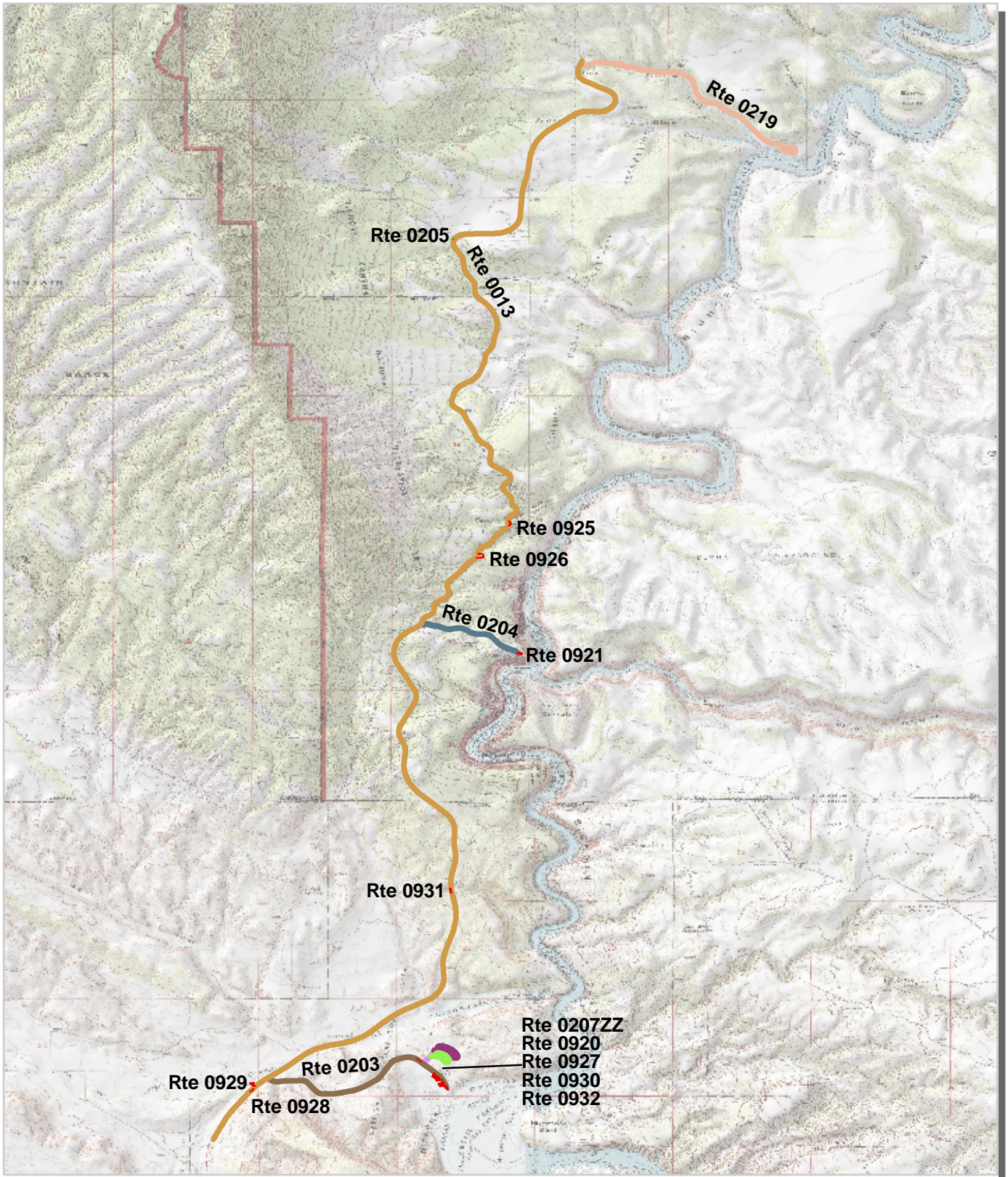


Unique colors used to differentiate routes

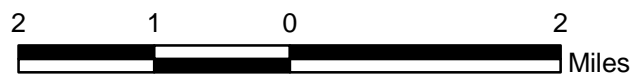


0

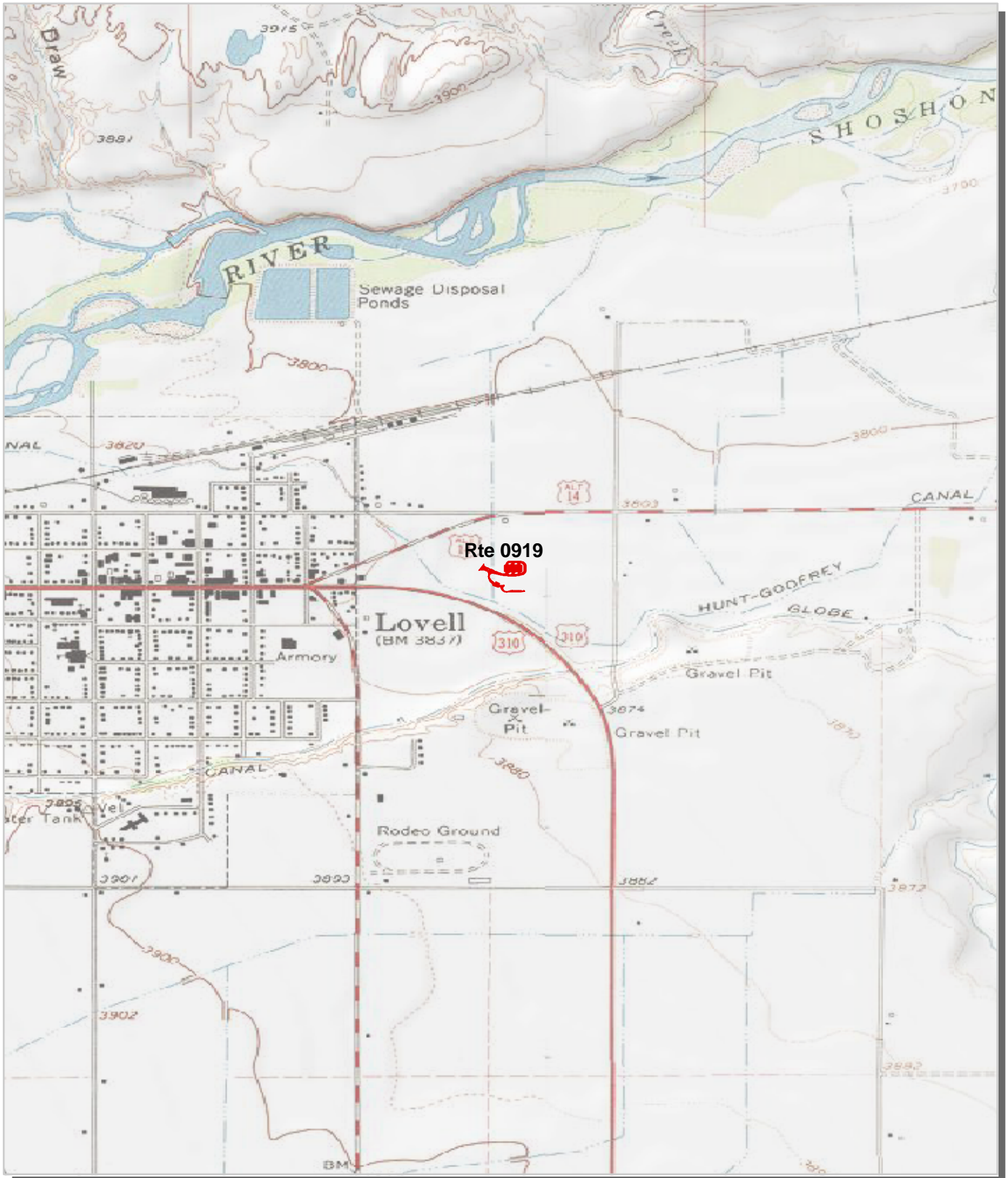
Bighorn Canyon National Recreation Area Route Location Map Area 2



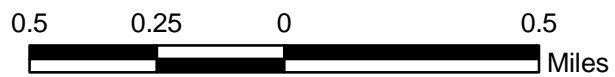
Unique colors used to differentiate routes



Bighorn Canyon National Recreation Area Route Location Map Area 3



Unique colors used to differentiate routes



0

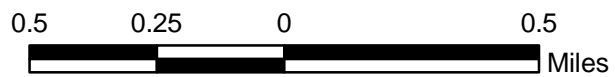
Bighorn Canyon National Recreation Area

Route Location Map

Area 4

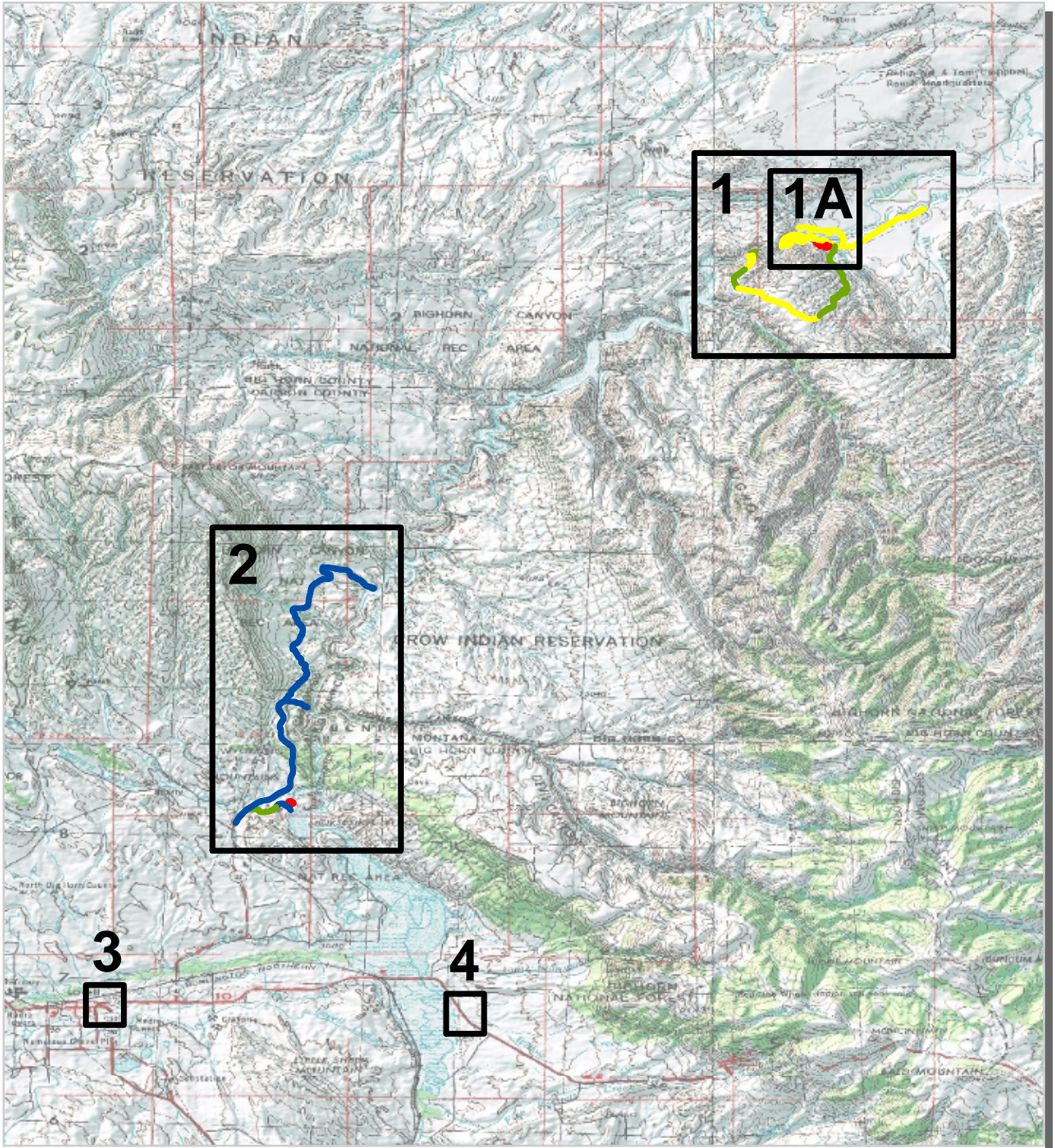


Unique colors used to differentiate routes



0

Bighorn Canyon National Recreation Area Route Condition Map PCR - Mile by Mile Key Map

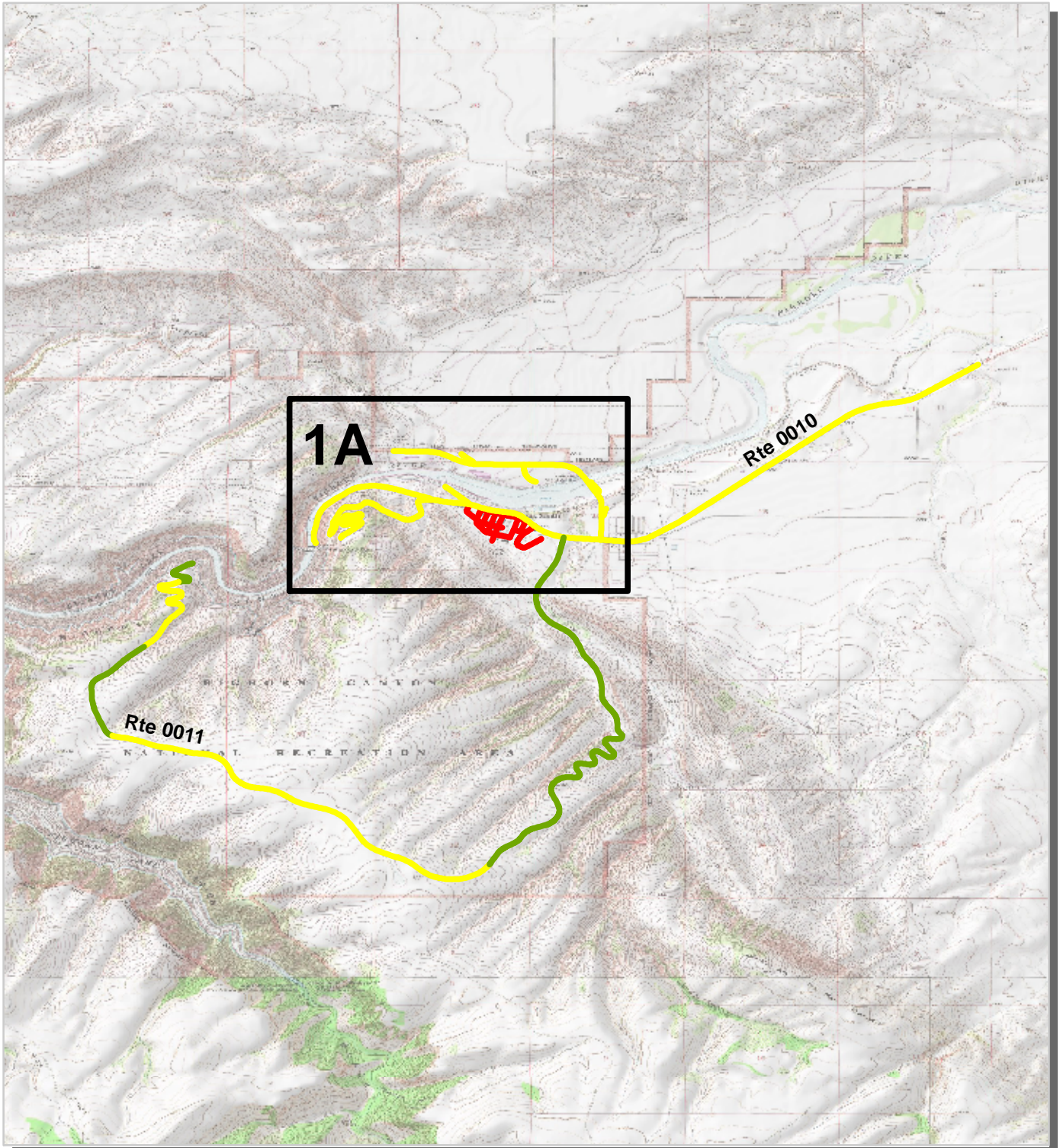


PCR	Poor	Fair	Good	Excellent	No Data
	(≤60)	(61 - 84)	(85 - 94)	(95 - 100)	

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



**Bighorn Canyon National Recreation Area
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.

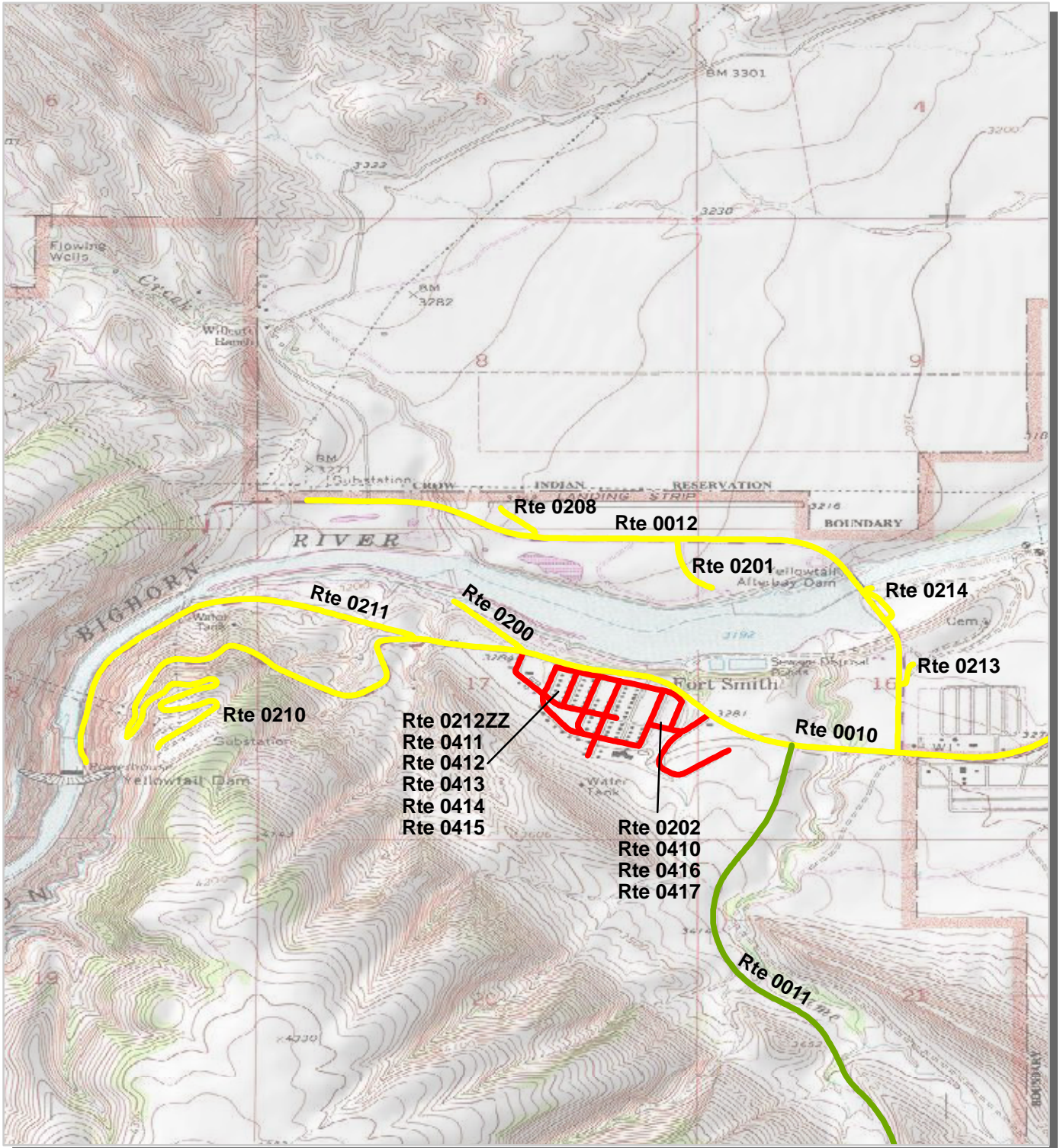


Bighorn Canyon National Recreation Area

Route Condition Map

PCR - Mile by Mile

Area 1A



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.

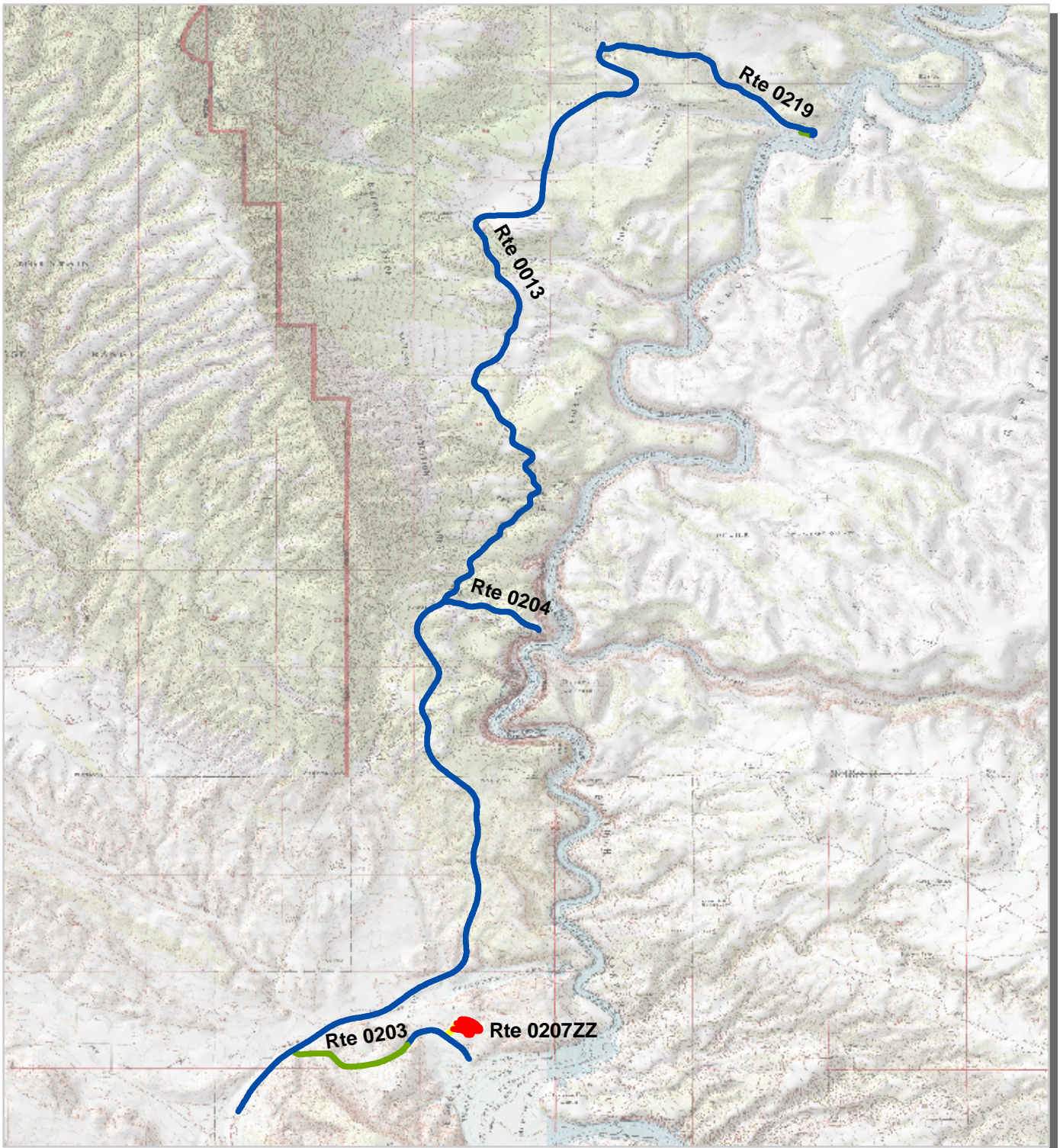


Bighorn Canyon National Recreation Area

Route Condition Map

PCR - Mile by Mile

Area 2



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.



Bighorn Canyon National Recreation Area



Section 4 **Park Route Inventory**

NPS/RIP Route ID Report

Road Inventory Program 06/30/2009

(Numerical By Route #)

Page 2 of 7

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)

BICA

BIGHORN CANYON NATIONAL RECREATION AREA

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0211	77026		YELLOWTAIL POWER PLANT ROAD	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 4.22 (ON RIGHT)	TO ROUTE 0923 (YELLOWTAIL POWER PLANT PARKING)	N	1.140	0.000	1.140	3		0	AS	1, 1A
0212ZZ	102671		AVENUE B ROADS	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.96 (ON LEFT)	TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.48 (ON LEFT)	N	0.510	0.000	0.510	3		0	AS	1, 1A
0213	75529		DITCHRIDER ROAD	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.21 (ON RIGHT)	TO END OF PAVEMENT AT CATTLE GUARD	N	0.080	0.000	0.080	3		0	AS	1, 1A
0214	75534		BIGHORN CANAL ROAD	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.43 (ON RIGHT)	TO END OF PAVEMENT	N	0.140	0.000	0.140	3		0	AS	1, 1A
0215	75544		AFTER BAY RIVER LAUNCH ROAD	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.70 (ON RIGHT)	TO ROUTE 0908 (NORTH AFTER BAY RIVER ACCESS PARKING)	N	0.000	0.050	0.050	3		0	GR	
0216	75576		GRAPEVINE CAMPGROUND ROAD	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 1.63 (ON LEFT)	TO END	N	0.000	0.040	0.040	3		0	GR	
0217	75202		THREE MILE ACCESS ROAD	FROM WAR MAN COUNTY LOOP	TO END	N	0.000	0.480	0.480	3		0	GR	
0218	73017		LOCKHART RANCH ACCESS ROAD	FROM ROUTE 0013 (BAD PASS ROAD) AT END	TO PARK BOUNDARY	S	0.000	4.800	4.800	3		0	GR	
0219	N/A		BARRY'S LANDING BOAT RAMP ROAD	FROM ROUTE 0013 (BAD PASS ROAD) AT MP 13.55 (ON RIGHT)	TO PAVEMENT CHANGE NEAR WATER	N	2.090	0.000	2.090	3		0	AS	2
0400	75579		PUMPHOUSE ROAD	FROM ROUTE 0200 (AFTER BAY CAMPGROUND ROAD)	TO END	N	0.000	0.420	0.420	5		0	GR	
0401	76965		FIREBREAK ROAD	FROM ROUTE 0202 (M-K HILL PICNIC ROAD) AT MP 0.04 (ON RIGHT)	TO ROUTE 0415 (FOURTH STREET)	N	0.000	0.900	0.900	5		0	GR	
0402	77038		FIRING RANGE ROAD	FROM ROUTE 0011 (OK-A-BEH ROAD)	TO END	N	0.000	0.200	0.200	5		0	GR	
0410	76962		AVENUE A	FROM ROUTE 0417 (SEVENTH STREET) AT MP 0.00 (ON RIGHT)	TO ROUTE 0412 (FIRST STREET) AT END	N	0.310	0.000	0.310	5		0	AS	1, 1A
0411	102680		AVENUE C	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.17 (ON RIGHT)	TO ROUTE 0416 (SIXTH STREET) AT MP 0.00 (ON LEFT)	N	0.300	0.000	0.300	5		0	AS	1, 1A
0412	102685		FIRST STREET	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.16 (ON LEFT)	TO ROUTE 0410 (AVENUE A) AT END	N	0.090	0.000	0.090	5		0	AS	1, 1A

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)

BICA

BIGHORN CANYON NATIONAL RECREATION AREA

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From	To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0413	103144		SECOND STREET	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.83 (ON LEFT)	TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.22 (ON LEFT)	N	0.130	0.000	0.130	5		0	AS	1, 1A
0414	103148		THIRD STREET	FROM ROUTE 0410 (AVENUE A) AT MP 0.21 (ON LEFT)	TO ROUTE 0411 (AVENUE C) AT MP 0.16 (ON LEFT)	N	0.190	0.000	0.190	5		0	AS	1, 1A
0415	103151		FOURTH STREET	FROM ROUTE 0410 (AVENUE A) AT MP 0.16 (ON LEFT)	TO DEAD END	N	0.250	0.000	0.250	5		0	AS	1, 1A
0416	103153		SIXTH STREET	FROM ROUTE 0411 (AVENUE C) AT MP 0.30 (ON LEFT)	TO ROUTE 0410 (AVENUE A) AT MP 0.06 (ON LEFT)	N	0.180	0.000	0.180	5		0	AS	1, 1A
0417	103158		SEVENTH STREET	FROM ROUTE 0410 (AVENUE A) AT MP 0.00 (SIDE N/A)	TO ROUTE 0212BZ (AVENUE B (EAST)) AT MP 0.05 (ON LEFT)	N	0.090	0.000	0.090	5		0	AS	1, 1A
0419	103165		AVENUE A ACCESS ROAD	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.67 (ON LEFT)	TO ROUTE 0410 (AVENUE A) AT MP 0.11 (ON RIGHT)	N	0.046	0.000	0.046	5		5,400	AS	1, 1A
0701	72402		HBR-HORSESHOE BEND GRAVEL ROADS	FROM	TO	S	0.000	0.400	0.400			0	GR	
0702	72407		HBR-RED CLIFF ACCESS ROAD	FROM	TO	S	0.000	0.400	0.400			0	GR	
0703	72540		CCR-COMMON CORRALS GRAVEL ACCESS ROAD	FROM	TO	S	0.000	0.300	0.300			0	GR	
0704	72548		HIR-HILLSBORO ACCESS GRAVEL ROAD	FROM	TO	S	0.000	0.400	0.400			0	GR	
0705	72643		BLR-MEDICINE CREEK ACCESS ROAD	FROM	TO	S	0.000	3.100	3.100			0	GR	
0708	75578		ABR-AFTERBAY LAGOON GRAVEL ROAD	FROM	TO	N	0.000	0.600	0.600			0	GR	
0709	76964		FSR MK HILL WATER TANK ROAD	FROM	TO	N	0.000	0.100	0.100			0	GR	
0711	77029		YDR WEST DAM EMERGENCY ACCESS RD	FROM	TO	N	0.000	2.140	2.140			0	GR	
0712	77031		YDR EAST TEST WELL ROAD	FROM	TO	N	0.000	0.500	0.500			0	GR	
0713	77032		YDR WEST TEST WELL ROAD	FROM	TO	N	0.000	2.000	2.000			0	GR	
0714	77033		YDR LOWER SPILLWAY ROAD	FROM	TO	N	0.000	0.100	0.100			0	GR	

NPS/RIP Route ID Report

Road Inventory Program 06/30/2009

(Numerical By Route #)

Page 4 of 7

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)

BICA

BIGHORN CANYON NATIONAL RECREATION AREA

Rte. No.	FMSS No.	Concess Route	Route Name	Route Description From To	Maint. District	Paved Miles	Un-Paved Miles	Total Route Length	Func. Class	Rte. Lanes	Manual Rated SQ/FT	Surf. Type	Area Maps
0900	77034		YELLOWTAIL DAM VISITOR CENTER PARKING	ADJACENT TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 5.26 (ON RIGHT)	N	0.000	0.000	0.000			27,689	AS	1, 1A
0901	75254		FORT SMITH CONTACT STATION PARKING	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.06 (ON LEFT) TO ROUTE 0012 (AFTER BAY ROAD) AT MP 0.11 (ON LEFT)	N	0.000	0.000	0.000			36,477	AS	1, 1A
0902	75542		AFTER BAY OVERLOOK PARKING	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.70 (ON LEFT) TO PARKING	N	0.000	0.000	0.000			26,086	AS	1, 1A
0903	77041		UPPER OK-A-BEH PARKING	FROM ROUTE 0011 (OK-A-BEH ROAD) AT MP 9.15 (ON RIGHT) TO PARKING	N	0.000	0.000	0.000			120,811	AS	1
0904	77042		LOWER OK-A-BEH PARKING	FROM ROUTE 0011 (OK-A-BEH ROAD) AT END TO PARKING	N	0.000	0.000	0.000			53,615	AS	1
0905	77040		OK-A-BEH OVERLOOK PARKING	FROM ROUTE 0011 (OK-A-BEH ROAD) AT MP 8.60 (ON LEFT) TO PARKING	N	0.000	0.000	0.000			23,331	AS	1
0906	104541		OK-A-BEH EXHIBIT PARKING	ADJACENT TO ROUTE 0011 (OK-A-BEH ROAD) AT MP 4.58 (ON RIGHT) TO PARKING	N	0.000	0.000	0.000			2,086	AS	1
0907	103951		SOUTH AFTER BAY RIVER ACCESS PARKING	FROM ROUTE 0214 (BIGHORN CANAL ROAD) AT END TO PARKING	N	0.000	0.000	0.000			0	GR	
0908	75549		NORTH AFTER BAY RIVER ACCESS PARKING	FROM ROUTE 0215 (AFTER BAY RIVER LAUNCH ROAD) AT END TO PARKING	N	0.000	0.000	0.000			0	GR	
0909	75574		AFTER BAY BOAT RAMP PARKING	FROM ROUTE 0201 (AFTER BAY BOAT RAMP ROAD) AT END TO PARKING	N	0.000	0.000	0.000			57,702	AS	1, 1A
0910	75212		THREE MILE RIVER ACCESS PARKING	FROM ROUTE 0217 (THREE MILE ACCESS ROAD) AT END TO PARKING	N	0.000	0.000	0.000			0	GR	
0911	N/A		AIRSTRIIP PARKING	FROM ROUTE 0208 (AIRSTRIIP ACCESS ROAD) AT END TO PARKING	N	0.000	0.000	0.000			15,815	AS	1, 1A
0912	90205		UPPER SWITCHYARD GATE PARKING	ADJACENT TO ROUTE 0210 AT MP 0.319 TO PARKING	N	0.000	0.000	0.000			0	GR	
0913ZZ	103172		PARK HEADQUARTERS PARKING AREAS	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.04 (ON LEFT) TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.10 (ON LEFT)	N	0.000	0.000	0.000			19,633	AS	1, 1A
0914	103176		MAINTENANCE PARKING	ADJACENT TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.08 (ON RIGHT) TO PARKING	N	0.000	0.000	0.000			32,519	AS	1, 1A

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)

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 BICA

Road Inventory Program 06/30/2009

(Numerical By Subcomponent #)

Page 1 of 2

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

■ = Subcomponent Flag ON

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

BICA

BIGHORN CANYON NATIONAL RECREATION AREA

Asset Entered in FMSS System

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0207ZZ	77521		HORSESHOE BEND CAMPGROUND ROADS	FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.36 (ON LEFT)	THROUGH CAMPGROUND		3	0.93	0.00	0.93	0
0212ZZ	102671		AVENUE B ROADS	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.96 (ON LEFT)	TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.48 (ON LEFT)		3	0.51	0.00	0.51	0
0913ZZ	103172		PARK HEADQUARTERS PARKING AREAS	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.04 (ON LEFT)	TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.10 (ON LEFT)			0.00	0.00	0.00	19,633

Asset BICA-0207ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0207AZ	77521	■	HORSESHOE BEND CAMPGROUND ROAD LOOP A	FROM ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)	TO END OF LOOP		3	0.33	0.00	0.33	0
0207BZ	77521	■	HORSESHOE BEND CAMPGROUND ROAD LOOP B	FROM ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)	TO END OF LOOP		3	0.44	0.00	0.44	0
0207Z	77521	■	HORSESHOE BEND CAMPGROUND ACCESS ROAD	FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.36 (ON LEFT)	TO ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)		3	0.16	0.00	0.16	0

Asset BICA-0212ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0212AZ	102671	■	AVENUE B (WEST)	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.96 (ON LEFT)	TO ROUTE 0915 (BALLFIELD PARKING A)		3	0.35	0.00	0.35	0
0212BZ	102671	■	AVENUE B (EAST)	FROM ROUTE 0416 (SIXTH STREET) AT MP 0.07 (ON RIGHT)	TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.48 (ON LEFT)		3	0.16	0.00	0.16	0

NPS/RIP Subcomponent Details for BICA

Road Inventory Program 06/30/2009

(Numerical By Subcomponent #)

Page 2 of 2

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

= Subcomponent Flag ON

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

BICA

BIGHORN CANYON NATIONAL RECREATION AREA

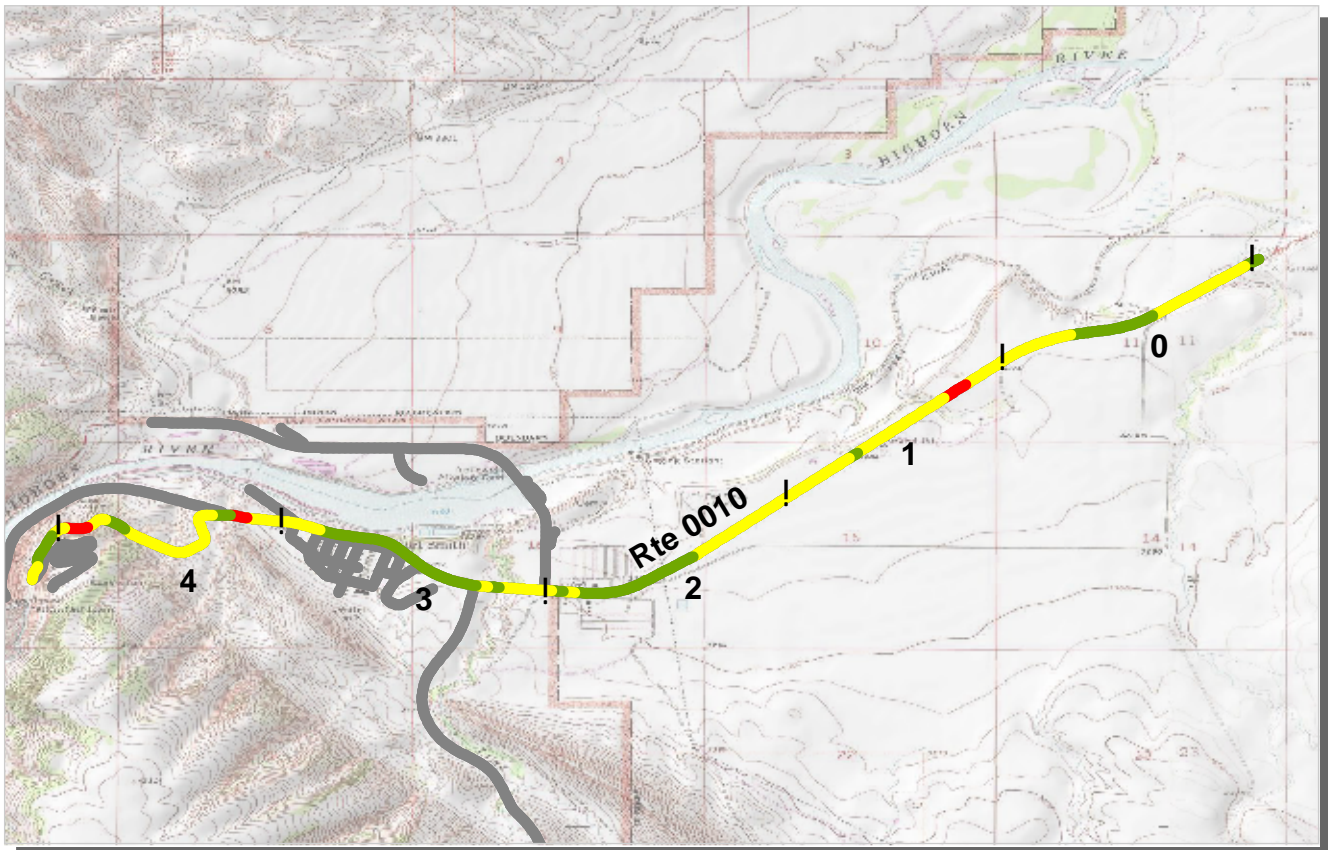
Asset BICA-0913ZZ Subcomponent Breakdown

Rte. No.	FMSS No.	Sub Comp	Route Name	From	To	Concess Route	Func. Class	Paved Miles	Un-Paved Miles	Total Route Length	Manual Rated SQ/FT
0913AZ	103172		PARK HEADQUARTERS PARKING A	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.04 (ON LEFT)	TO PARKING			0.00	0.00	0.00	7,475
0913BZ	103172		PARK HEADQUARTERS PARKING B	ADJACENT TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.10 (ON LEFT)	TO PARKING			0.00	0.00	0.00	12,158

Bighorn Canyon National Recreation Area



Section 5 **Paved Route Condition Rating Sheets** **(CRS)**



0

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 FORT SMITH ACCESS ROAD

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

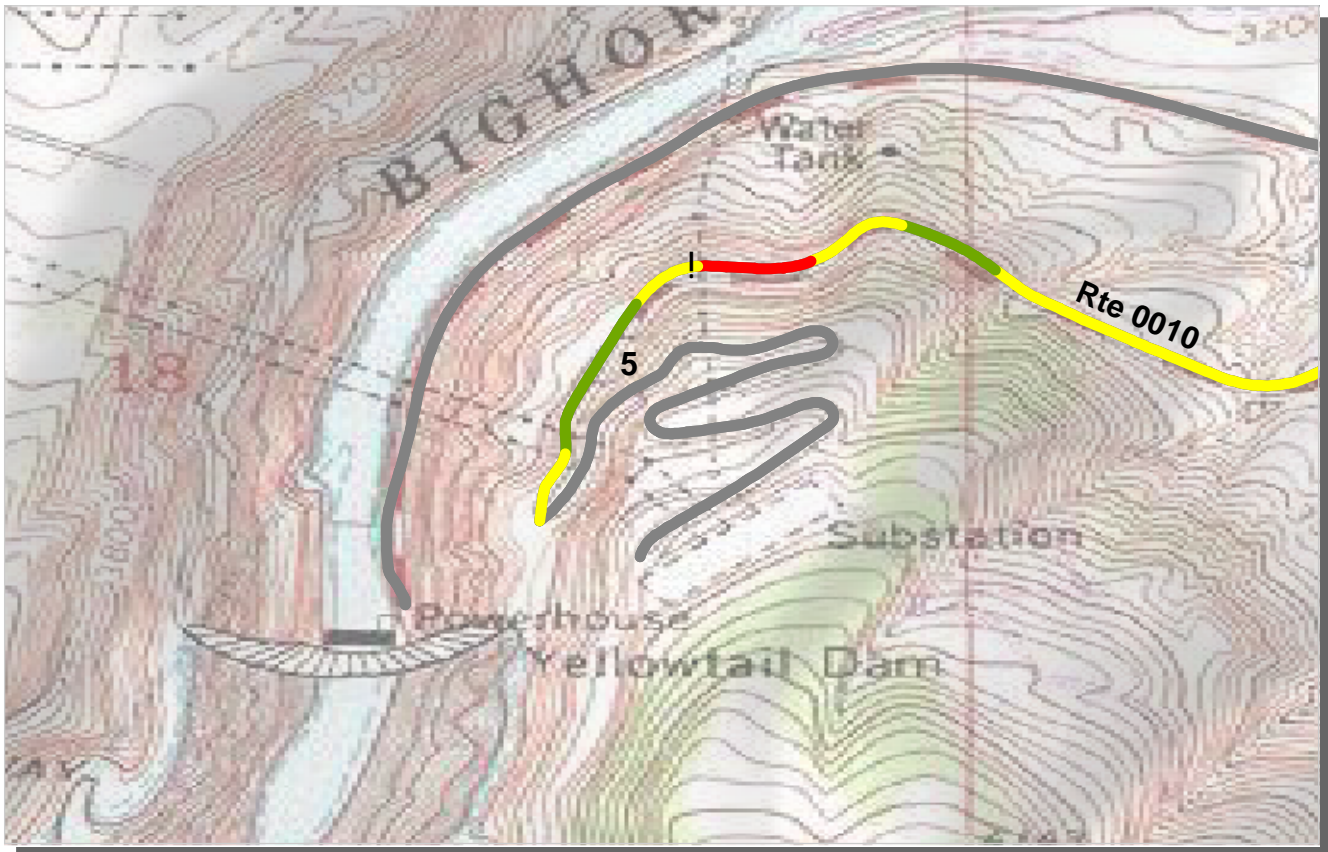
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 5.29 Miles

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2	2	4	2
Paved Width (ft)	24	25	25	31	28
Lane Width (ft)	11	11	11	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)	71	58	76	77	72
PCR (Pavement Condition Rating)	81	73	84	84	74
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	99	100	100	98	99
Transverse Cracking Index	95	85	97	97	97
Patching Index	100	100	100	100	100
Rutting Index	77	71	78	83	75
Roughness Condition Index (RCI)	96	95	98	95	79

ROUTE: 0010 FORT SMITH ACCESS ROAD



0

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 FORT SMITH ACCESS ROAD

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

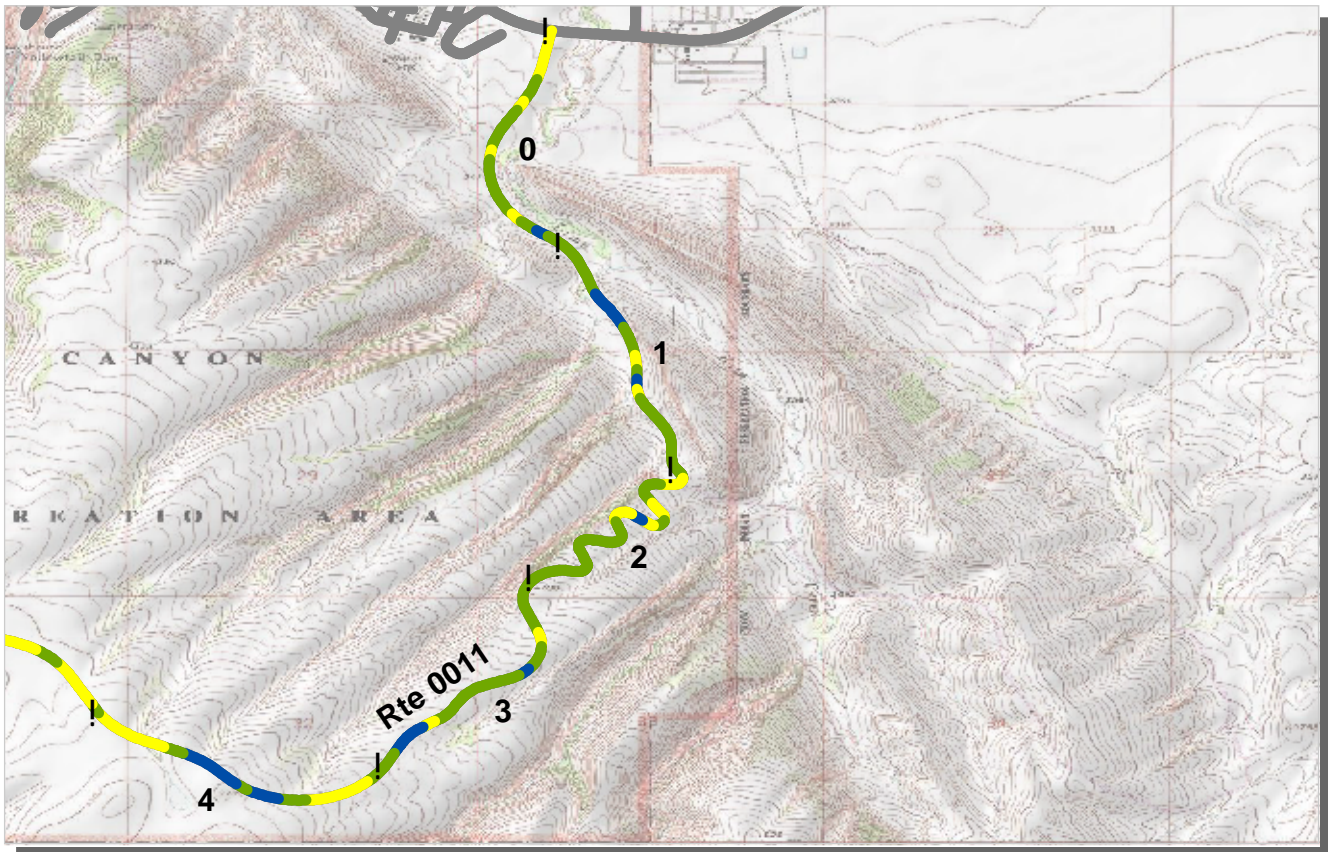
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 5.29 Miles

Section Number	5				
Section Length (mi)	0.29				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	32				
Lane Width (ft)	9				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	81				
PCR (Pavement Condition Rating)	80				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	99				
Transverse Cracking Index	98				
Patching Index	100				
Rutting Index	84				
Roughness Condition Index (RCI)	79				

ROUTE: 0010 FORT SMITH ACCESS ROAD



0

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.

ROUTE: 0011 OK-A-BEH ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

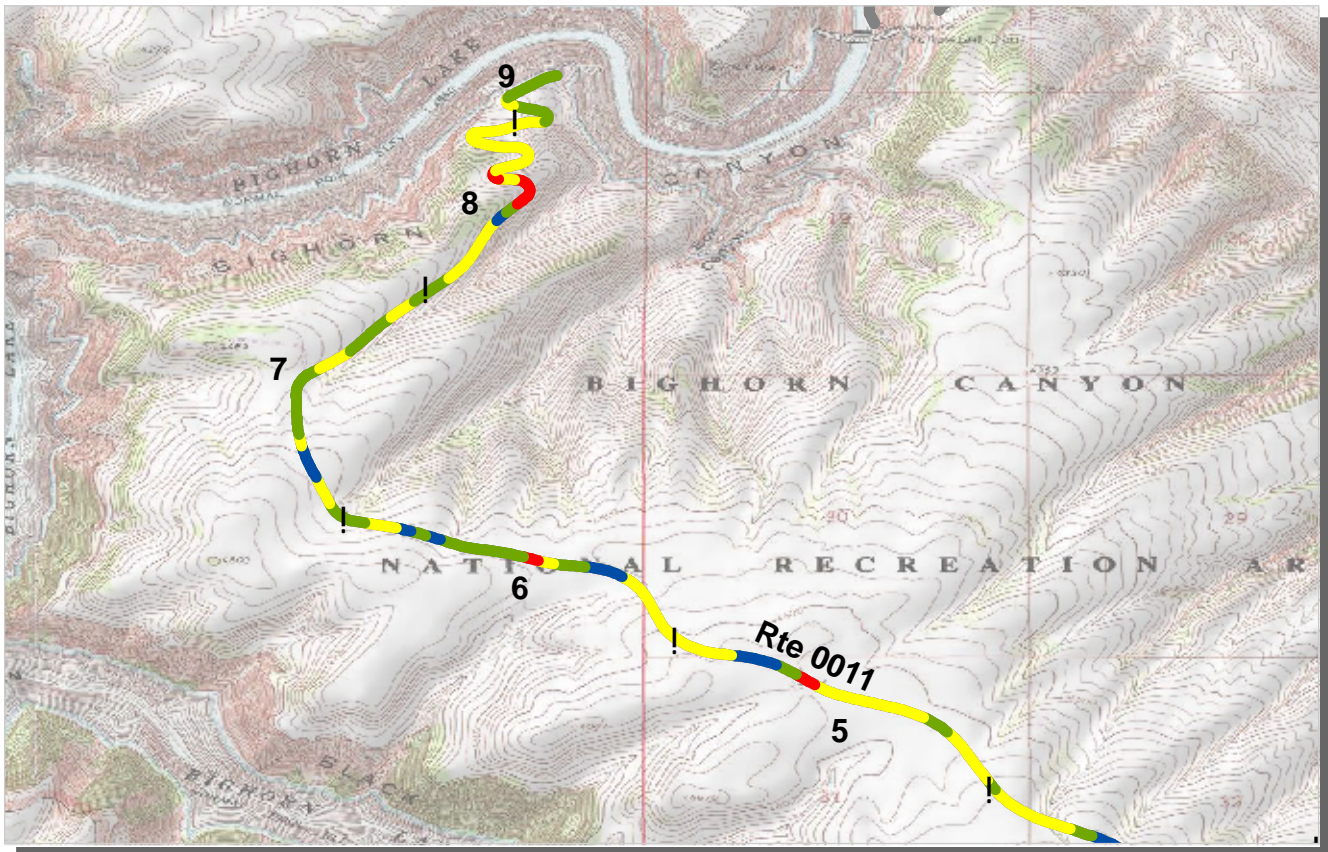
COLLECTED: 8/16/2008
TOTAL LENGTH: 9.37 Miles

INTERMOUNTAIN REGION

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	23	23	29	29	27
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)	83	87	85	91	84
PCR (Pavement Condition Rating)	85	89	86	91	84
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	100	100	100	100	99
Transverse Cracking Index	99	99	100	100	99
Patching Index	100	100	100	100	100
Rutting Index	85	89	85	91	86
Roughness Condition Index (RCI)	87	90	88	90	85

ROUTE: 0011 OK-A-BEH ROAD

NC - Not Collected



0

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.

ROUTE: 0011 OK-A-BEH ROAD

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/16/2008

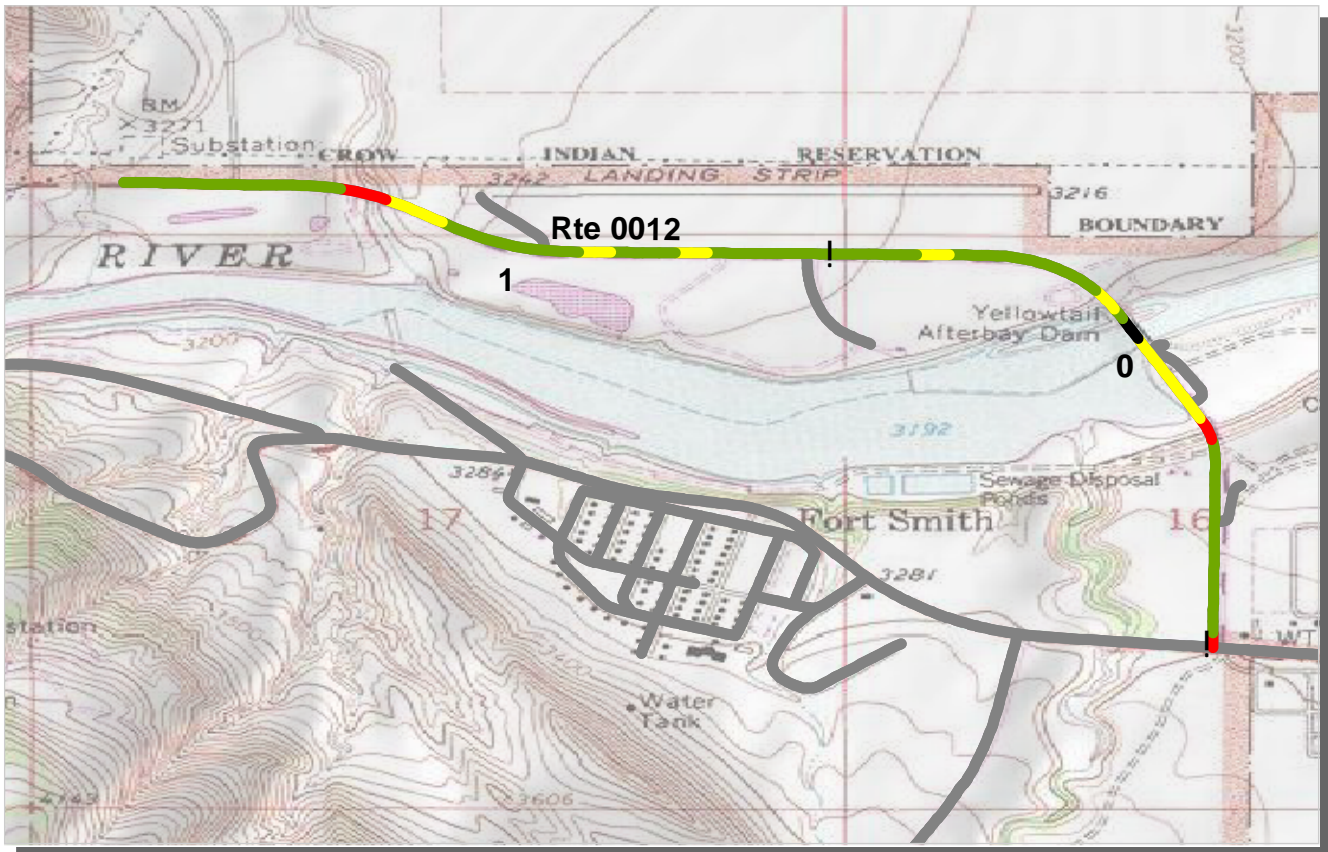
INTERMOUNTAIN REGION

TOTAL LENGTH: 9.37 Miles

<i>Section Number</i>	5	6	7	8	9
<i>Section Length (mi)</i>	1.00	1.00	1.00	1.00	0.37
<i>Traffic</i>	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
<i>Cross Section Information</i>					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	24	26	27	27	29
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
<i>Roadway Condition Information</i>					
SCR (Surface Condition Rating)	78	83	89	78	89
PCR (Pavement Condition Rating)	79	82	87	73	86
<i>Distress Index Values</i>					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	99	100	100	98	100
Transverse Cracking Index	99	99	100	100	100
Patching Index	100	100	100	96	100
Rutting Index	80	85	90	84	89
Roughness Condition Index (RCI)	80	81	83	66	81

ROUTE: 0011 OK-A-BEH ROAD

NC - Not Collected



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.

ROUTE: 0012 AFTER BAY ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

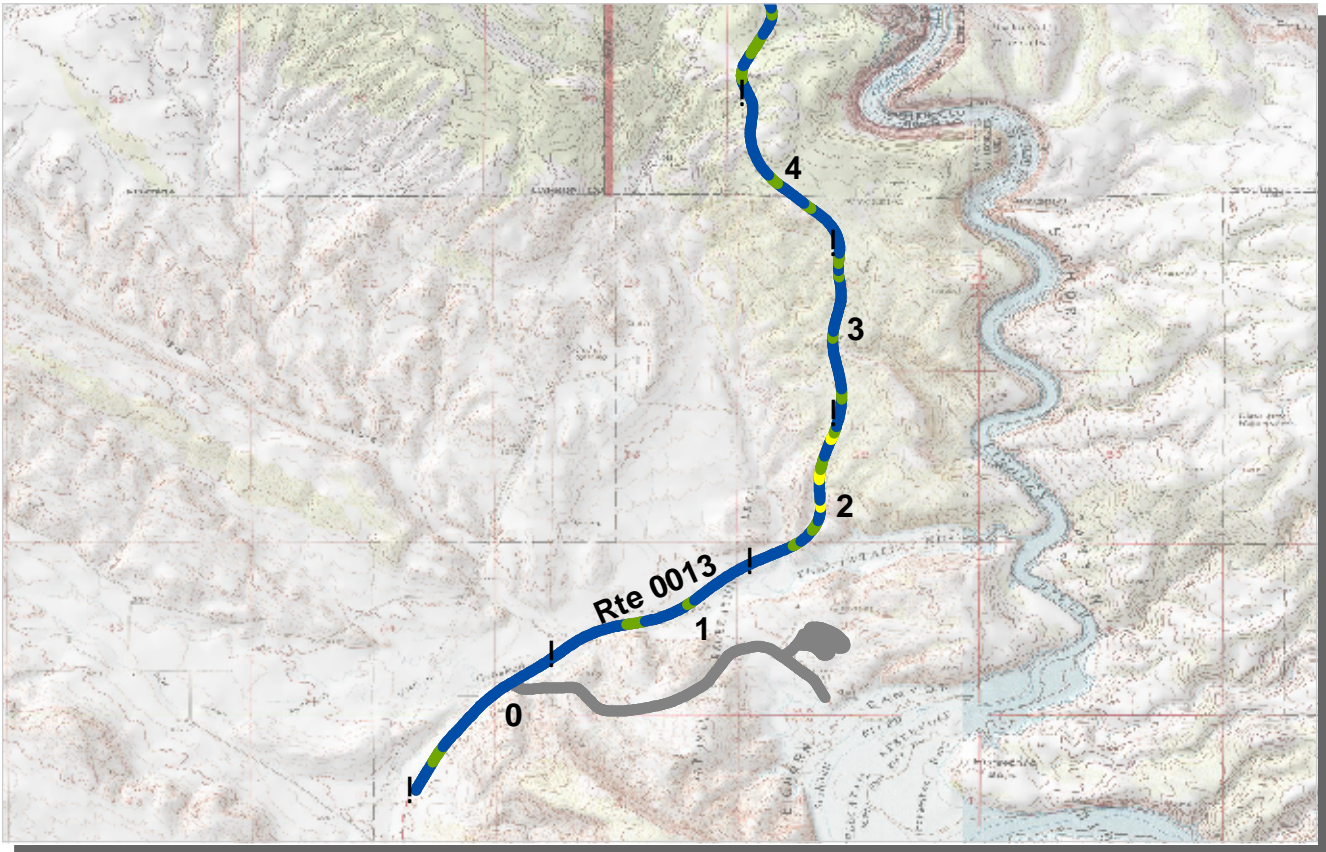
COLLECTED: 8/15/2008
TOTAL LENGTH: 1.91 Miles

INTERMOUNTAIN REGION

Section Number	0	1			
Section Length (mi)	1.00	0.91			
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	34	32			
Lane Width (ft)	11	11			
Shoulder Width Right (ft)	NC	NC			
Shoulder Width Left (ft)	NC	NC			
Roadway Condition Information					
SCR (Surface Condition Rating)	78	75			
PCR (Pavement Condition Rating)	84	81			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	99	100			
Transverse Cracking Index	97	98			
Patching Index	100	100			
Rutting Index	81	77			
Roughness Condition Index (RCI)	92	92			

ROUTE: 0012 AFTER BAY ROAD

NC - Not Collected



0

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.

ROUTE: 0013 BAD PASS ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

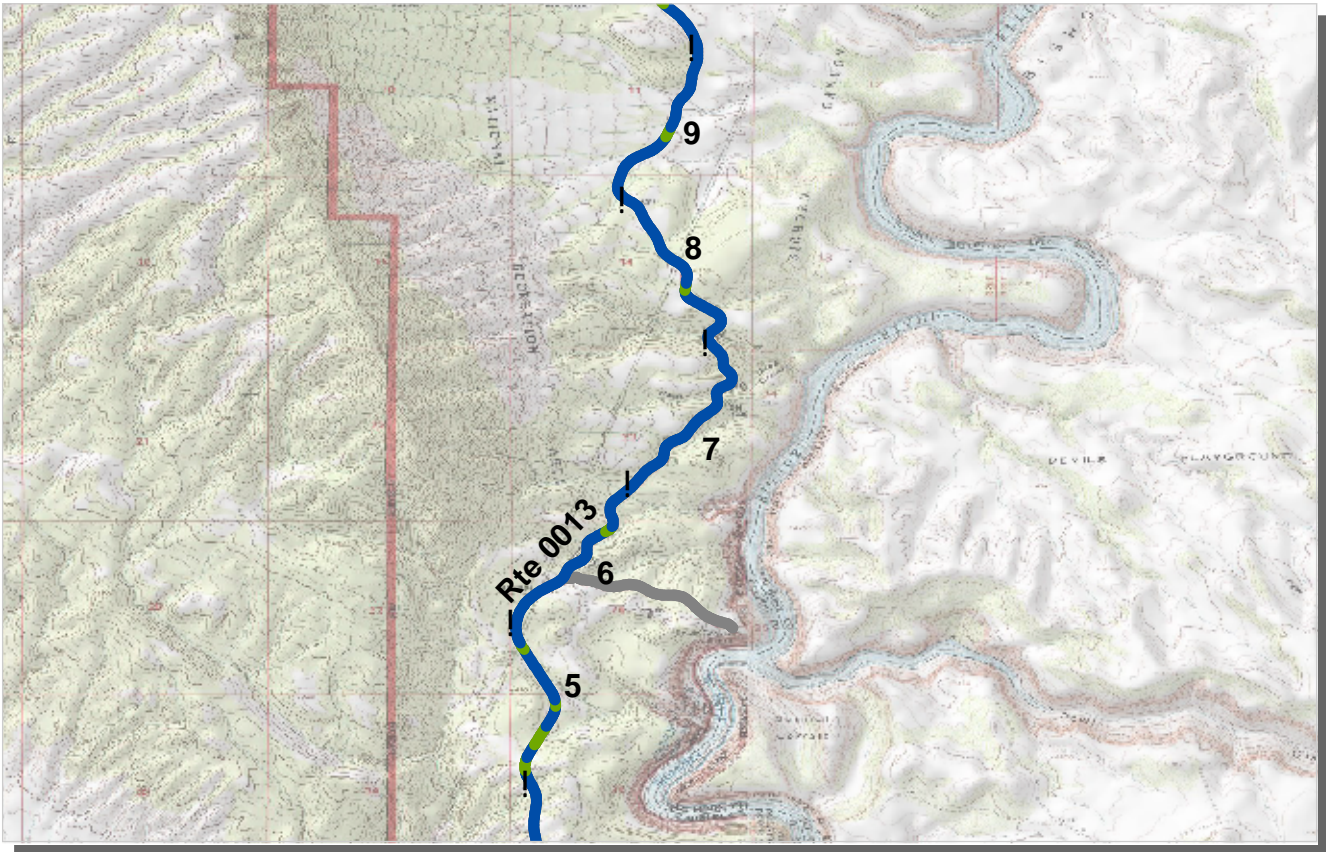
COLLECTED: 8/17/2008
TOTAL LENGTH: 13.60 Miles

INTERMOUNTAIN REGION

Section Number	0	1	2	3	4
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	37	31	31	31	31
Lane Width (ft)	13	12	12	11	11
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)	97	93	93	94	95
PCR (Pavement Condition Rating)	98	96	95	96	97
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	100	100	100	100	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	100	100	100	100	100
Rutting Index	97	93	93	94	95
Roughness Condition Index (RCI)	99	100	100	100	100

ROUTE: 0013 BAD PASS ROAD

NC - Not Collected



0

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.

ROUTE: 0013 BAD PASS ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

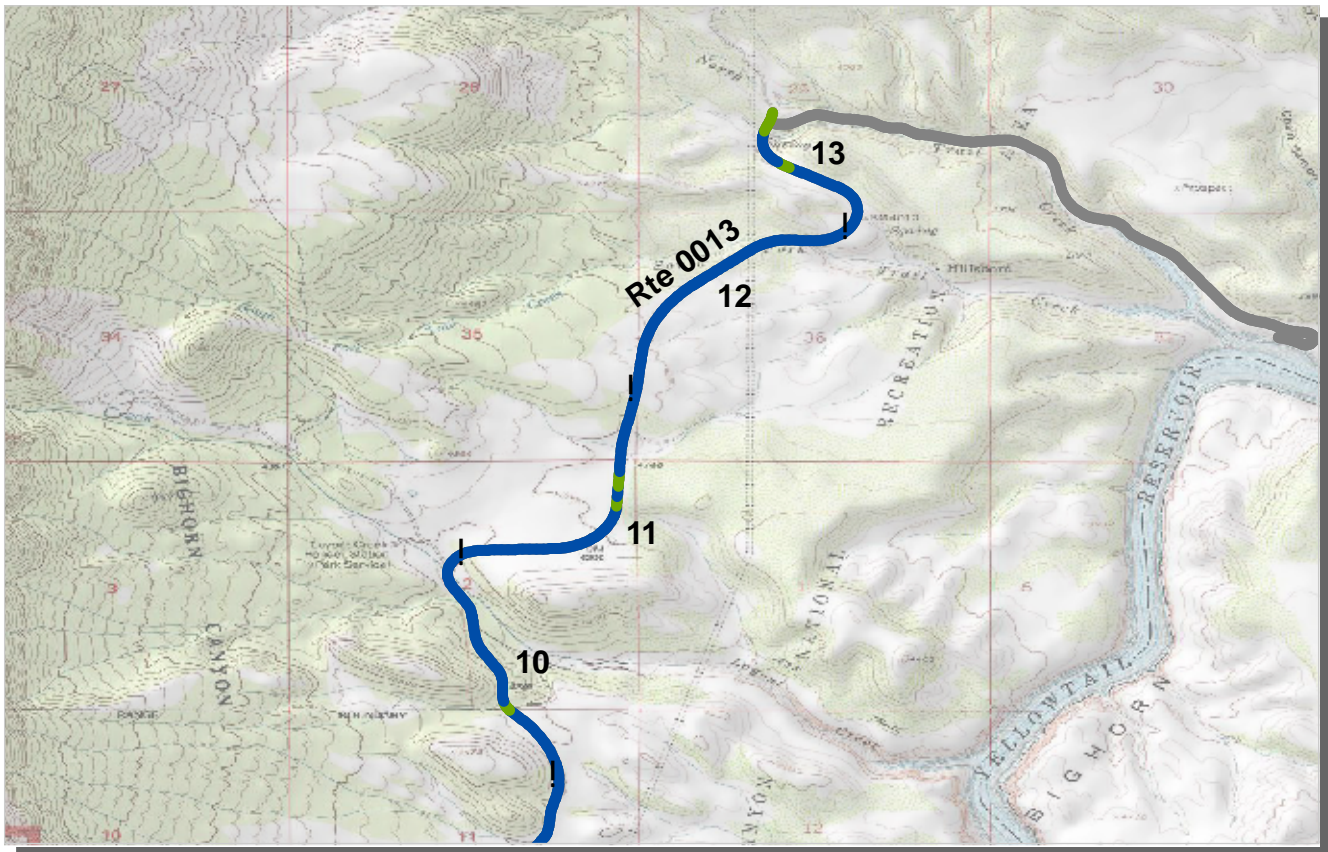
COLLECTED: 8/17/2008
TOTAL LENGTH: 13.60 Miles

INTERMOUNTAIN REGION

Section Number	5	6	7	8	9
Section Length (mi)	1.00	1.00	1.00	1.00	1.00
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2	2	2	2
Paved Width (ft)	31	37	36	34	32
Lane Width (ft)	12	13	12	11	11
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)	94	97	96	94	95
PCR (Pavement Condition Rating)	96	98	97	97	97
Distress Index Values					
Alligator Cracking Index	100	100	100	100	100
Longitudinal Cracking Index	100	100	100	100	100
Transverse Cracking Index	100	100	100	100	100
Patching Index	100	100	100	99	100
Rutting Index	94	97	96	95	95
Roughness Condition Index (RCI)	100	99	100	100	100

ROUTE: 0013 BAD PASS ROAD

NC - Not Collected



0

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.

ROUTE: 0013 BAD PASS ROAD

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/17/2008

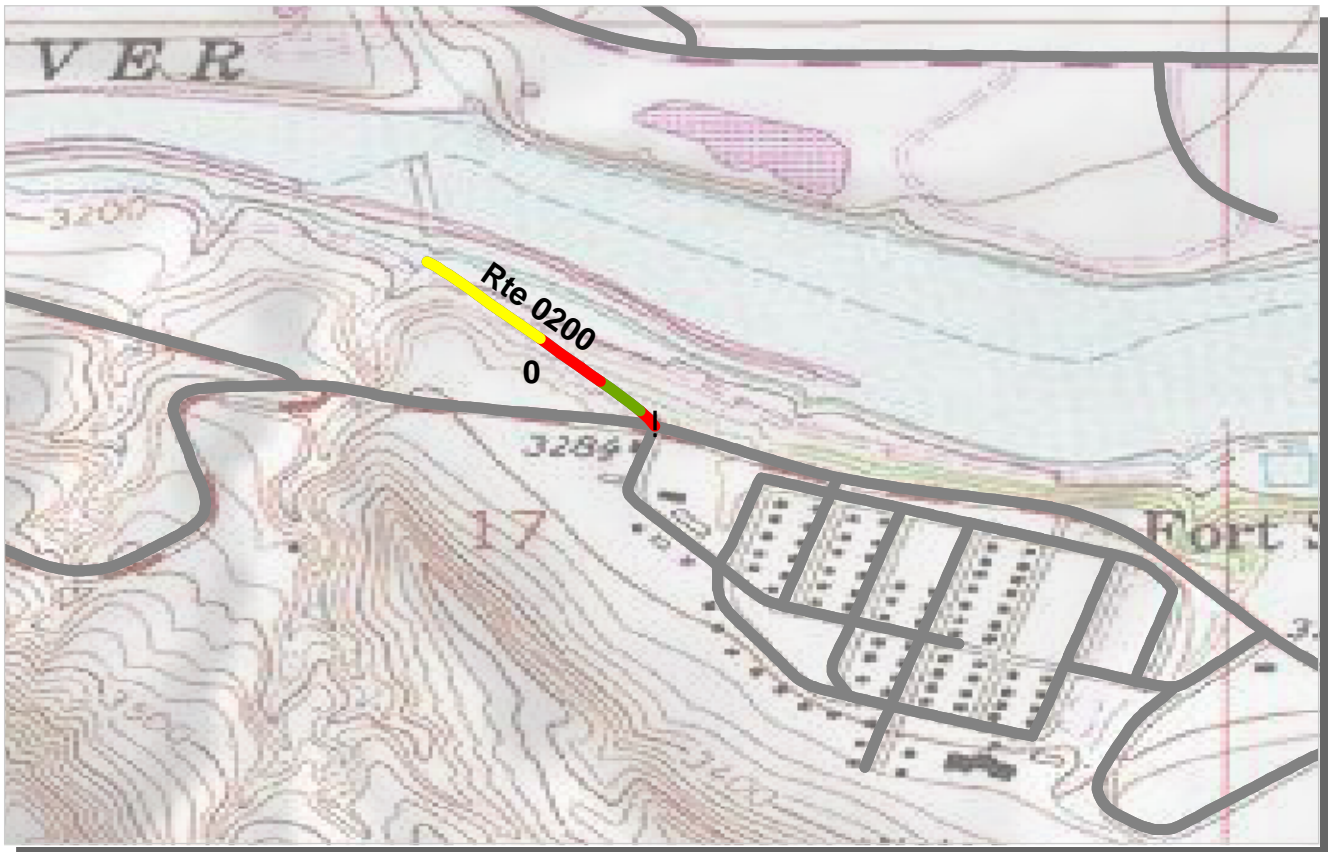
INTERMOUNTAIN REGION

TOTAL LENGTH: 13.60 Miles

<i>Section Number</i>	10	11	12	13	
<i>Section Length (mi)</i>	1.00	1.00	1.00	0.60	
<i>Traffic</i>	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
<i>Cross Section Information</i>					
Number of Lanes	2	2	2	2	
Paved Width (ft)	33	32	33	38	
Lane Width (ft)	11	11	11	12	
Shoulder Width Right (ft)	NC	NC	NC	NC	
Shoulder Width Left (ft)	NC	NC	NC	NC	
<i>Roadway Condition Information</i>					
SCR (Surface Condition Rating)	96	95	95	94	
PCR (Pavement Condition Rating)	97	96	97	96	
<i>Distress Index Values</i>					
Alligator Cracking Index	100	100	100	100	
Longitudinal Cracking Index	100	100	100	100	
Transverse Cracking Index	100	100	100	100	
Patching Index	100	100	100	100	
Rutting Index	96	95	95	94	
Roughness Condition Index (RCI)	99	99	100	98	

ROUTE: 0013 BAD PASS ROAD

NC - Not Collected



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.

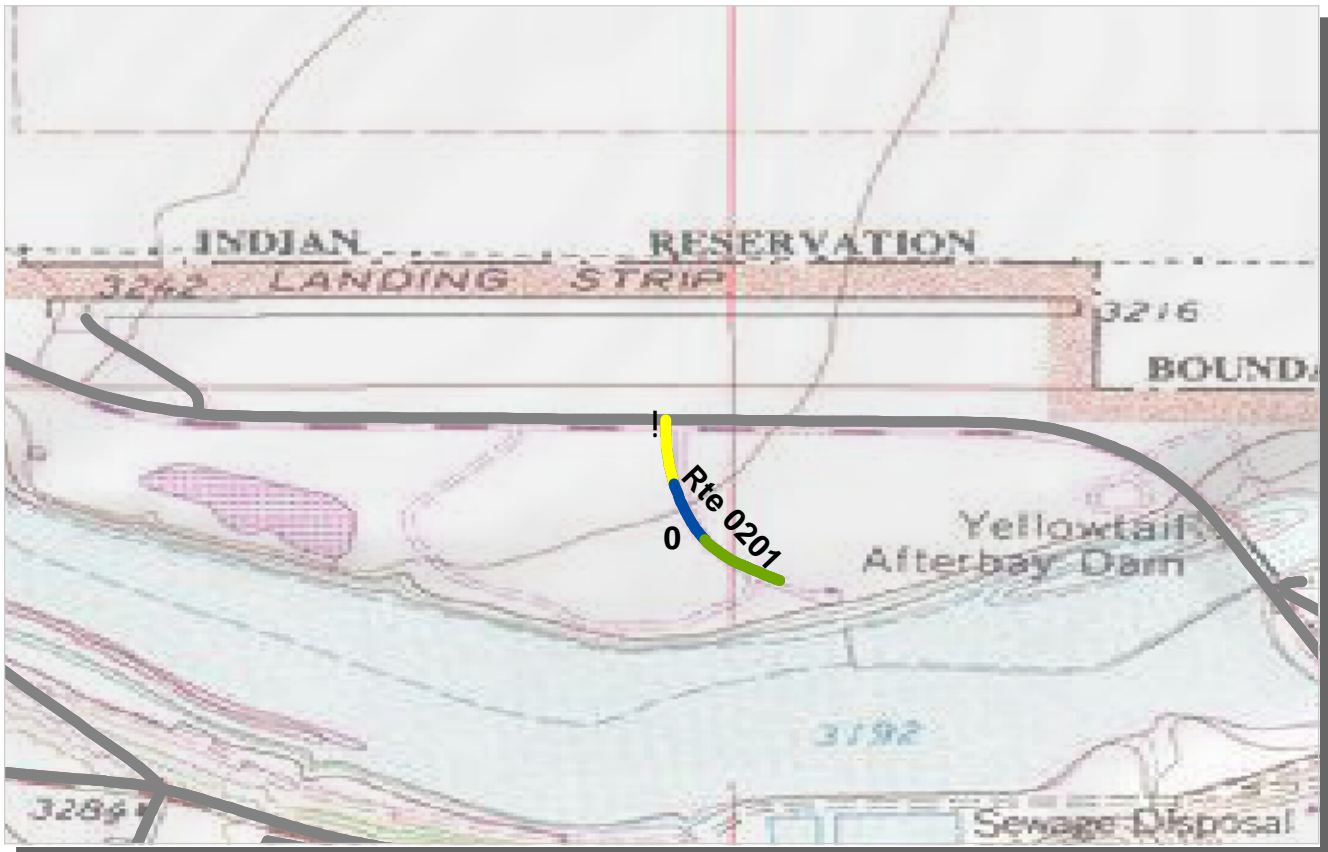
ROUTE: 0200 AFTER BAY CAMPGROUND ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.23 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.23				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	24				
Lane Width (ft)	11				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	66				
PCR (Pavement Condition Rating)	69				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	94				
Transverse Cracking Index	97				
Patching Index	100				
Rutting Index	76				
Roughness Condition Index (RCI)	78				

ROUTE: 0200 AFTER BAY CAMPGROUND ROAD



0

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.

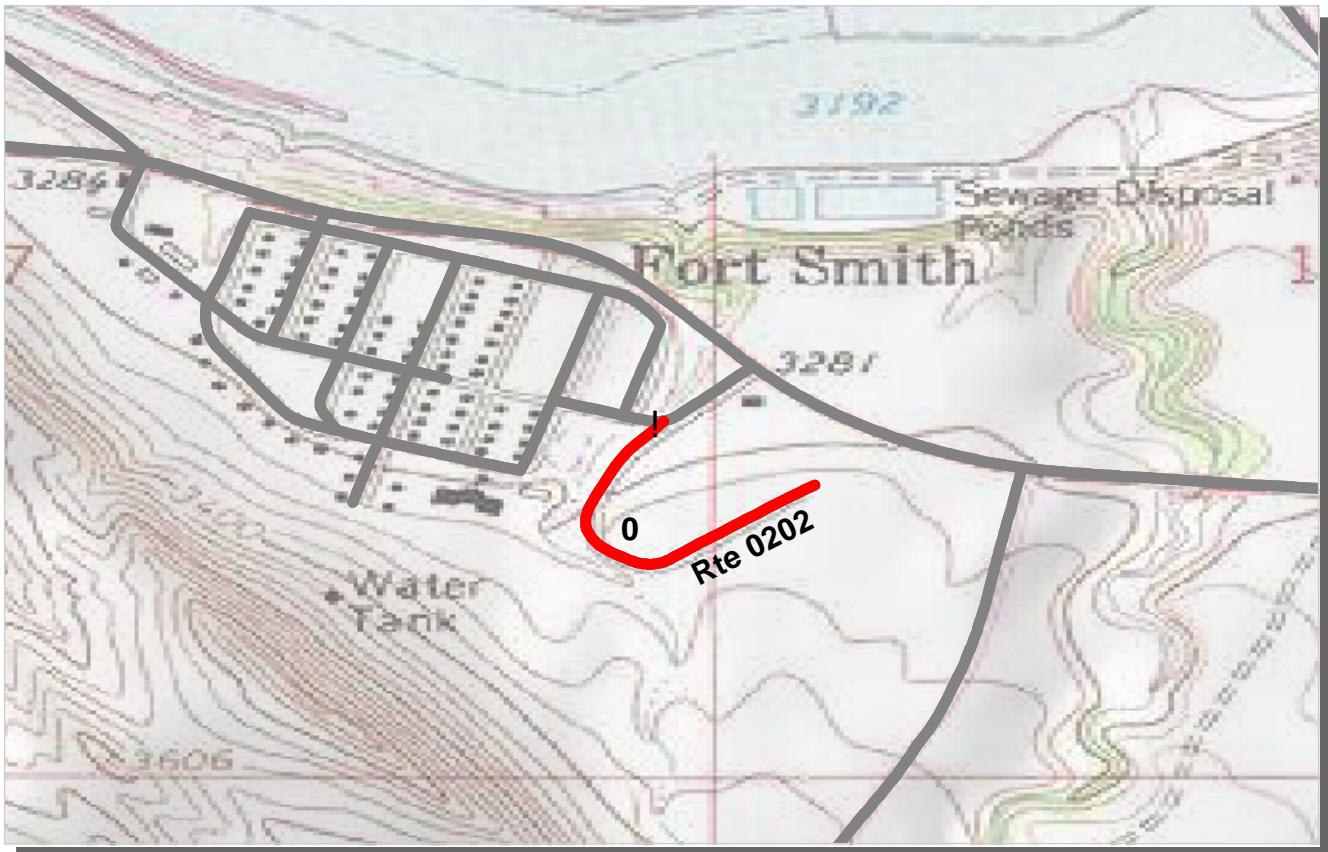
ROUTE: 0201 AFTER BAY BOAT RAMP ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.19 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.19				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	26				
Lane Width (ft)	12				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	83				
PCR (Pavement Condition Rating)	84				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	99				
Patching Index	100				
Rutting Index	85				
Roughness Condition Index (RCI)	88				

ROUTE: 0201 AFTER BAY BOAT RAMP ROAD



0

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.

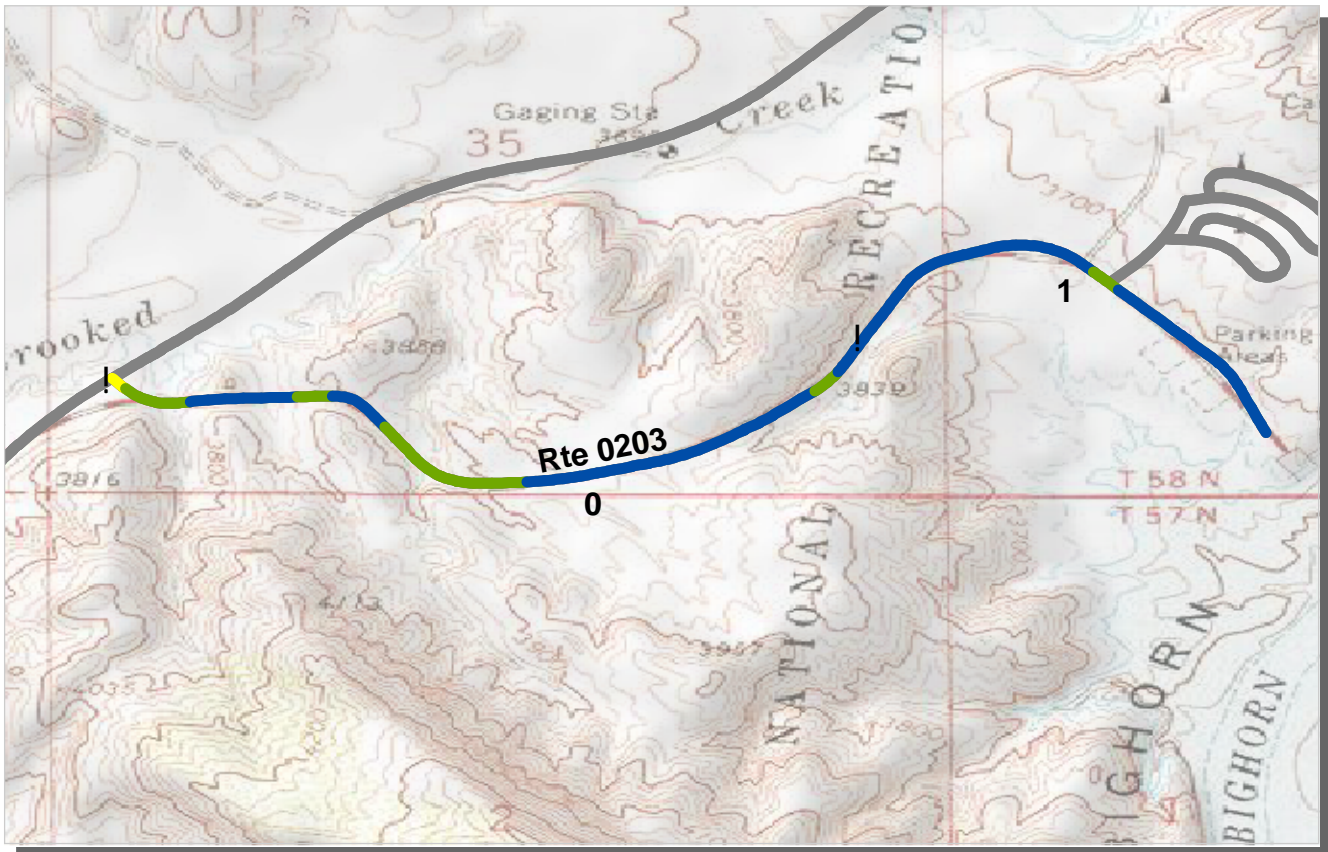
ROUTE: 0202 M-K HILL PICNIC ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.32 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.32				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
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)	35				
PCR (Pavement Condition Rating)	35				
Distress Index Values					
Alligator Cracking Index	99				
Longitudinal Cracking Index	97				
Transverse Cracking Index	97				
Patching Index	99				
Rutting Index	43				
Roughness Condition Index (RCI)	36				

ROUTE: 0202 M-K HILL PICNIC ROAD



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.

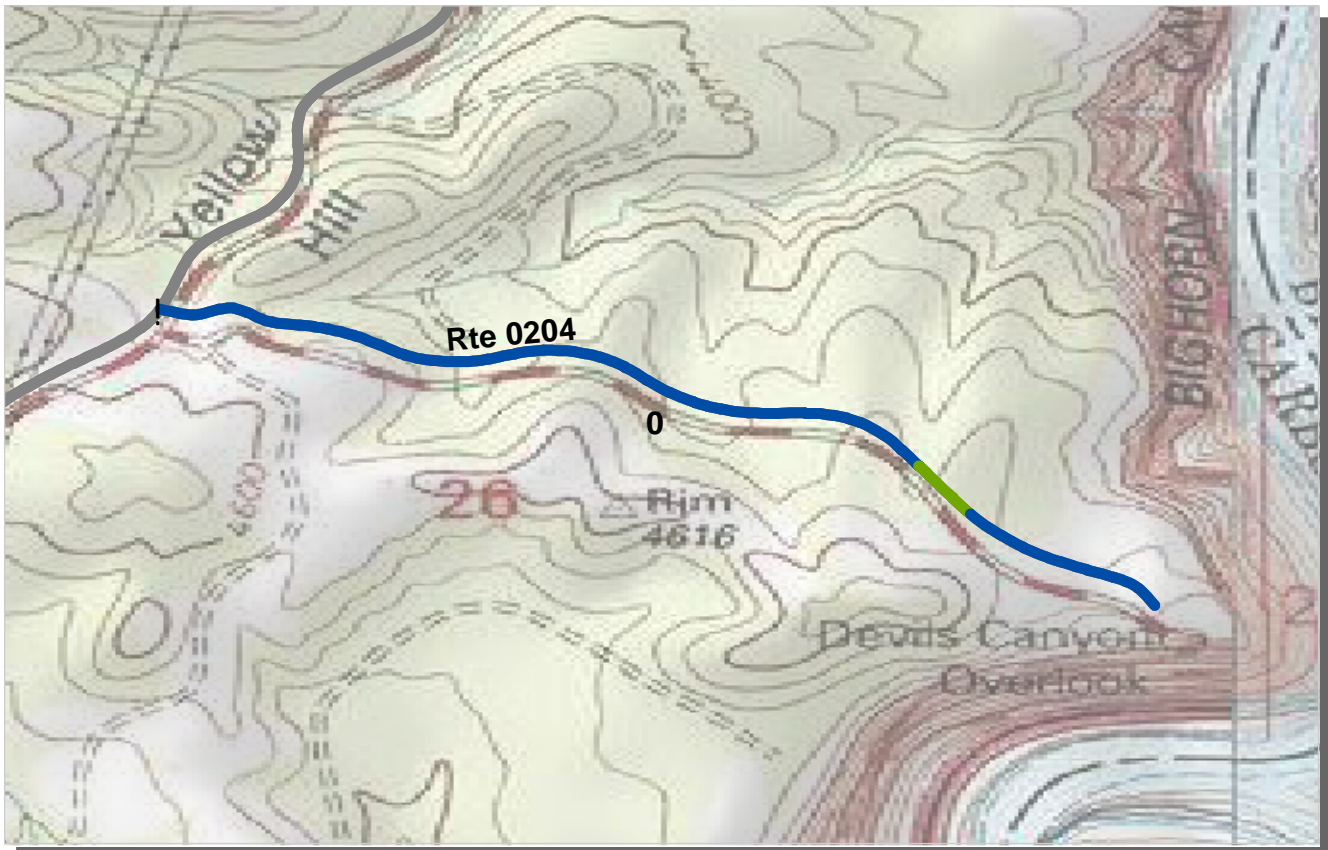
ROUTE: 0203 HORSESHOE BEND ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/17/2008
TOTAL LENGTH: 1.66 Miles

INTERMOUNTAIN REGION

Section Number	0	1			
Section Length (mi)	1.00	0.66			
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	25	24			
Lane Width (ft)	9	9			
Shoulder Width Right (ft)	NC	NC			
Shoulder Width Left (ft)	NC	NC			
Roadway Condition Information					
SCR (Surface Condition Rating)	92	96			
PCR (Pavement Condition Rating)	94	97			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	100	100			
Transverse Cracking Index	100	100			
Patching Index	100	100			
Rutting Index	92	96			
Roughness Condition Index (RCI)	97	99			

ROUTE: 0203 HORSESHOE BEND ROAD



0

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.

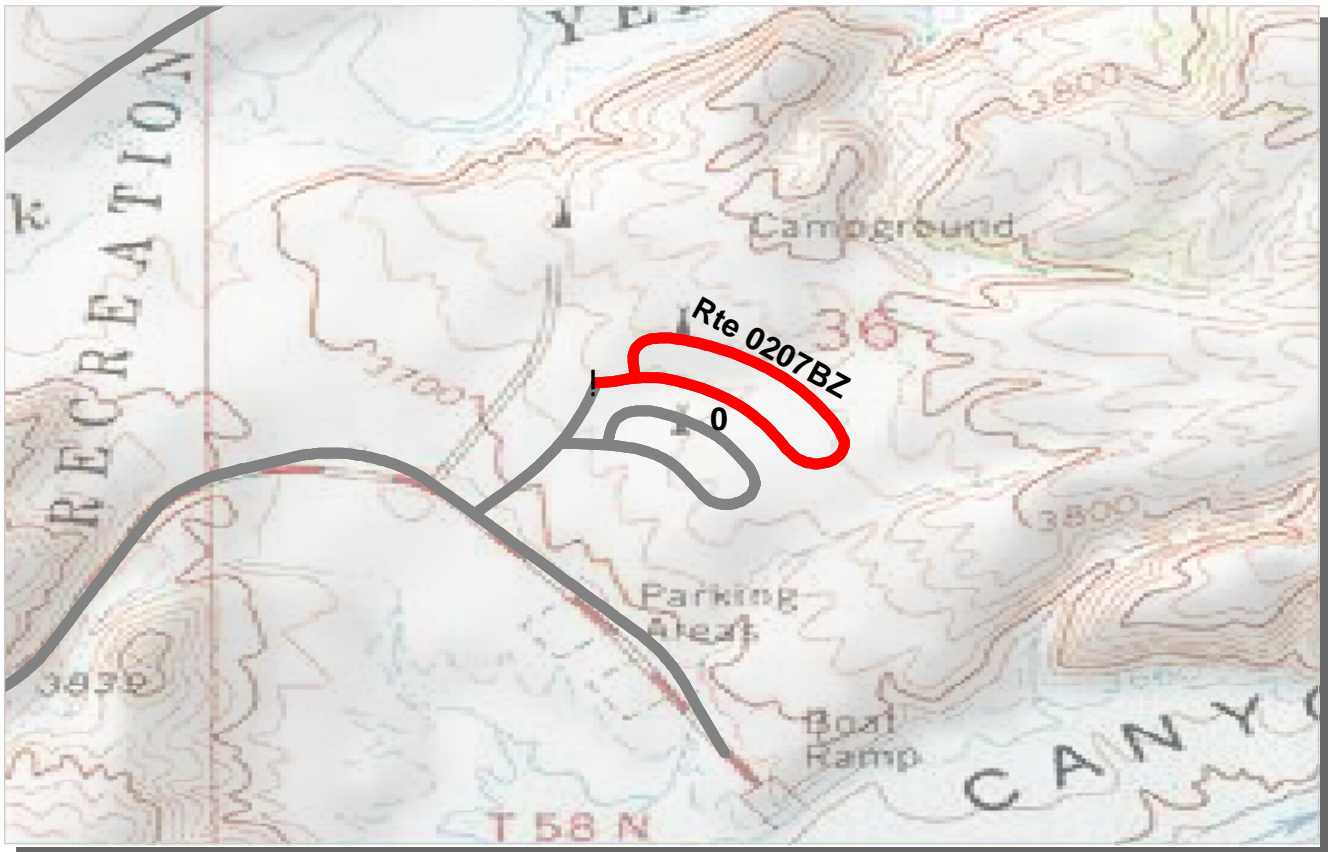
ROUTE: 0204 DEVIL'S CANYON OVERLOOK ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/17/2008
TOTAL LENGTH: 0.80 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.80				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	29				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	94				
PCR (Pavement Condition Rating)	96				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	100				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	94				
Roughness Condition Index (RCI)	99				

ROUTE: 0204 DEVIL'S CANYON OVERLOOK ROAD



0

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.

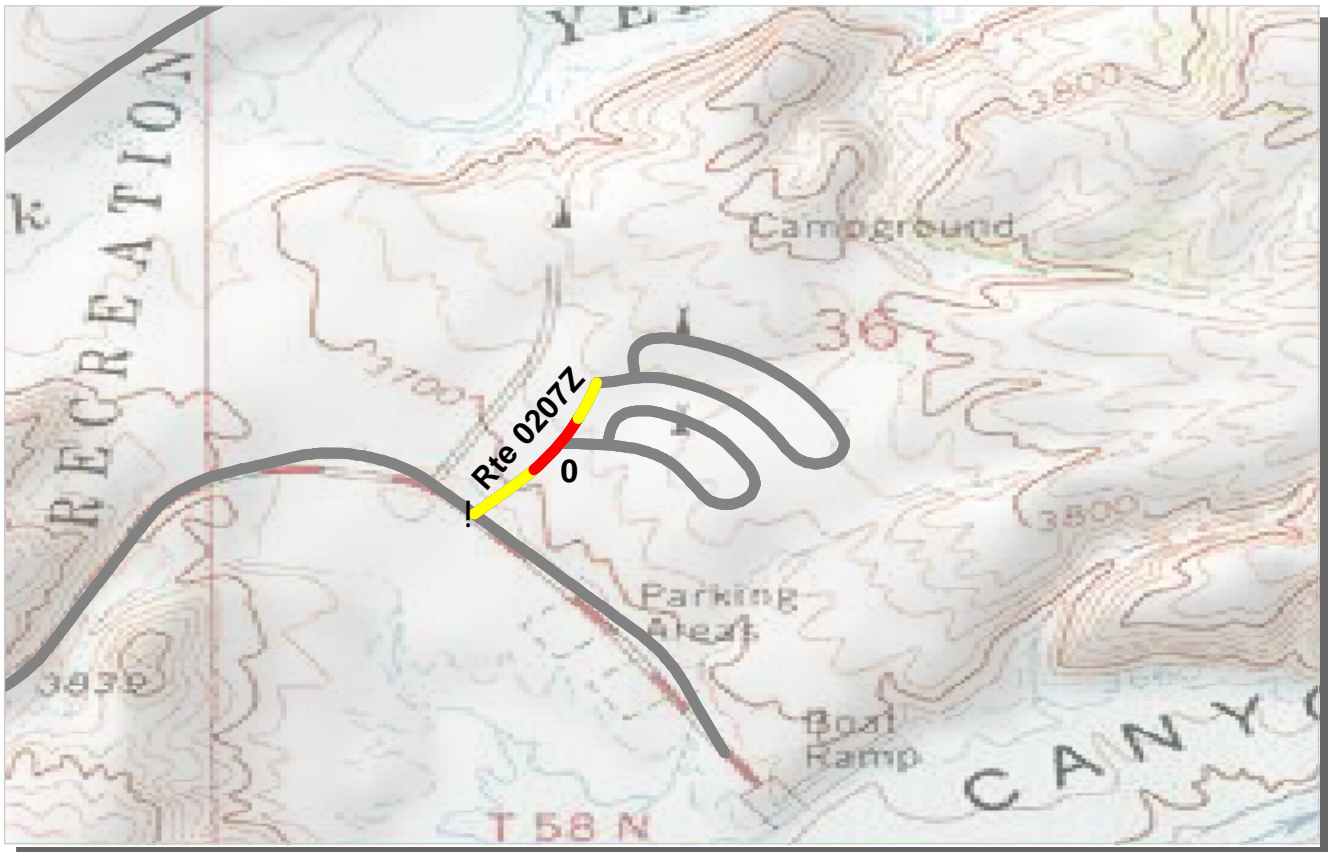
ROUTE: 0207BZ HORSESHOE BEND CAMPGROUND ROAD LOOP B
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

Subcomponent Record **COLLECTED: 8/17/2008**
INTERMOUNTAIN REGION TOTAL LENGTH: 0.44 Miles

Section Number	0				
Section Length (mi)	0.44				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	15				
Lane Width (ft)	14				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	0				
PCR (Pavement Condition Rating)	7				
Distress Index Values					
Alligator Cracking Index	24				
Longitudinal Cracking Index	65				
Transverse Cracking Index	61				
Patching Index	100				
Rutting Index	66				
Roughness Condition Index (RCI)	36				

ROUTE: 0207BZ HORSESHOE BEND CAMPGROUND ROAD LOOP B

NC - Not Collected



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

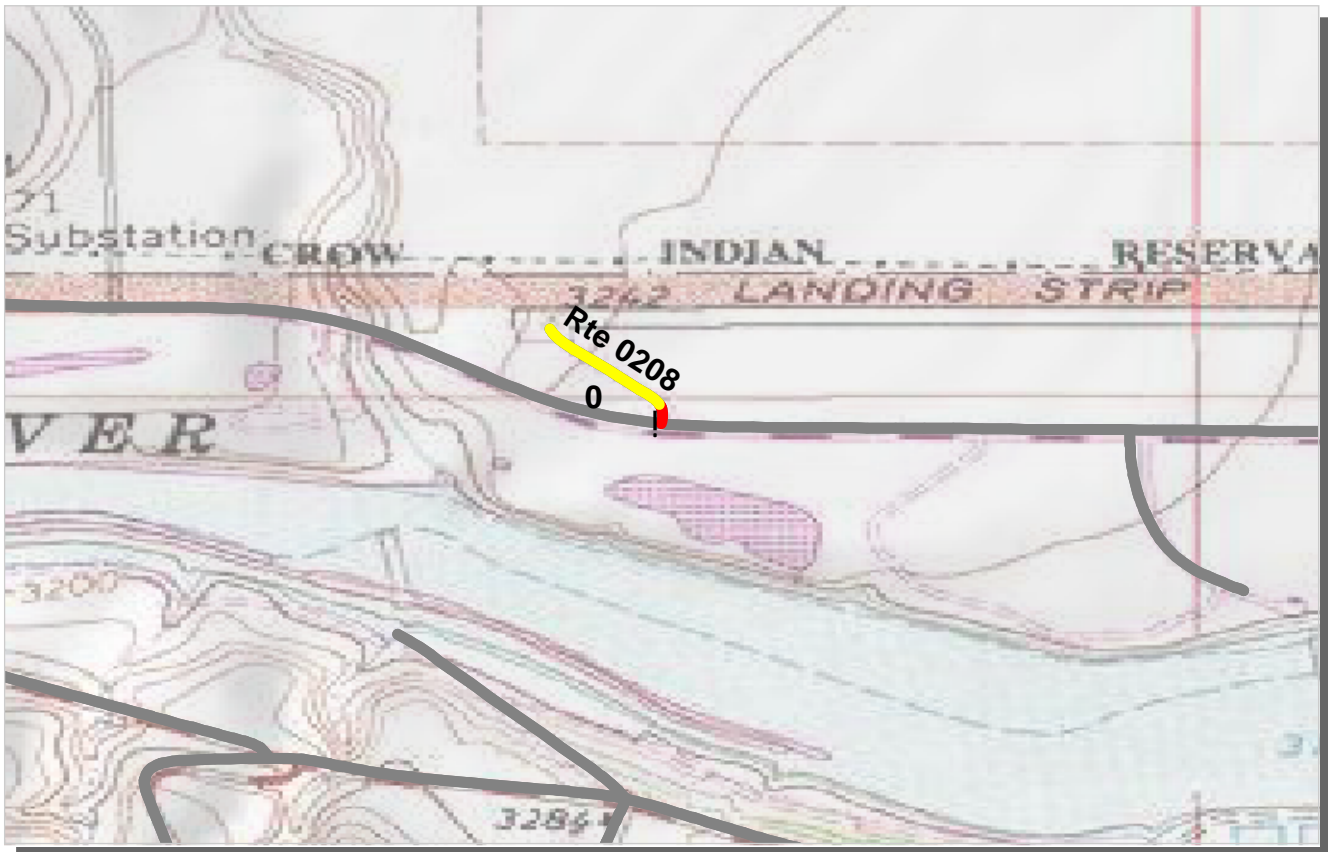
* If the PCR rating is not available for a section, the SCR rating will be displayed. See appendix for definitions and formulas.

ROUTE: 0207Z HORSESHOE BEND CAMPGROUND ACCESS ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

Subcomponent Record **COLLECTED: 8/17/2008**
INTERMOUNTAIN REGION TOTAL LENGTH: 0.16 Miles

Section Number	0				
Section Length (mi)	0.16				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
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)	70				
PCR (Pavement Condition Rating)	67				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	92				
Patching Index	100				
Rutting Index	81				
Roughness Condition Index (RCI)	37				

ROUTE: 0207Z HORSESHOE BEND CAMPGROUND ACCESS ROAD



0

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.

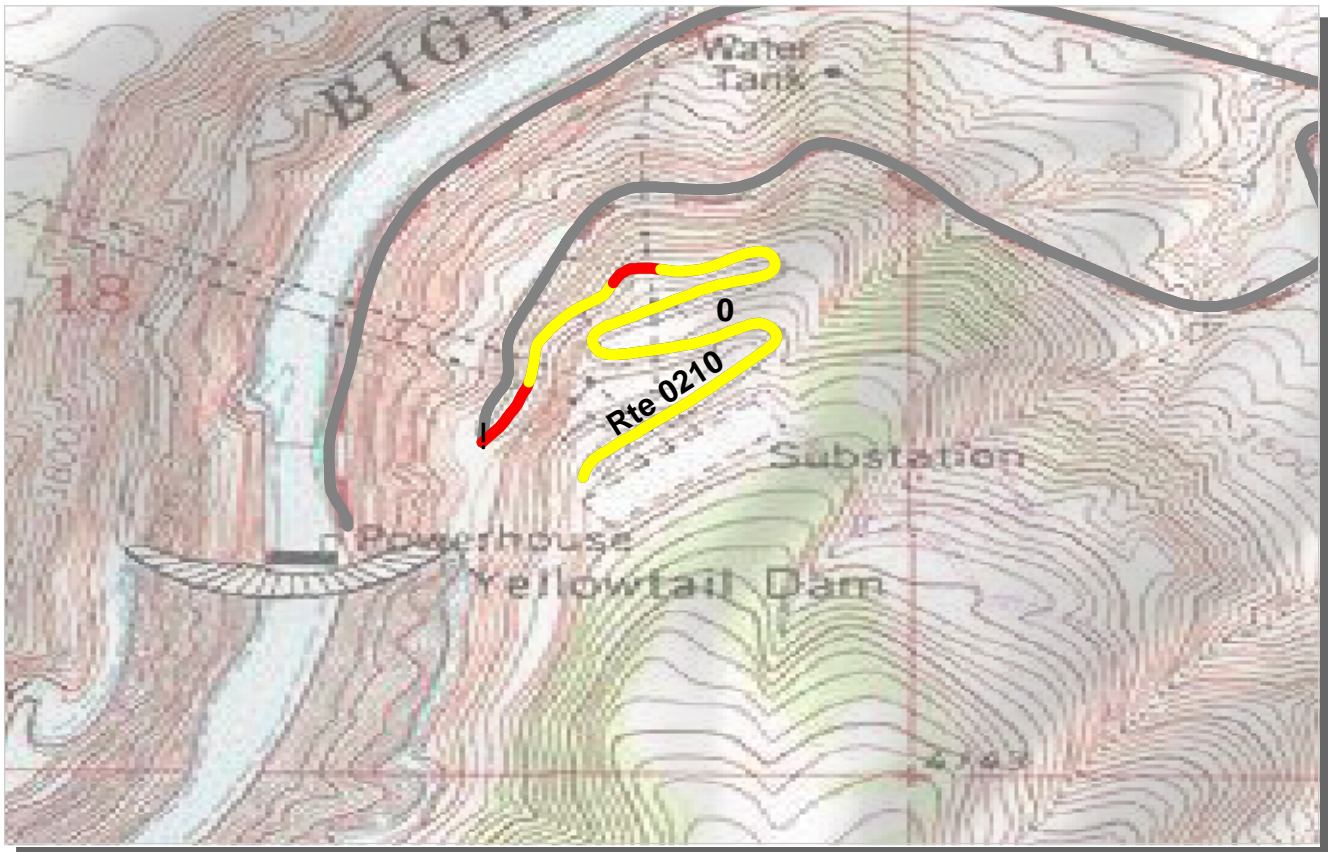
ROUTE: 0208 AIRSTRIP ACCESS ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.13 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.13				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
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)	65				
PCR (Pavement Condition Rating)	69				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	95				
Patching Index	100				
Rutting Index	72				
Roughness Condition Index (RCI)	90				

ROUTE: 0208 AIRSTRIP ACCESS ROAD



0

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.

ROUTE: 0210 WAPPA UPPER SWITCHYARD ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

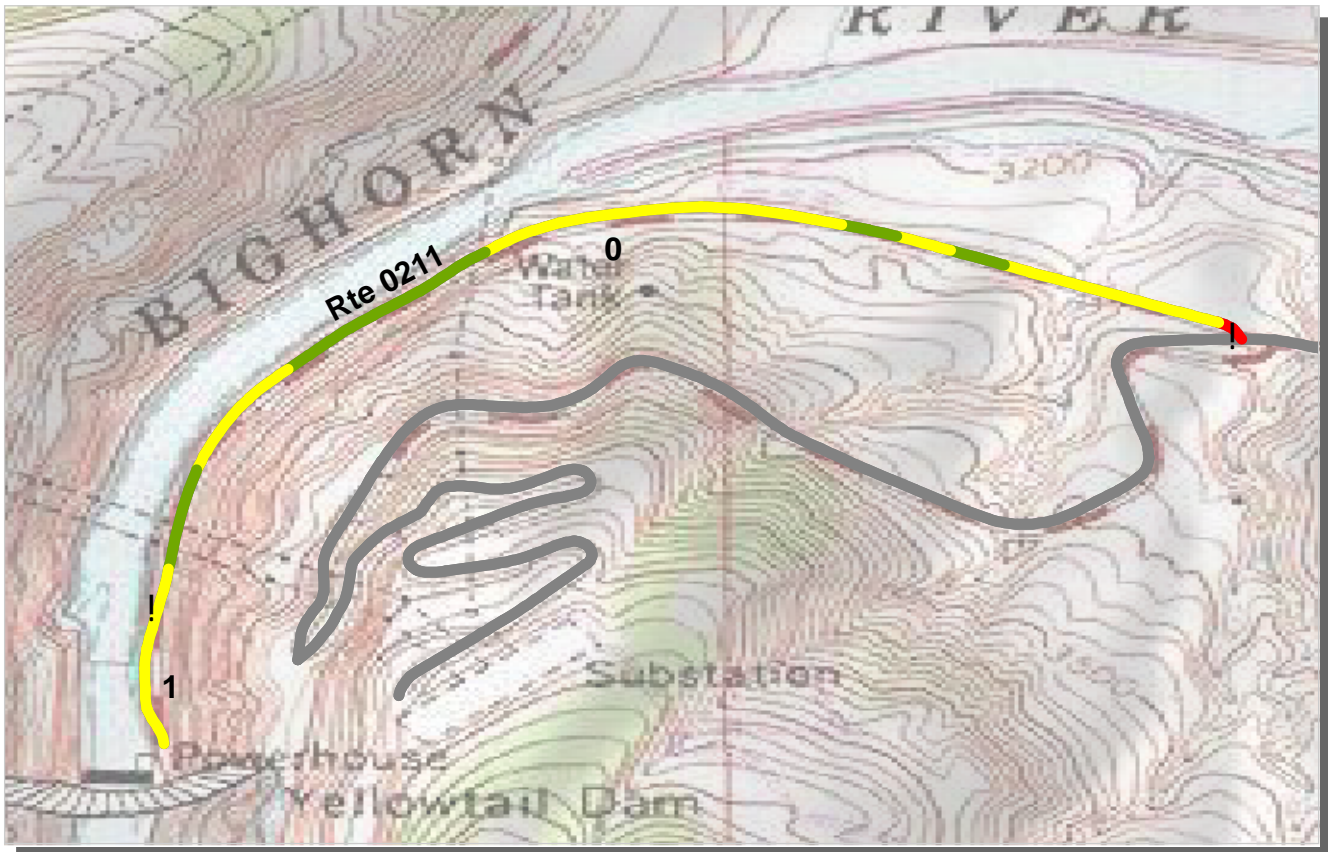
COLLECTED: 8/15/2008
TOTAL LENGTH: 0.81 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.81				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	22				
Lane Width (ft)	10				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	67				
PCR (Pavement Condition Rating)	72				
Distress Index Values					
Alligator Cracking Index	99				
Longitudinal Cracking Index	93				
Transverse Cracking Index	97				
Patching Index	100				
Rutting Index	78				
Roughness Condition Index (RCI)	82				

ROUTE: 0210 WAPPA UPPER SWITCHYARD ROAD

NC - Not Collected



0

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.

ROUTE: 0211 YELLOWTAIL POWER PLANT ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

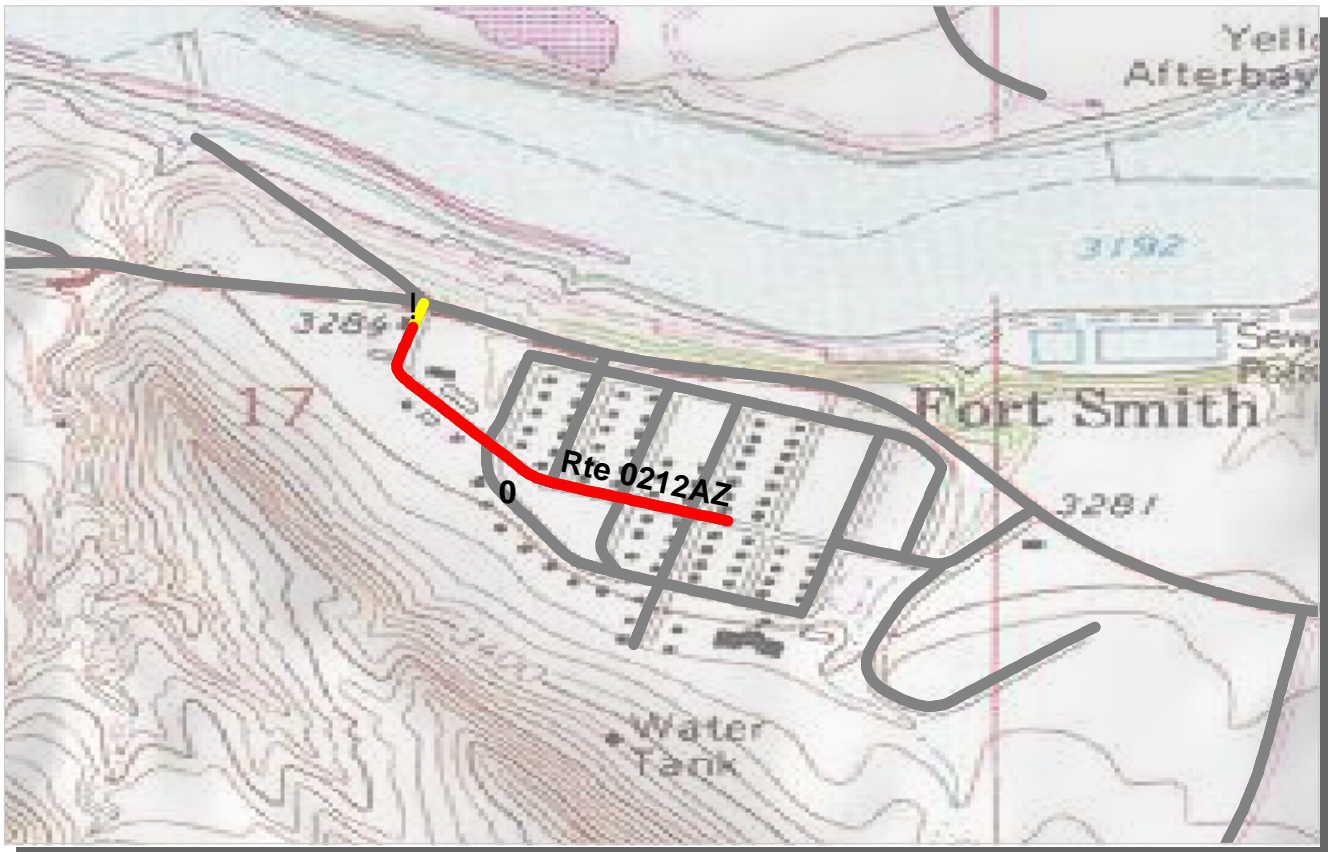
COLLECTED: 8/15/2008
TOTAL LENGTH: 1.14 Miles

INTERMOUNTAIN REGION

Section Number	0	1			
Section Length (mi)	1.00	0.14			
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2			
Paved Width (ft)	21	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)	72	68			
PCR (Pavement Condition Rating)	79	73			
Distress Index Values					
Alligator Cracking Index	100	100			
Longitudinal Cracking Index	98	99			
Transverse Cracking Index	95	99			
Patching Index	100	100			
Rutting Index	79	71			
Roughness Condition Index (RCI)	90	81			

ROUTE: 0211 YELLOWTAIL POWER PLANT ROAD

NC - Not Collected



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.

ROUTE: 0212AZ AVENUE B (WEST)

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

Subcomponent Record

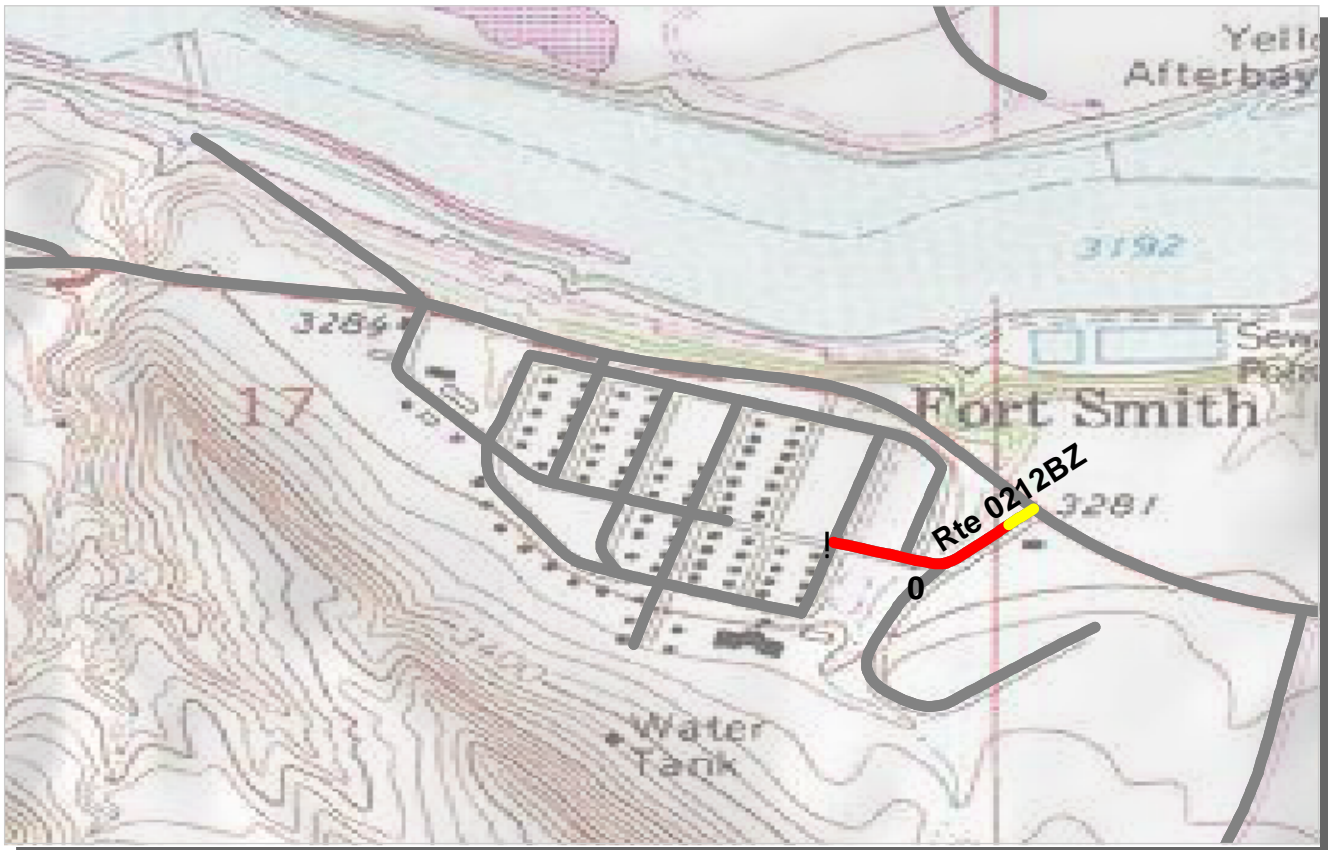
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.35 Miles

Section Number	0				
Section Length (mi)	0.35				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	33				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	23				
PCR (Pavement Condition Rating)	32				
Distress Index Values					
Alligator Cracking Index	51				
Longitudinal Cracking Index	93				
Transverse Cracking Index	92				
Patching Index	99				
Rutting Index	72				
Roughness Condition Index (RCI)	53				

ROUTE: 0212AZ AVENUE B (WEST)



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.

ROUTE: 0212BZ AVENUE B (EAST)

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

Subcomponent Record

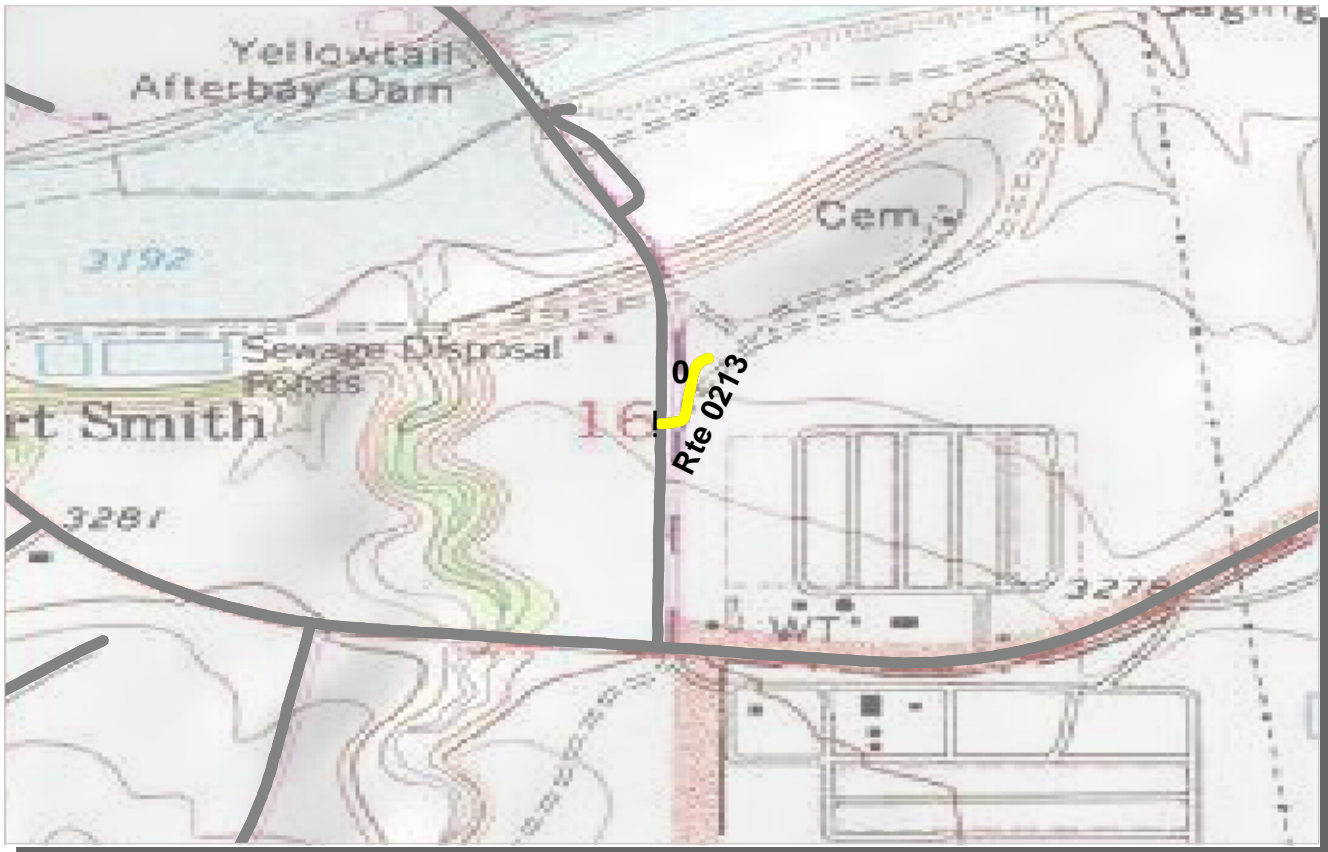
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.16 Miles

Section Number	0				
Section Length (mi)	0.16				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	34				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	38				
PCR (Pavement Condition Rating)	39				
Distress Index Values					
Alligator Cracking Index	78				
Longitudinal Cracking Index	96				
Transverse Cracking Index	97				
Patching Index	100				
Rutting Index	63				
Roughness Condition Index (RCI)	33				

ROUTE: 0212BZ AVENUE B (EAST)



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.

ROUTE: 0213 DITCHRIDER ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

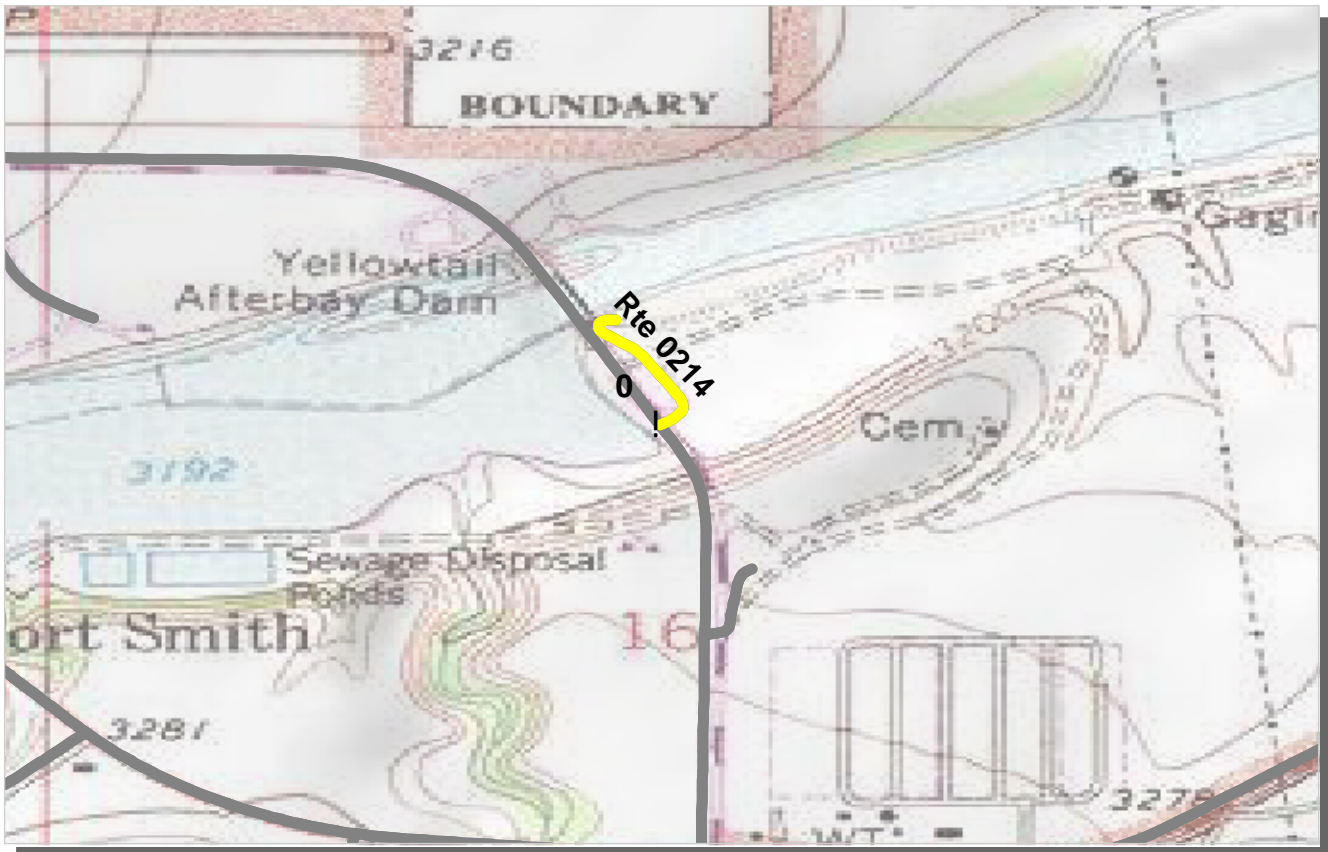
COLLECTED: 8/15/2008
TOTAL LENGTH: 0.08 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.08				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	1				
Paved Width (ft)	13				
Lane Width (ft)	13				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	63				
PCR (Pavement Condition Rating)	63				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	98				
Patching Index	100				
Rutting Index	68				
Roughness Condition Index (RCI)	NC				

ROUTE: 0213 DITCHRIDER ROAD

NC - Not Collected



0

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.

ROUTE: 0214 BIGHORN CANAL ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.14 Miles

Section Number	0				
Section Length (mi)	0.14				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	19				
Lane Width (ft)	11				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	68				
PCR (Pavement Condition Rating)	68				
Distress Index Values					
Alligator Cracking Index	100				
Longitudinal Cracking Index	98				
Transverse Cracking Index	100				
Patching Index	100				
Rutting Index	70				
Roughness Condition Index (RCI)	64				

ROUTE: 0214 BIGHORN CANAL ROAD



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.

ROUTE: 0219 BARRY'S LANDING BOAT RAMP ROAD
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

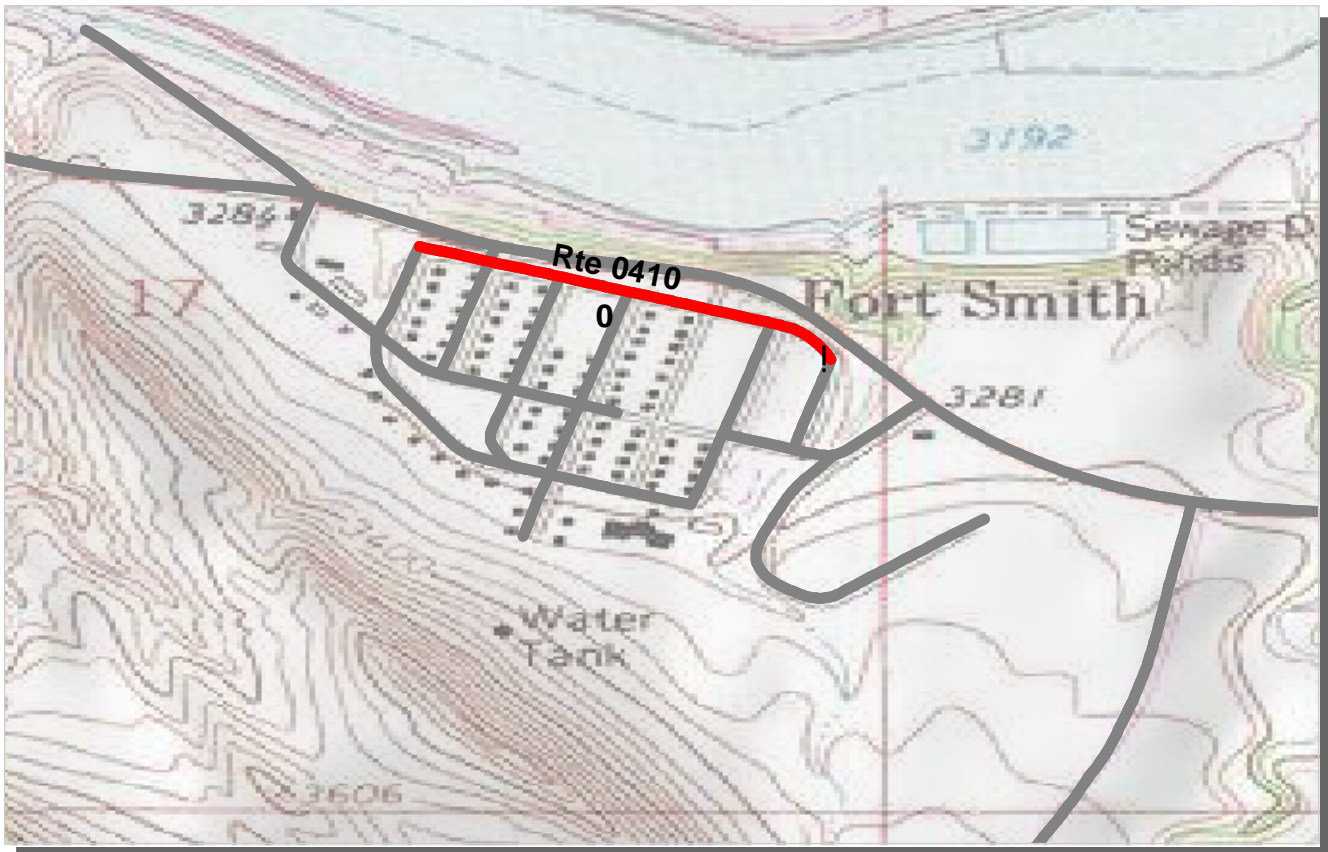
COLLECTED: 8/17/2008
TOTAL LENGTH: 2.09 Miles

INTERMOUNTAIN REGION

Section Number	0	1	2		
Section Length (mi)	1.00	1.00	0.09		
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2	2	2		
Paved Width (ft)	29	29	28		
Lane Width (ft)	11	11	10		
Shoulder Width Right (ft)	NC	NC	NC		
Shoulder Width Left (ft)	NC	NC	NC		
Roadway Condition Information					
SCR (Surface Condition Rating)	96	96	96		
PCR (Pavement Condition Rating)	97	96	94		
Distress Index Values					
Alligator Cracking Index	100	100	100		
Longitudinal Cracking Index	100	100	100		
Transverse Cracking Index	100	100	100		
Patching Index	100	100	100		
Rutting Index	96	96	96		
Roughness Condition Index (RCI)	99	97	80		

ROUTE: 0219 BARRY'S LANDING BOAT RAMP ROAD

NC - Not Collected



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.

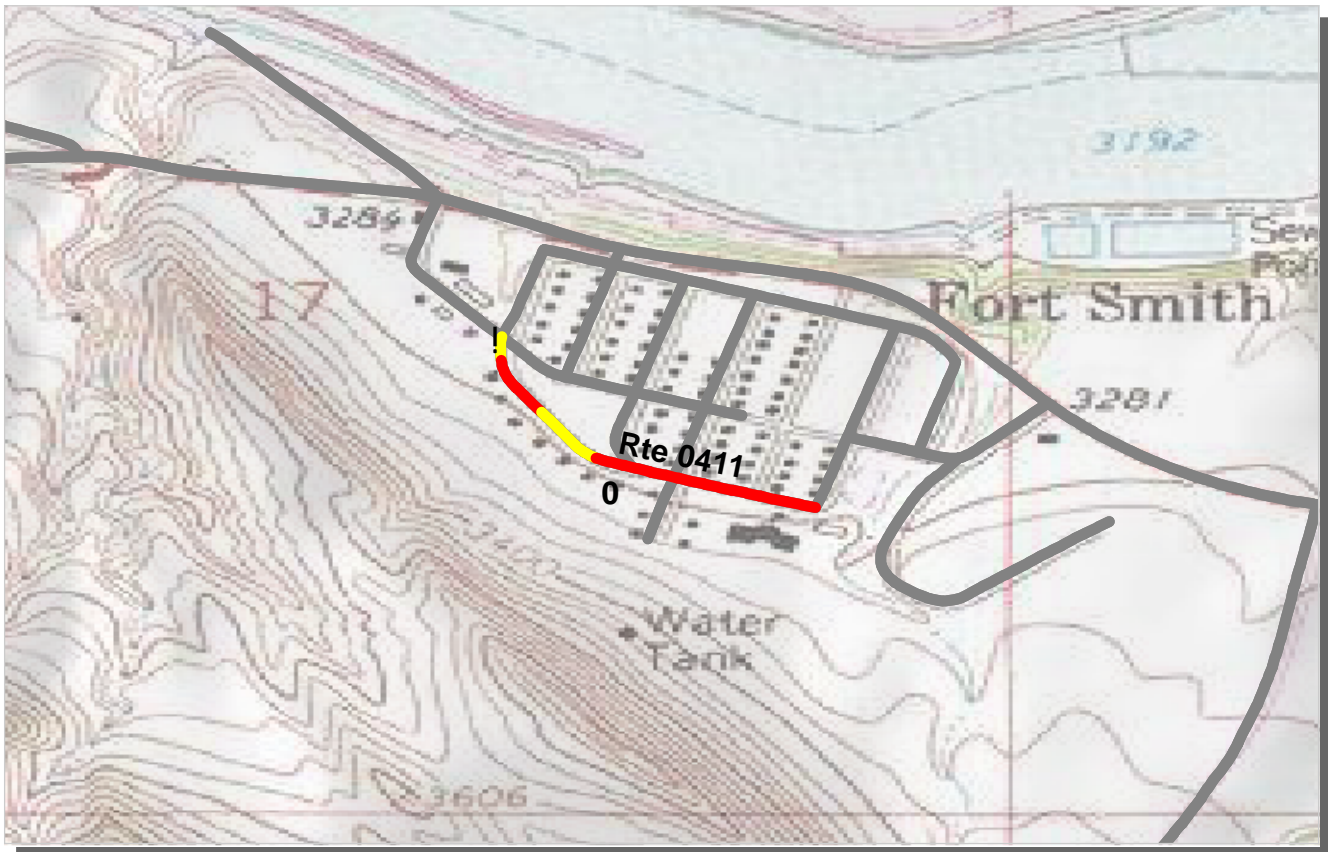
ROUTE: 0410 AVENUE A
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.31 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.31				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	35				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	16				
PCR (Pavement Condition Rating)	18				
Distress Index Values					
Alligator Cracking Index	37				
Longitudinal Cracking Index	86				
Transverse Cracking Index	96				
Patching Index	100				
Rutting Index	75				
Roughness Condition Index (RCI)	47				

ROUTE: 0410 AVENUE A



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.

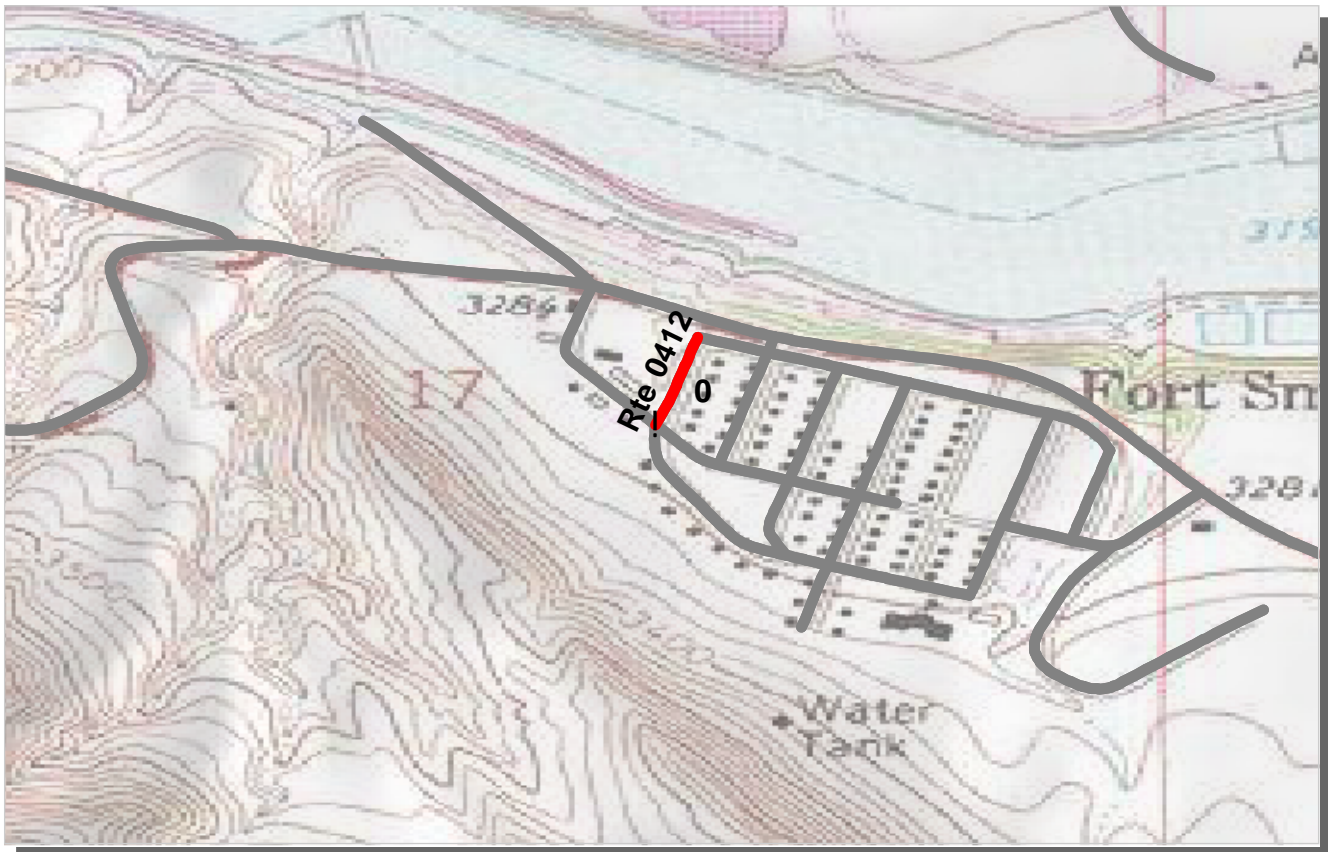
ROUTE: 0411 AVENUE C
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.30 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.30				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	31				
Lane Width (ft)	15				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	49				
PCR (Pavement Condition Rating)	52				
Distress Index Values					
Alligator Cracking Index	88				
Longitudinal Cracking Index	94				
Transverse Cracking Index	91				
Patching Index	99				
Rutting Index	75				
Roughness Condition Index (RCI)	76				

ROUTE: 0411 AVENUE C



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.

ROUTE: 0412 FIRST STREET

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

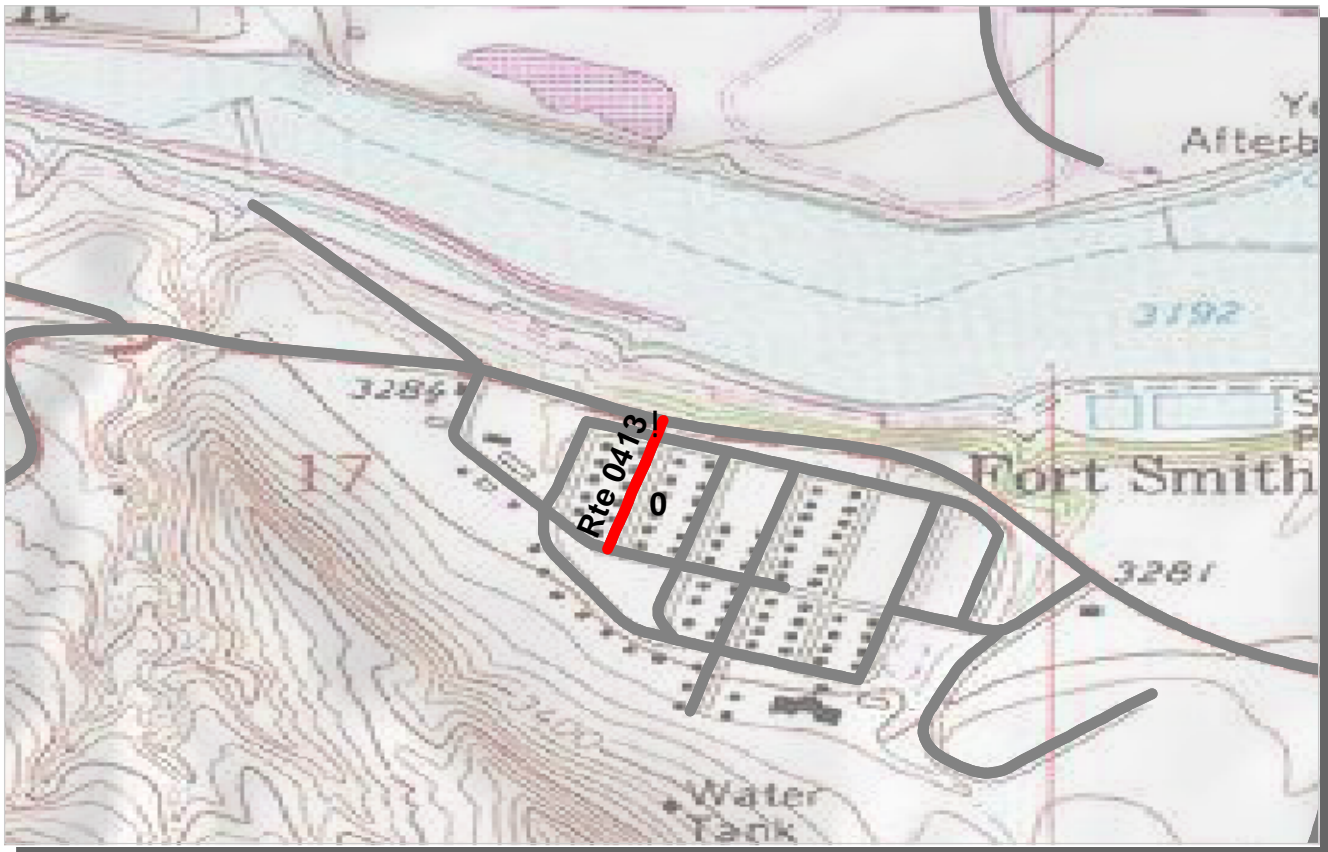
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.09 Miles

Section Number	0				
Section Length (mi)	0.09				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	34				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	39				
PCR (Pavement Condition Rating)	39				
Distress Index Values					
Alligator Cracking Index	66				
Longitudinal Cracking Index	94				
Transverse Cracking Index	95				
Patching Index	100				
Rutting Index	79				
Roughness Condition Index (RCI)	NC				

ROUTE: 0412 FIRST STREET



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.

ROUTE: 0413 SECOND STREET

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

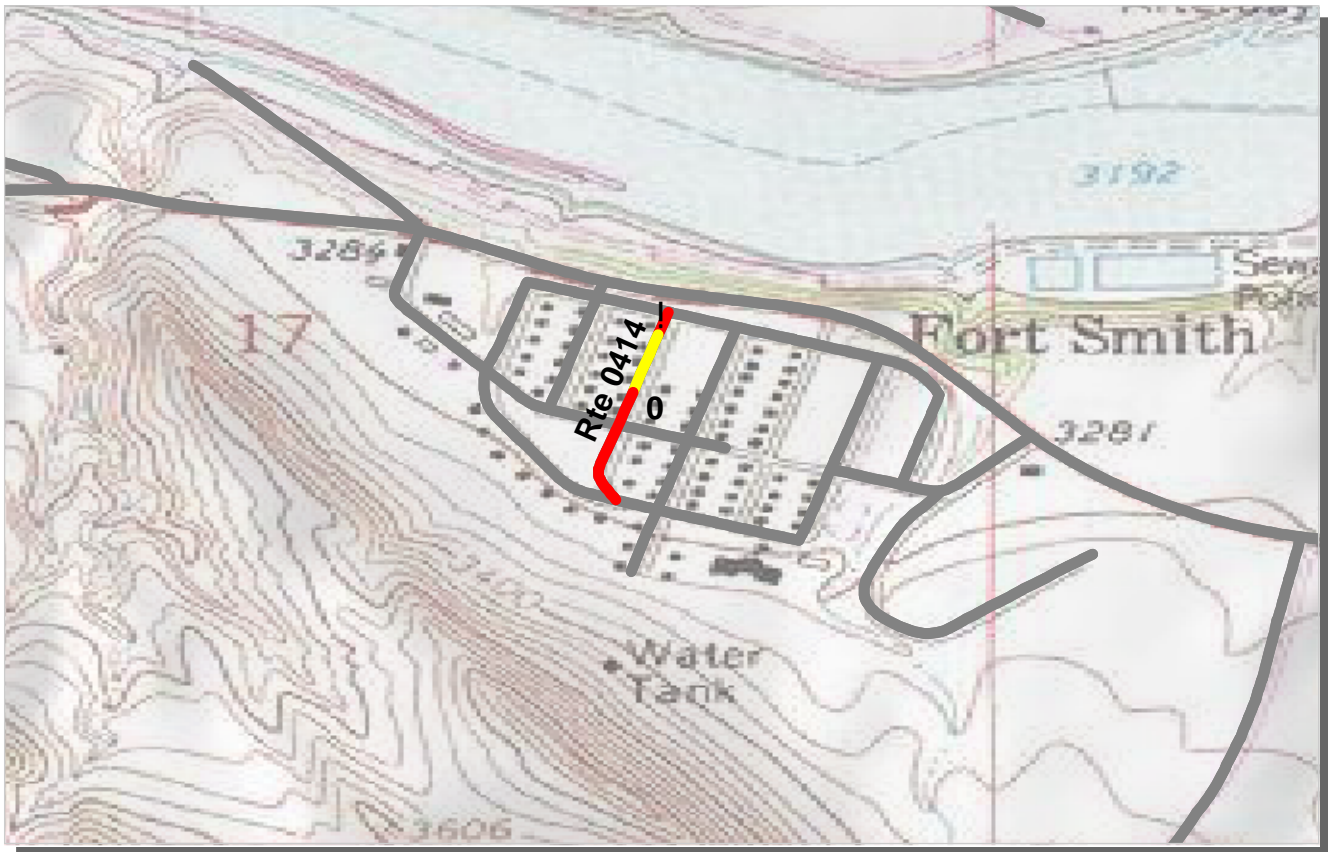
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.13 Miles

Section Number	0				
Section Length (mi)	0.13				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	32				
Lane Width (ft)	16				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	28				
PCR (Pavement Condition Rating)	27				
Distress Index Values					
Alligator Cracking Index	51				
Longitudinal Cracking Index	90				
Transverse Cracking Index	91				
Patching Index	100				
Rutting Index	85				
Roughness Condition Index (RCI)	39				

ROUTE: 0413 SECOND STREET



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.

ROUTE: 0414 THIRD STREET

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

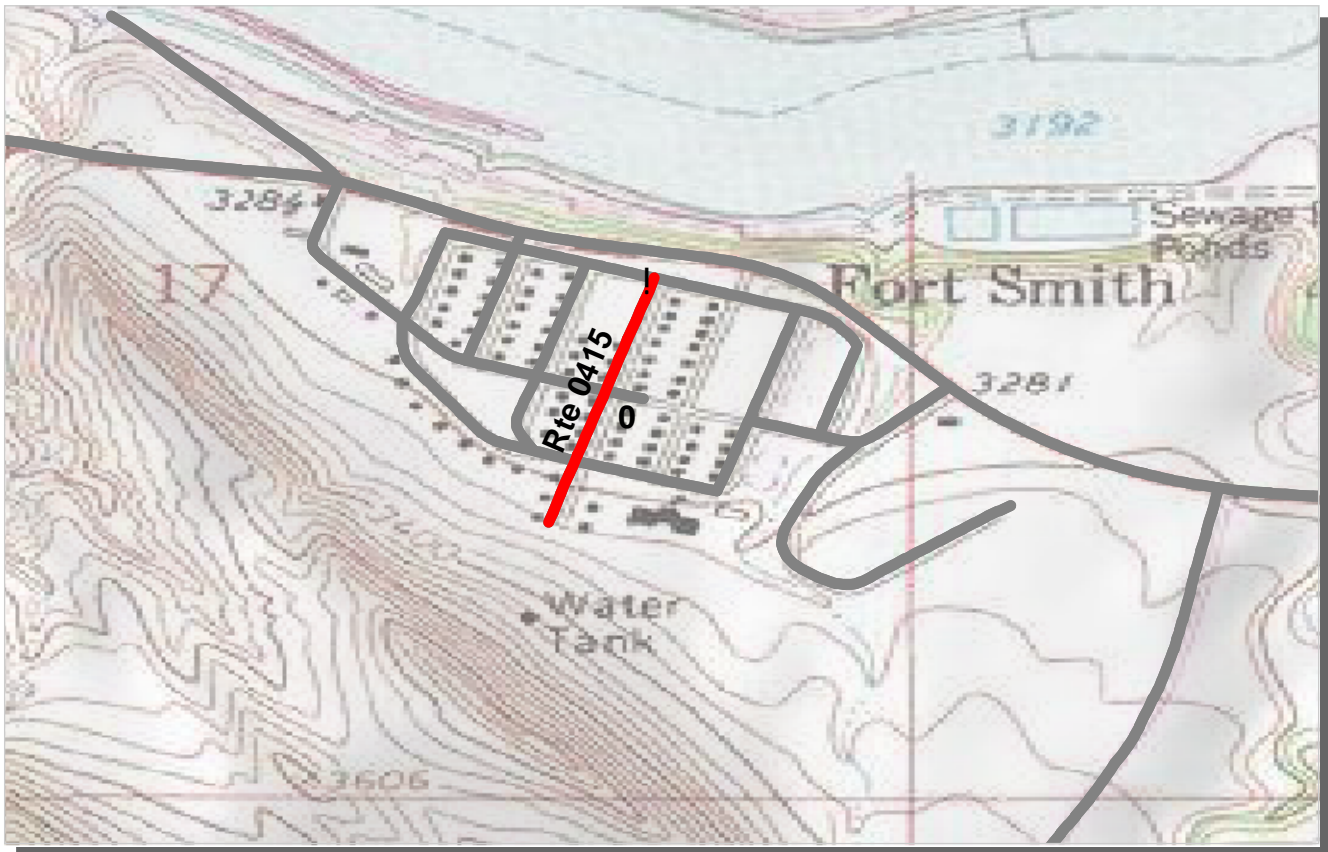
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.19 Miles

Section Number	0				
Section Length (mi)	0.19				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	31				
Lane Width (ft)	15				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	32				
PCR (Pavement Condition Rating)	33				
Distress Index Values					
Alligator Cracking Index	62				
Longitudinal Cracking Index	90				
Transverse Cracking Index	87				
Patching Index	100				
Rutting Index	81				
Roughness Condition Index (RCI)	56				

ROUTE: 0414 THIRD STREET



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.

ROUTE: 0415 FOURTH STREET

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

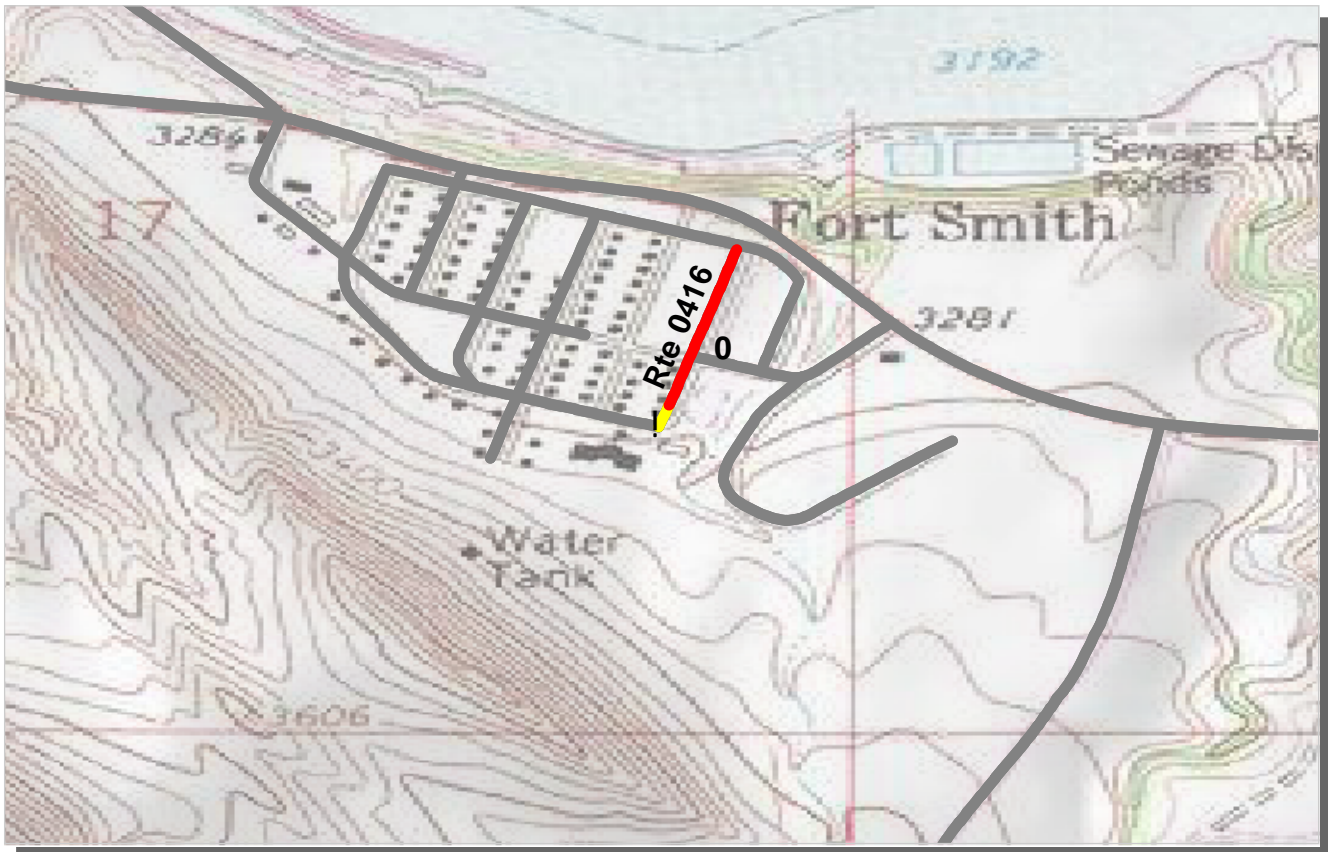
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.25 Miles

Section Number	0				
Section Length (mi)	0.25				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	31				
Lane Width (ft)	16				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	30				
PCR (Pavement Condition Rating)	33				
Distress Index Values					
Alligator Cracking Index	67				
Longitudinal Cracking Index	90				
Transverse Cracking Index	93				
Patching Index	100				
Rutting Index	77				
Roughness Condition Index (RCI)	58				

ROUTE: 0415 FOURTH STREET



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.

ROUTE: 0416 SIXTH STREET

BICA : BIGHORN CANYON NATIONAL RECREATION AREA

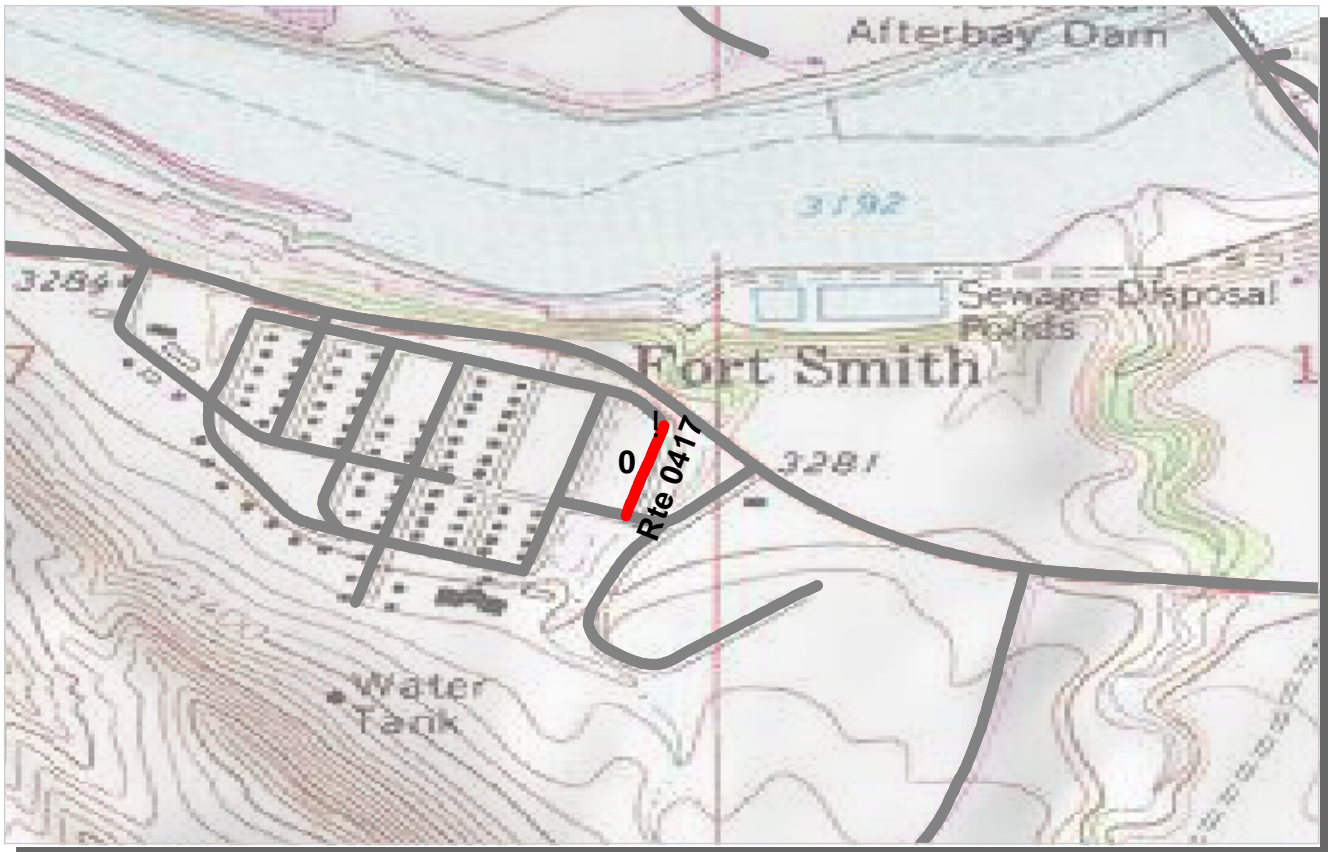
COLLECTED: 8/15/2008

INTERMOUNTAIN REGION

TOTAL LENGTH: 0.18 Miles

Section Number	0				
Section Length (mi)	0.18				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	33				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	21				
PCR (Pavement Condition Rating)	29				
Distress Index Values					
Alligator Cracking Index	53				
Longitudinal Cracking Index	83				
Transverse Cracking Index	94				
Patching Index	100				
Rutting Index	77				
Roughness Condition Index (RCI)	47				

ROUTE: 0416 SIXTH STREET



0

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.

ROUTE: 0417 SEVENTH STREET
BICA : BIGHORN CANYON NATIONAL RECREATION AREA

COLLECTED: 8/15/2008
TOTAL LENGTH: 0.09 Miles

INTERMOUNTAIN REGION

Section Number	0				
Section Length (mi)	0.09				
Traffic	Traffic data may be found at www.efl.fhwa.dot.gov Click on PROGRAMS / NPS Traffic Data (Note: Not all parks have traffic data)				
Cross Section Information					
Number of Lanes	2				
Paved Width (ft)	34				
Lane Width (ft)	17				
Shoulder Width Right (ft)	NC				
Shoulder Width Left (ft)	NC				
Roadway Condition Information					
SCR (Surface Condition Rating)	22				
PCR (Pavement Condition Rating)	22				
Distress Index Values					
Alligator Cracking Index	47				
Longitudinal Cracking Index	89				
Transverse Cracking Index	96				
Patching Index	100				
Rutting Index	81				
Roughness Condition Index (RCI)	NC				

ROUTE: 0417 SEVENTH STREET

Bighorn Canyon National Recreation Area



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

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0205

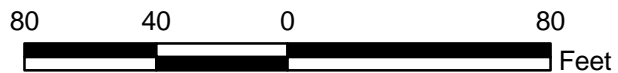
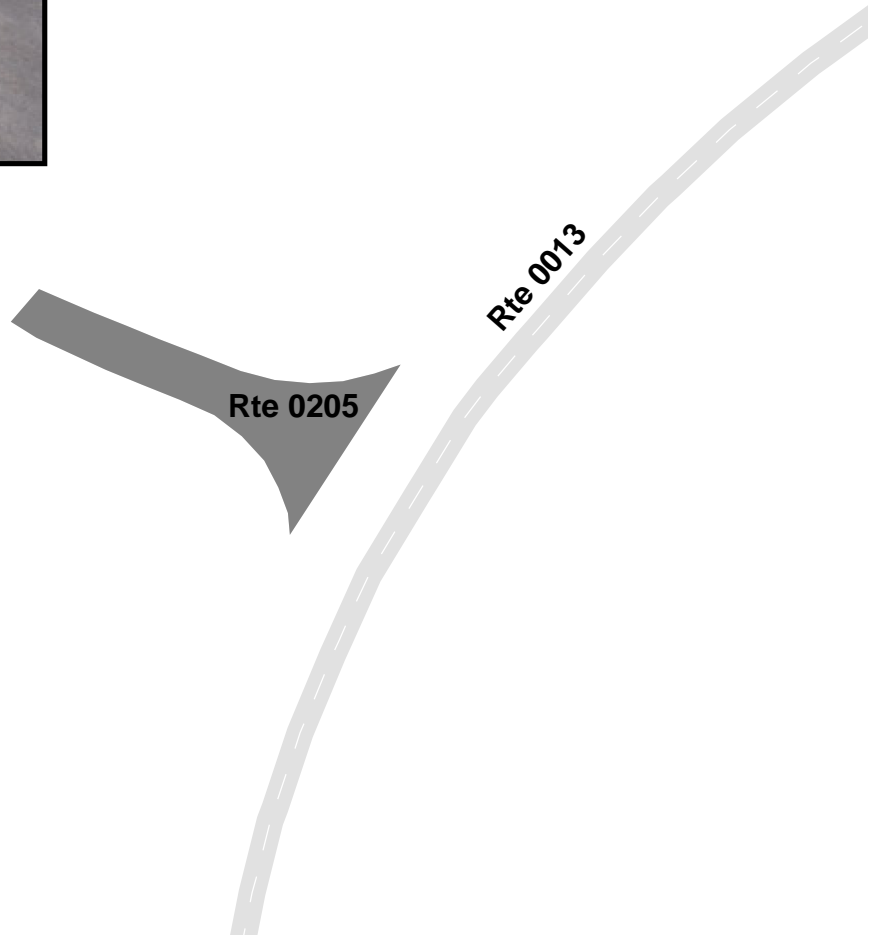
EWING-SNELL RANCH ROAD

FROM ROUTE 0013 (BAD PASS ROAD) AT MP 10.93 (ON LEFT)

TO RANGER STATION

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0205	PUBLIC	6/27/2007		1,563	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



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0209

M. L. RANCH ROAD SOUTH UNIT

FROM US ROUTE 14A

TO RANCH

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0209	PUBLIC	9/14/2001		3,467	0.06	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



The condition data being displayed for Route 0209 is from RIP Cycle-3, no data was collected in RIP Cycle-4.



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0419

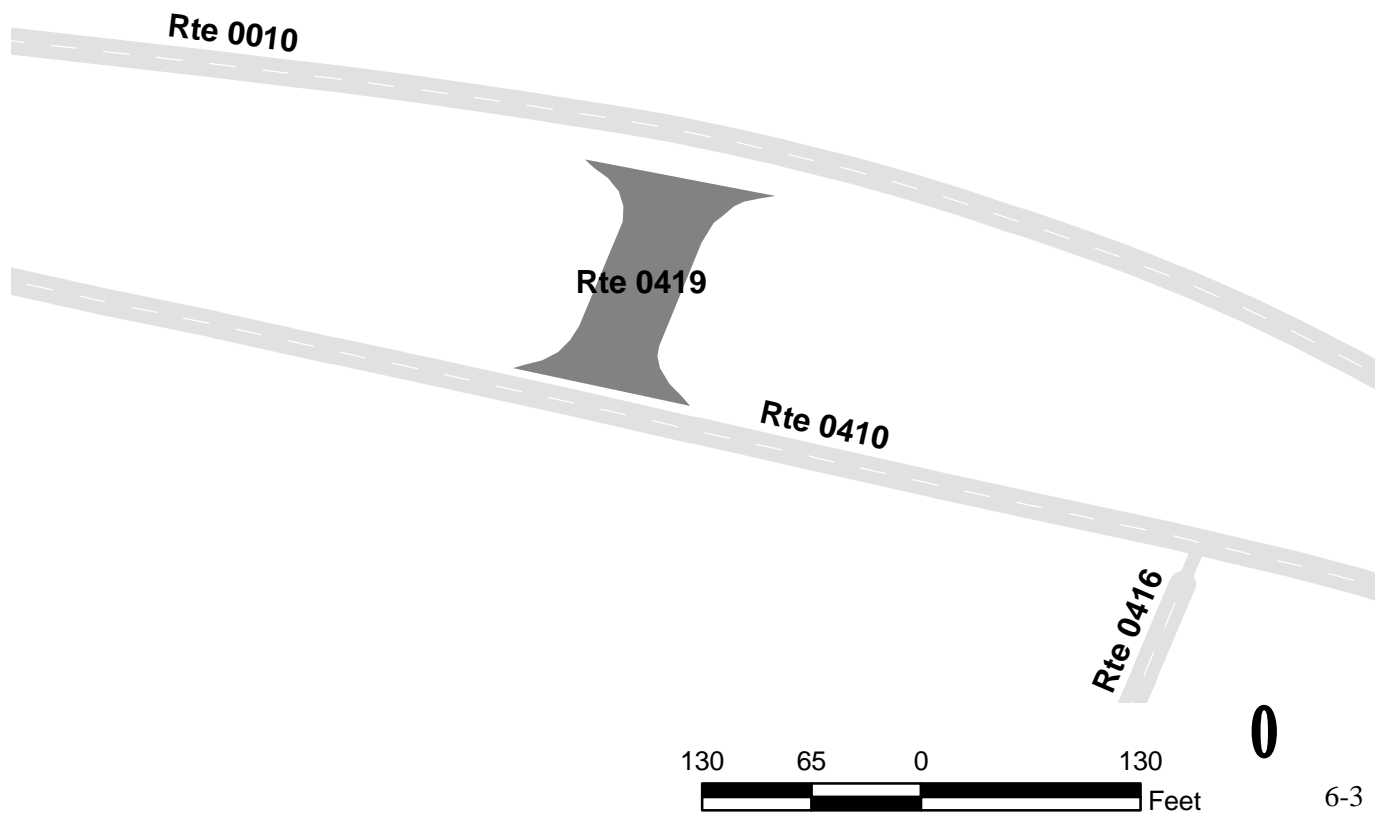
AVENUE A ACCESS ROAD

FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.67 (ON LEFT)

TO ROUTE 0410 (AVENUE A) AT MP 0.11 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0419	PUBLIC	6/26/2007		5,400	0.09	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
1	0	0	0	NO CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



Bighorn Canyon National Recreation Area



Section 7 **Parking Area Condition Rating Sheets**

BIGHORN CANYON NATIONAL RECREATION AREA

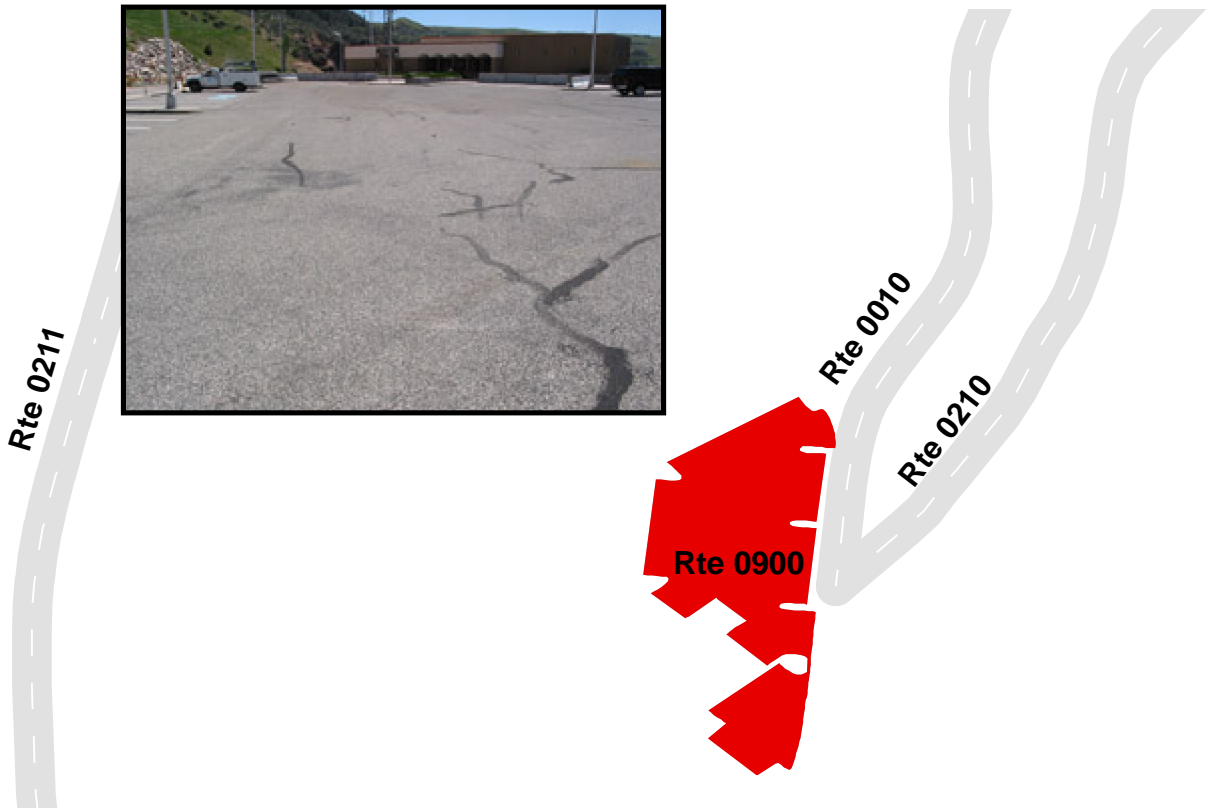
Route 0900

YELLOWTAIL DAM VISITOR CENTER PARKING

ADJACENT TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 5.26 (ON RIGHT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0900	PUBLIC	6/26/2007		27,689	0.48	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0901

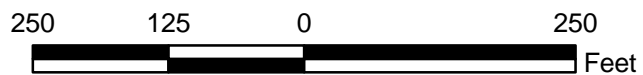
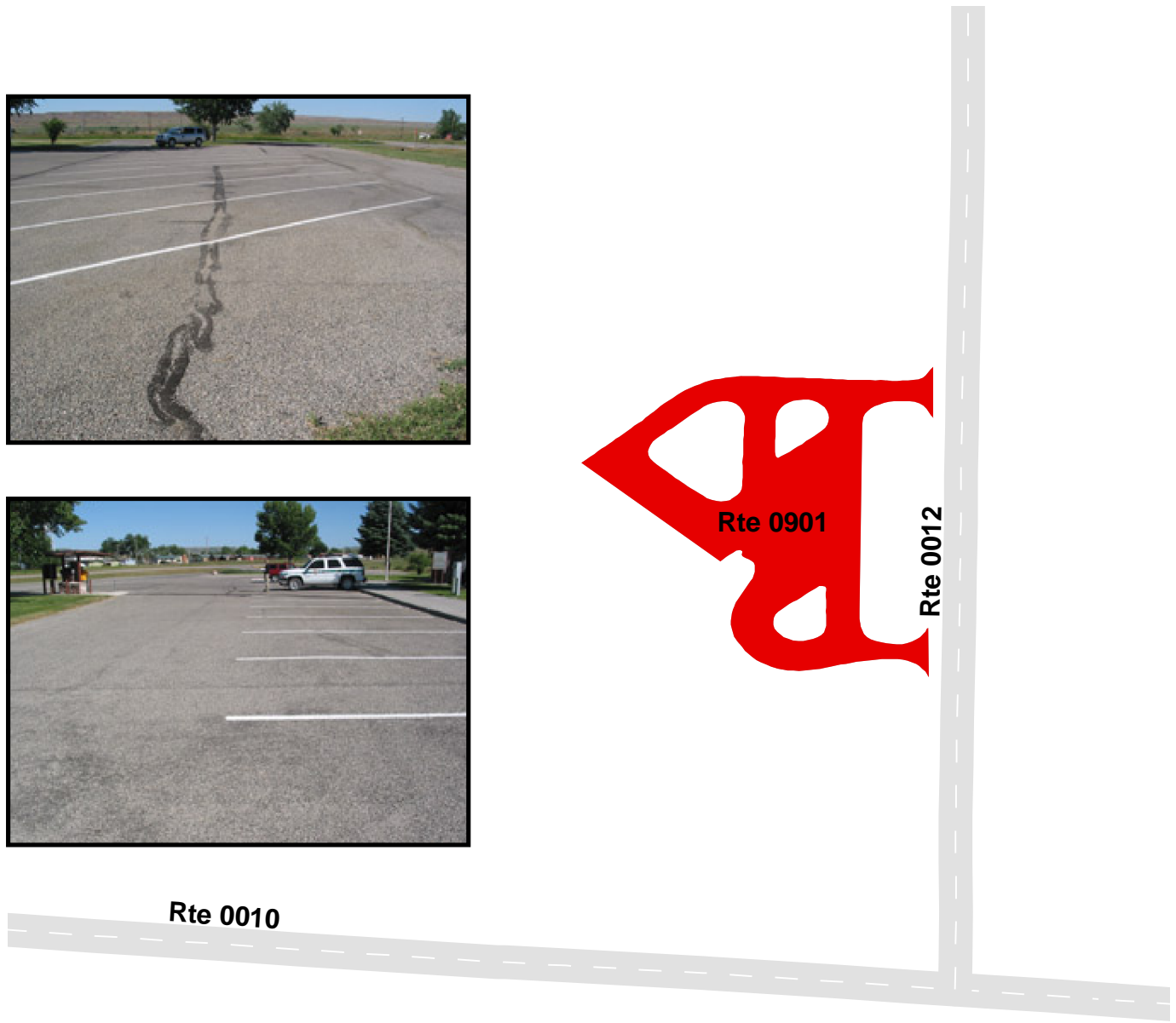
FORT SMITH CONTACT STATION PARKING

FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.06 (ON LEFT)

TO ROUTE 0012 (AFTER BAY ROAD) AT MP 0.11 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0901	PUBLIC	6/26/2007		36,477	0.63	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
2	0	0	0	NO CURB AND GUTTER	CONCRETE CURB	GOOD/90

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0902

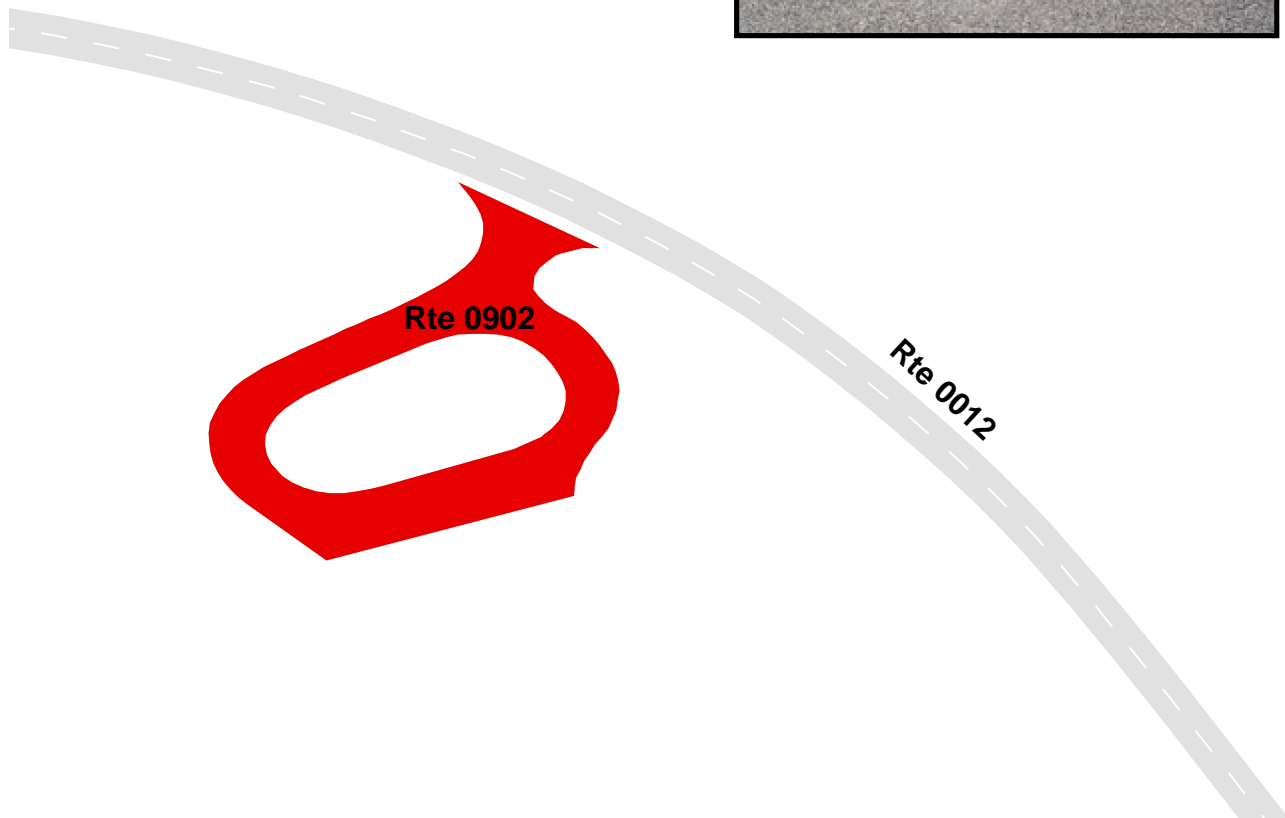
AFTER BAY OVERLOOK PARKING

FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.70 (ON LEFT)

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0902	PUBLIC	6/26/2007		26,086	0.45	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



BIGHORN CANYON NATIONAL RECREATION AREA

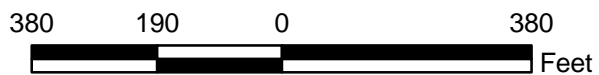
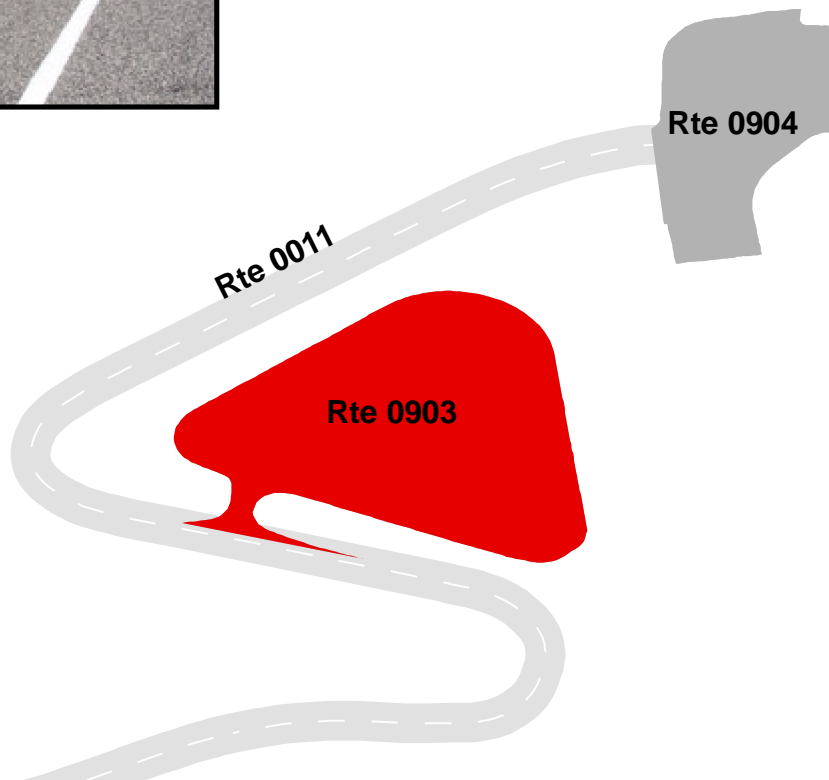
Route 0903

UPPER OK-A-BEH PARKING

FROM ROUTE 0011 (OK-A-BEH ROAD) AT MP 9.15 (ON RIGHT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0903	PUBLIC	6/26/2007		120,811	2.08	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	4	0	0	CONCRETE CURB AND GUTTER	ASPHALT CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

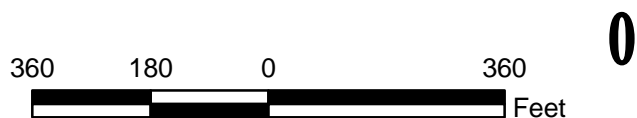
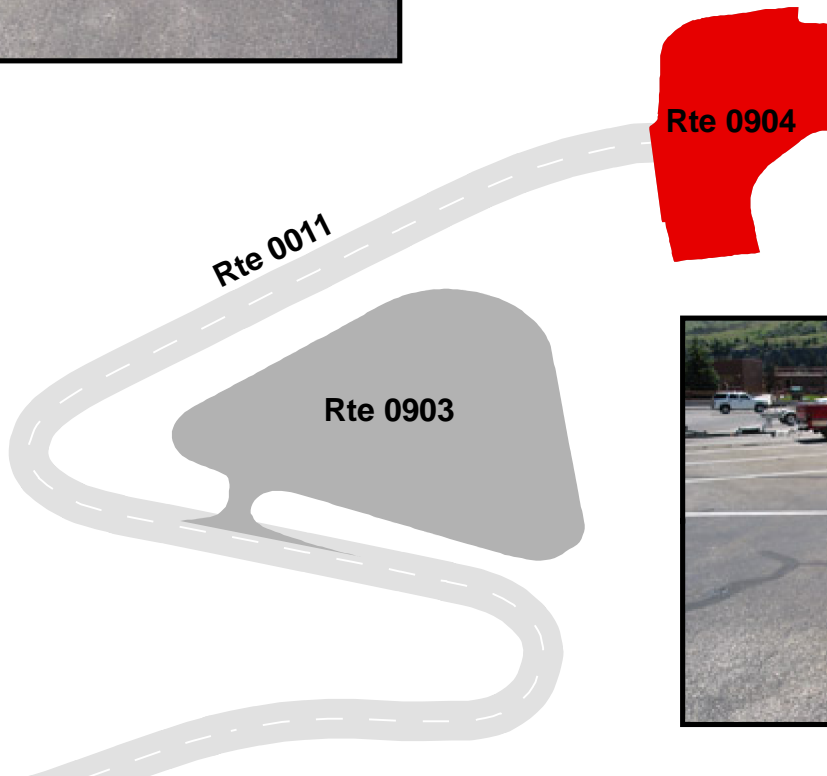
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0904

LOWER OK-A-BEH PARKING
FROM ROUTE 0011 (OK-A-BEH ROAD) AT END
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0904	PUBLIC	6/26/2007		53,615	0.92	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	CONCRETE CURB AND GUTTER	ASPHALT CURB	FAIR/73

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

Route 0905

OK-A-BEH OVERLOOK PARKING

FROM ROUTE 0011 (OK-A-BEH ROAD) AT MP 8.60 (ON LEFT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0905	PUBLIC	6/26/2007		23,331	0.40	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	NO CURB AND GUTTER	ASPHALT CURB	POOR/45

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

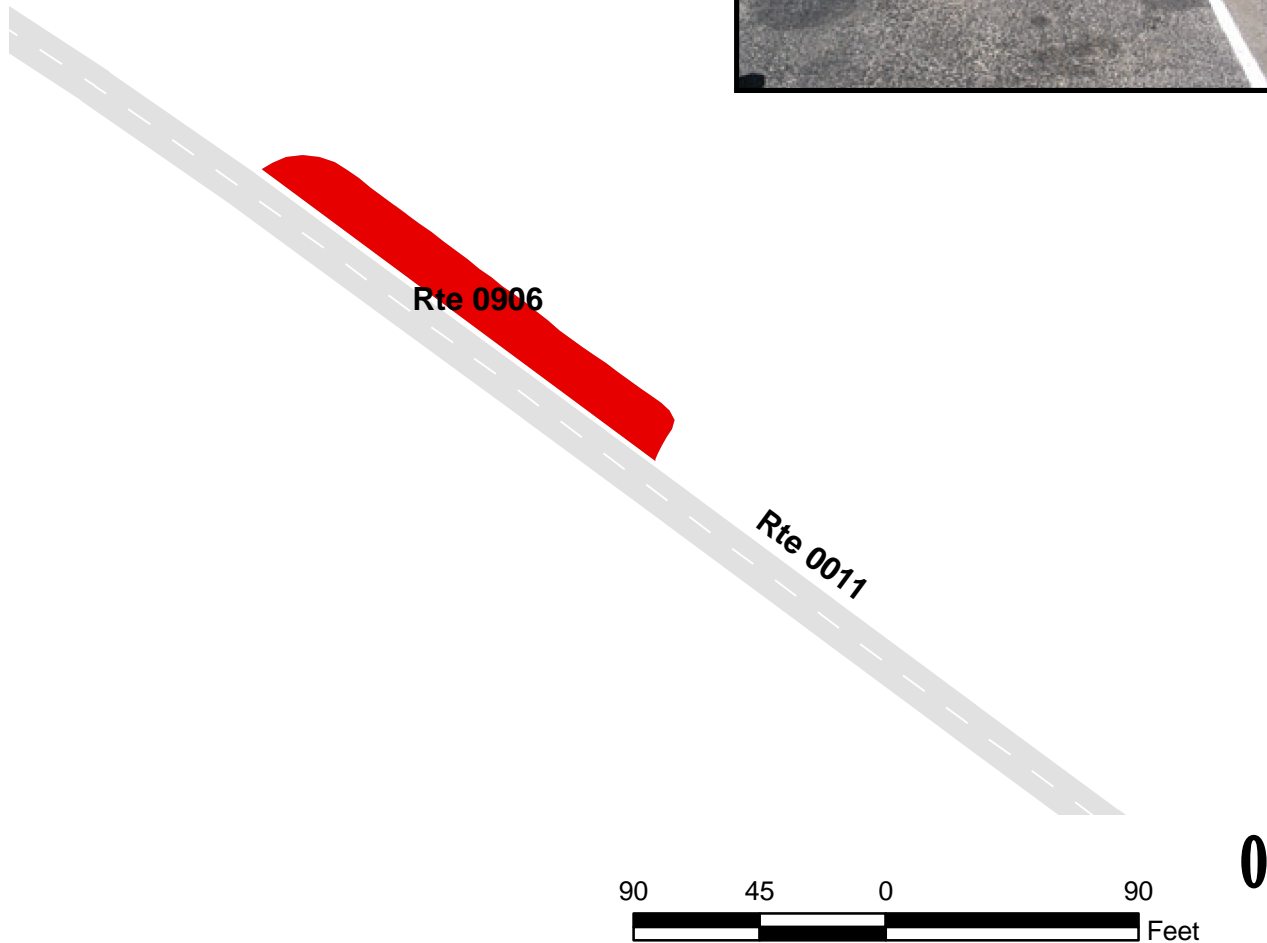
Route 0906

OK-A-BEH EXHIBIT PARKING

ADJACENT TO ROUTE 0011 (OK-A-BEH ROAD) AT MP 4.58 (ON RIGHT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0906	PUBLIC	6/26/2007		2,086	0.04	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	NO CURB AND GUTTER	ASPHALT CURB	FAIR/73

* Lane miles are based on 11' lane widths



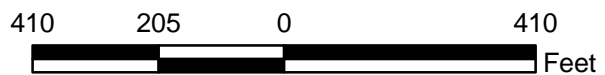
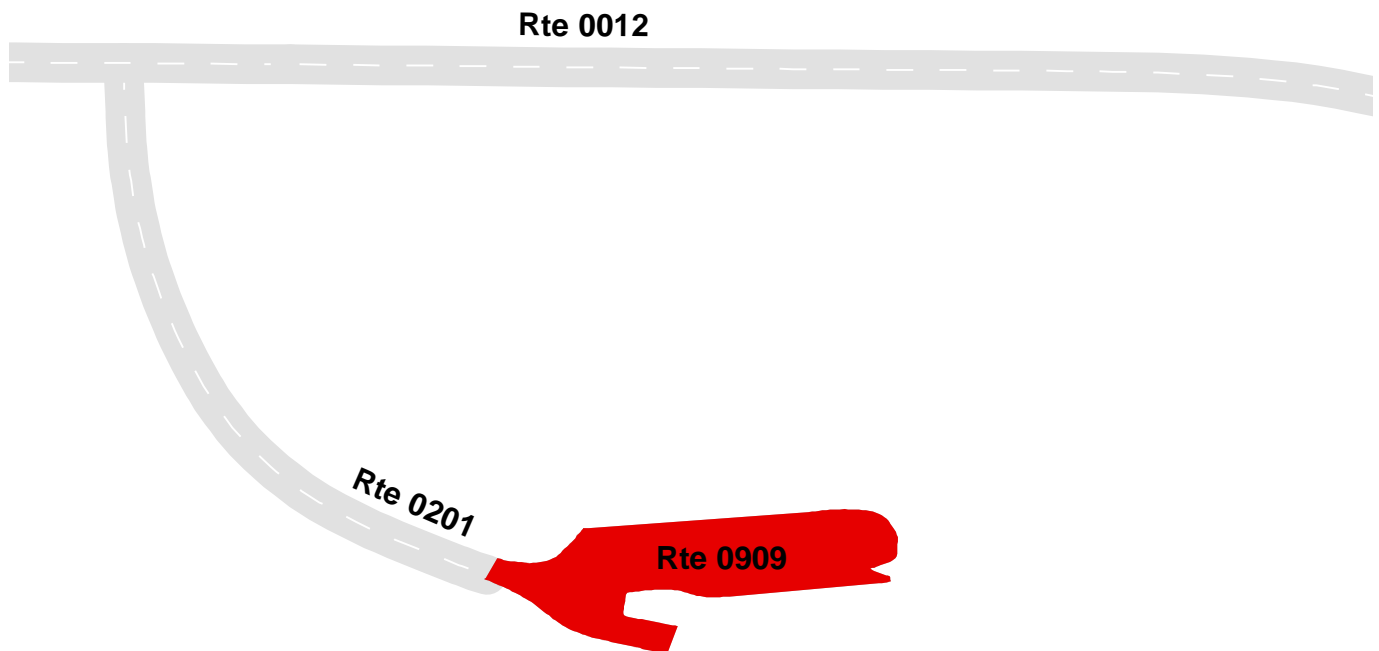
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0909

AFTER BAY BOAT RAMP PARKING
FROM ROUTE 0201 (AFTER BAY BOAT RAMP ROAD) AT END
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0909	PUBLIC	6/26/2007		57,702	0.99	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



0

BIGHORN CANYON NATIONAL RECREATION AREA

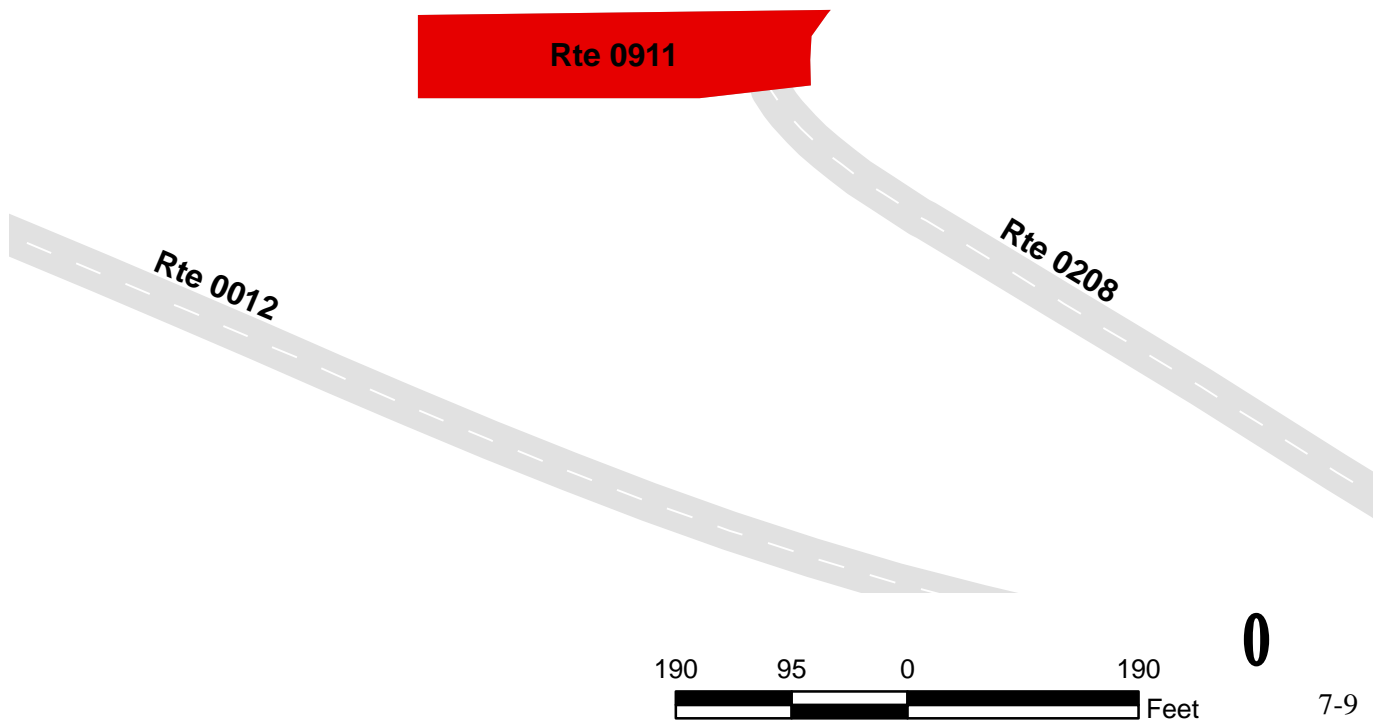
Route 0911

AIRSTRIP PARKING

FROM ROUTE 0208 (AIRSTRIP ACCESS ROAD) AT END
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0911	PUBLIC	8/15/2008		15,815	0.27	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



BIGHORN CANYON NATIONAL RECREATION AREA

Route 0913ZZ

PARK HEADQUARTERS PARKING AREAS

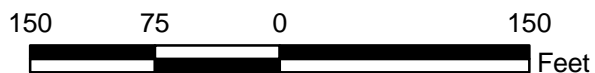
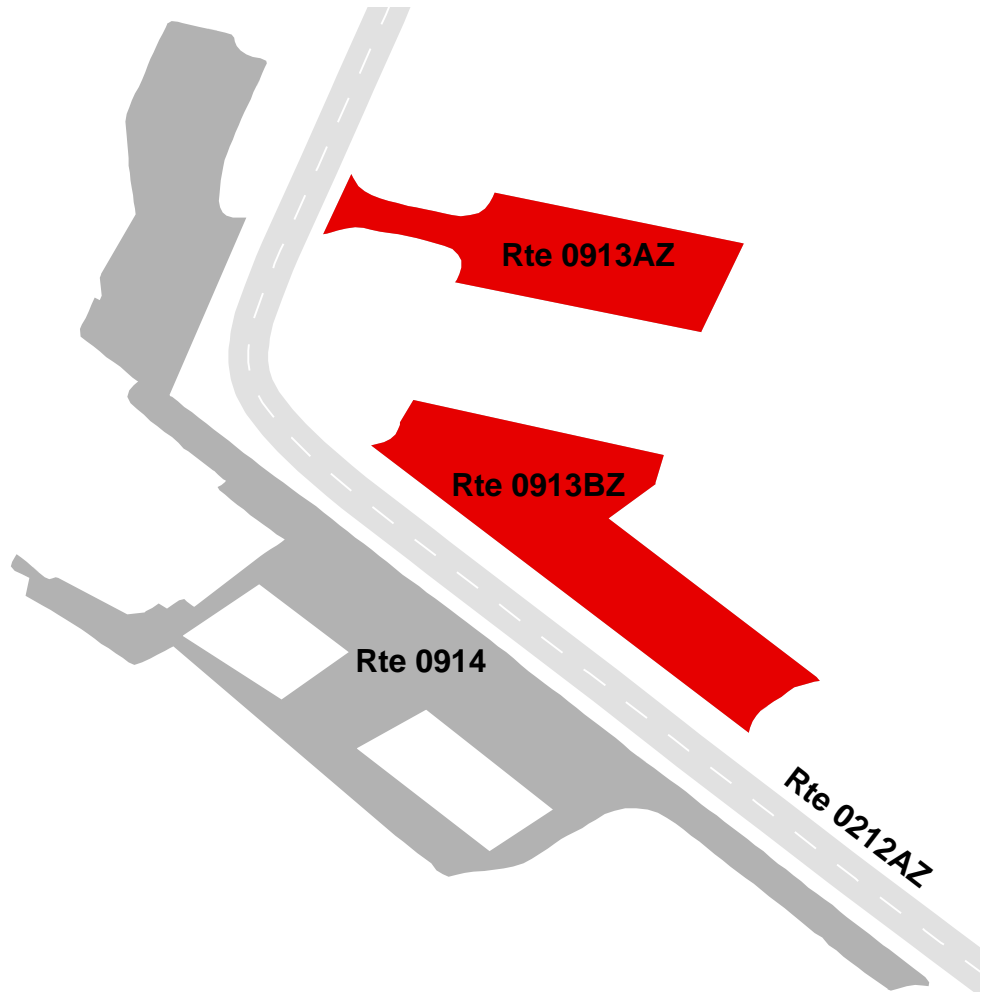
FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.04 (ON LEFT)

TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.10 (ON LEFT)

Summary Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0913ZZ	PUBLIC	6/26/2007		19,633	0.34	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	SUMMARY/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0913AZ

PARK HEADQUARTERS PARKING A

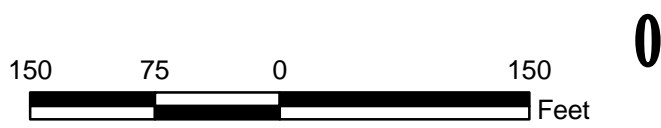
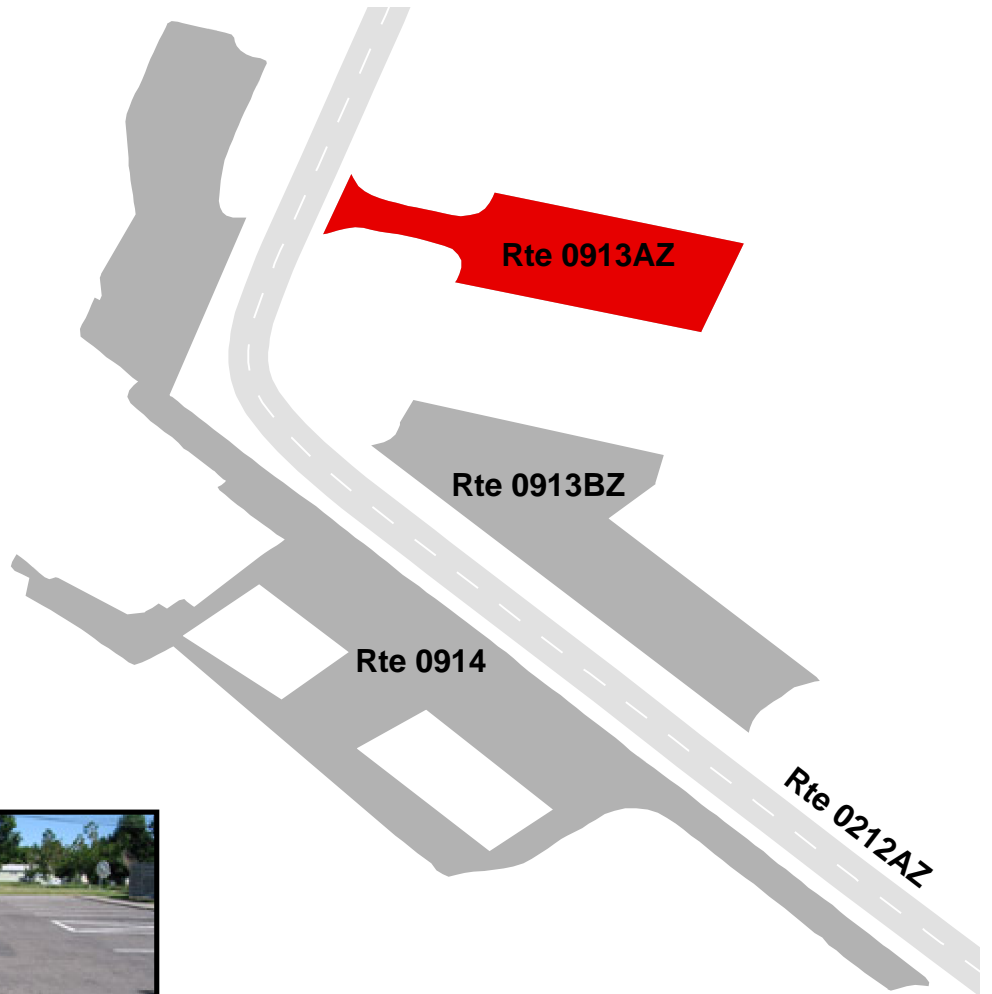
FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.04 (ON LEFT)

TO PARKING

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0913AZ	PUBLIC	6/26/2007		7,475	0.13	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

Route 0913BZ

PARK HEADQUARTERS PARKING B

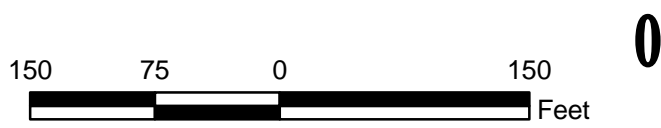
ADJACENT TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.10 (ON LEFT)

TO PARKING

Subcomponent Record

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0913BZ	PUBLIC	6/26/2007		12,158	0.21	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

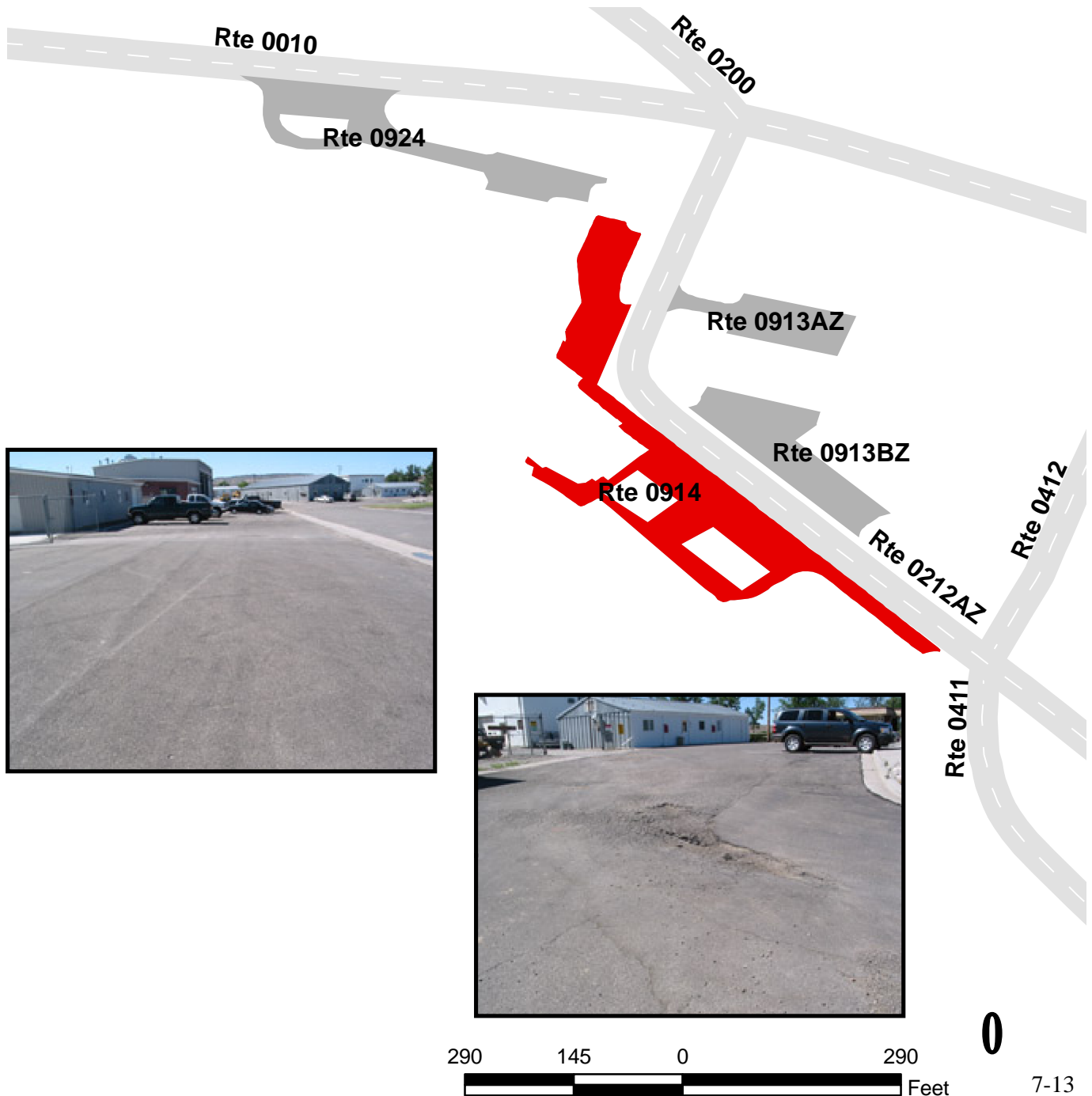
Route 0914

MAINTENANCE PARKING

ADJACENT TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.08 (ON RIGHT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0914	NONPUBLIC	6/26/2007		32,519	0.56	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	2	CONCRETE CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

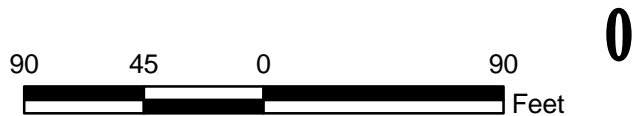
Route 0915

BALLFIELD PARKING A

ADJACENT TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.35 (ON LEFT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0915	PUBLIC	6/26/2007		2,415	0.04	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	GOOD/90

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

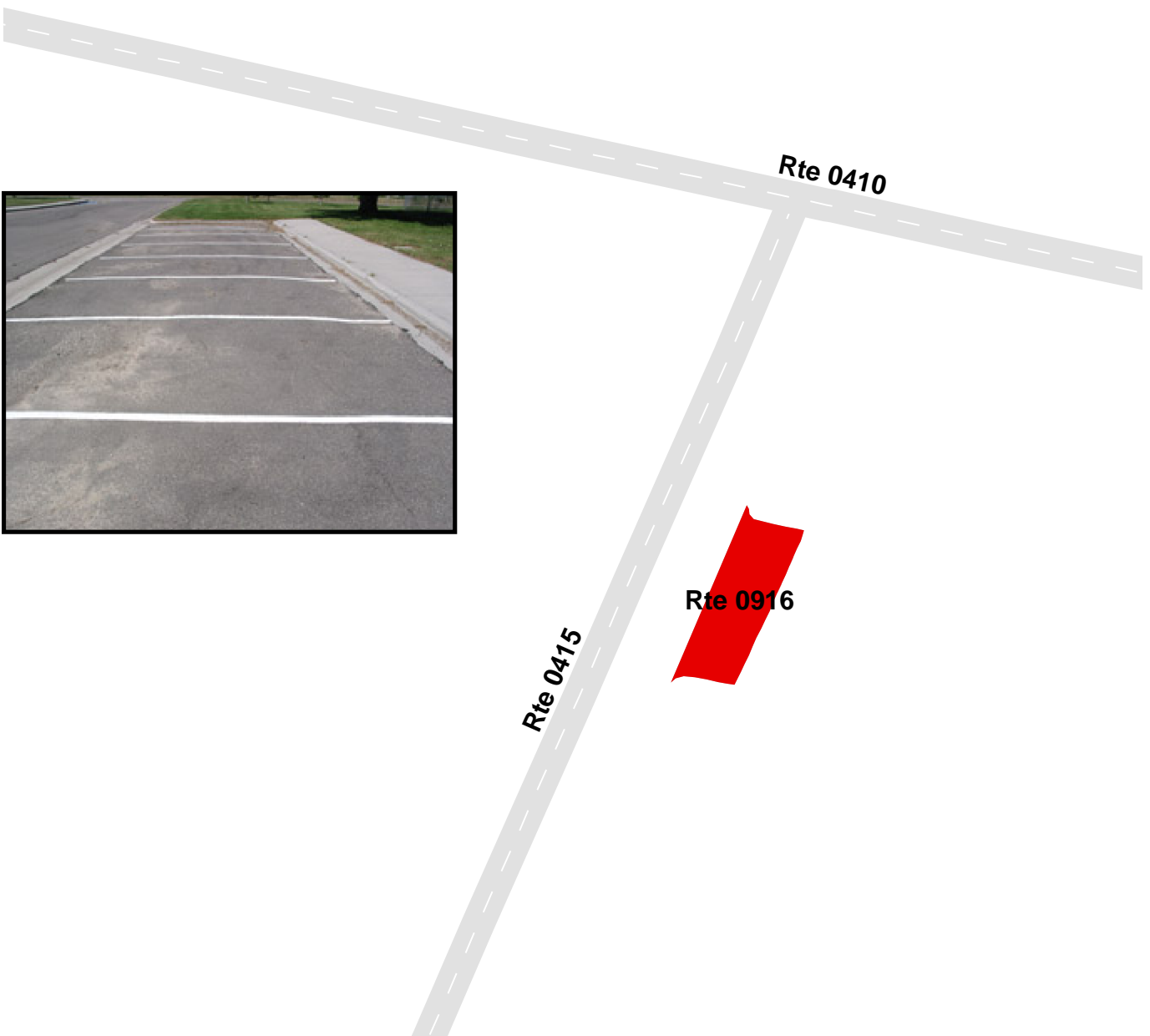
Route 0916

BALLFIELD PARKING B

ADJACENT TO ROUTE 0415 (FOURTH STREET) AT MP 0.02 (ON LEFT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0916	PUBLIC	6/26/2007		1,460	0.03	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

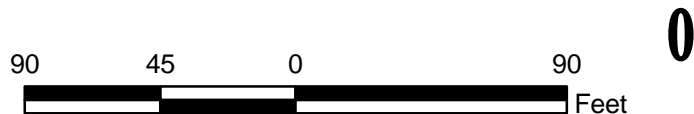
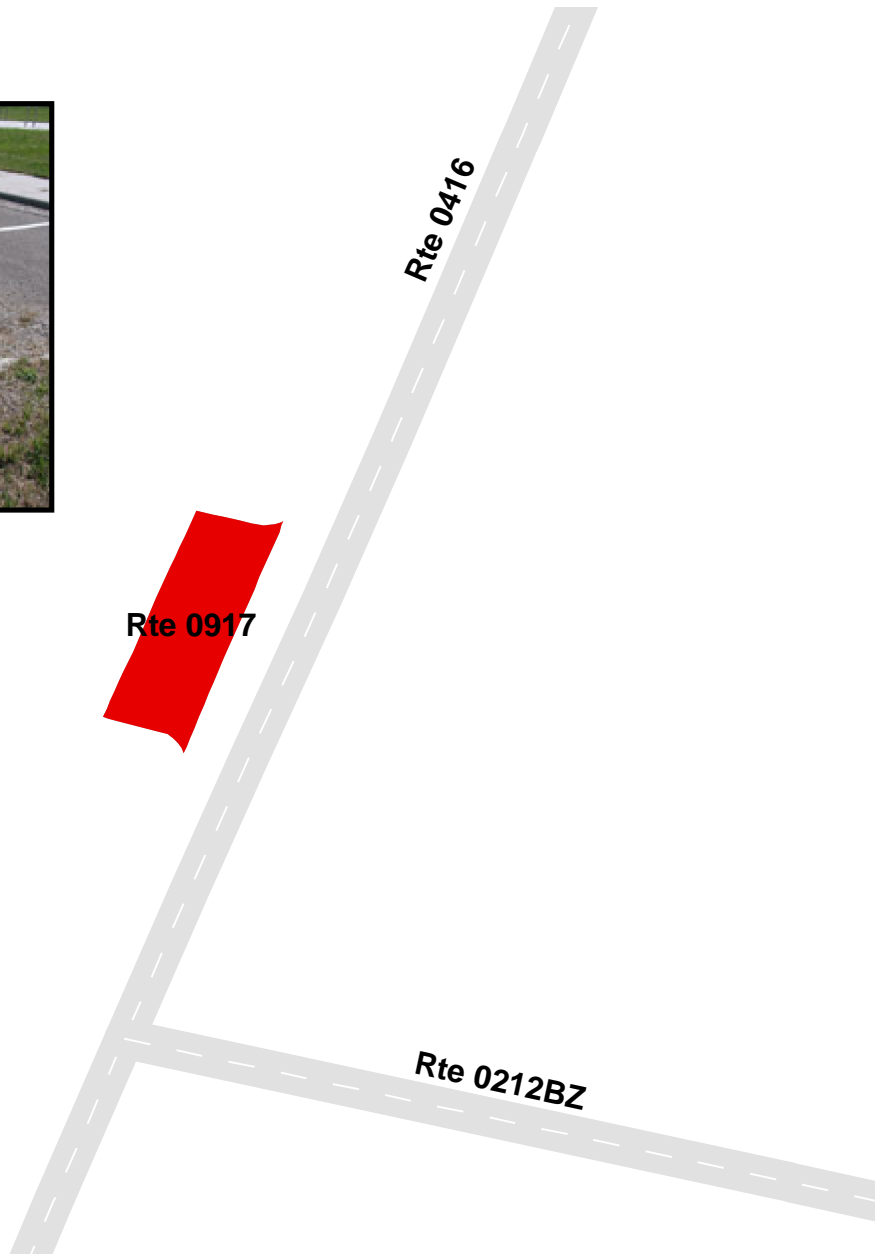
Route 0917

BALLFIELD PARKING C

ADJACENT TO ROUTE 0416 (SIXTH STREET) AT MP 0.09 (ON LEFT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0917	PUBLIC	6/26/2007		1,552	0.03	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	POOR/45

* Lane miles are based on 11' lane widths



BIGHORN CANYON NATIONAL RECREATION AREA

Route 0918

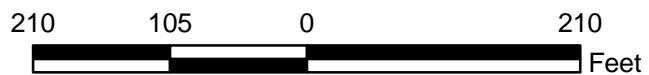
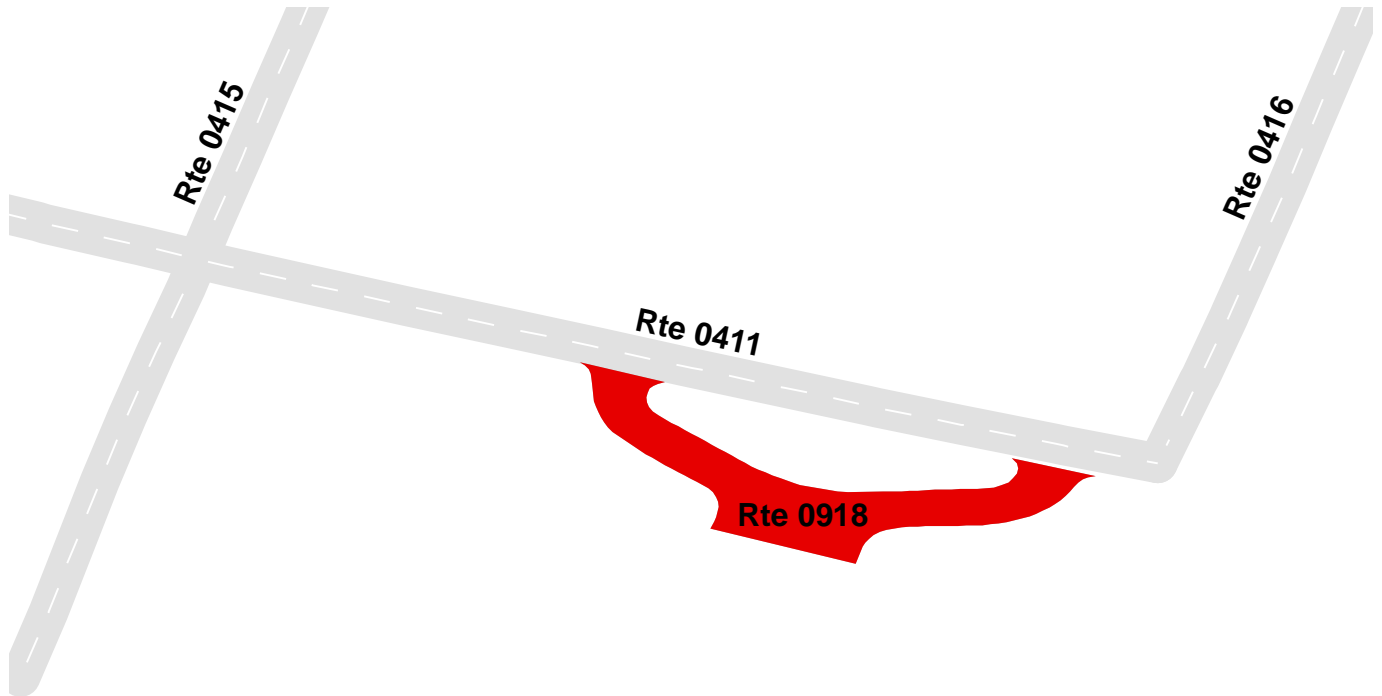
SCHOOL PARKING

FROM ROUTE 0411 (AVENUE C) AT MP 0.24 (ON RIGHT)

TO ROUTE 0411 (AVENUE C) AT MP 0.29 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0918	PUBLIC	6/26/2007		10,616	0.18	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0919

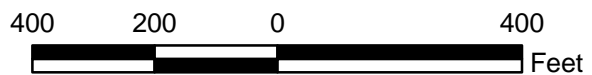
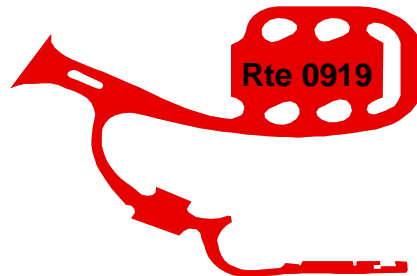
LOVELL VISITORS CENTER PARKING

FROM US ROUTE 14A

TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0919	PUBLIC	6/27/2007		56,083	0.97	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
1	2	0	1	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0920

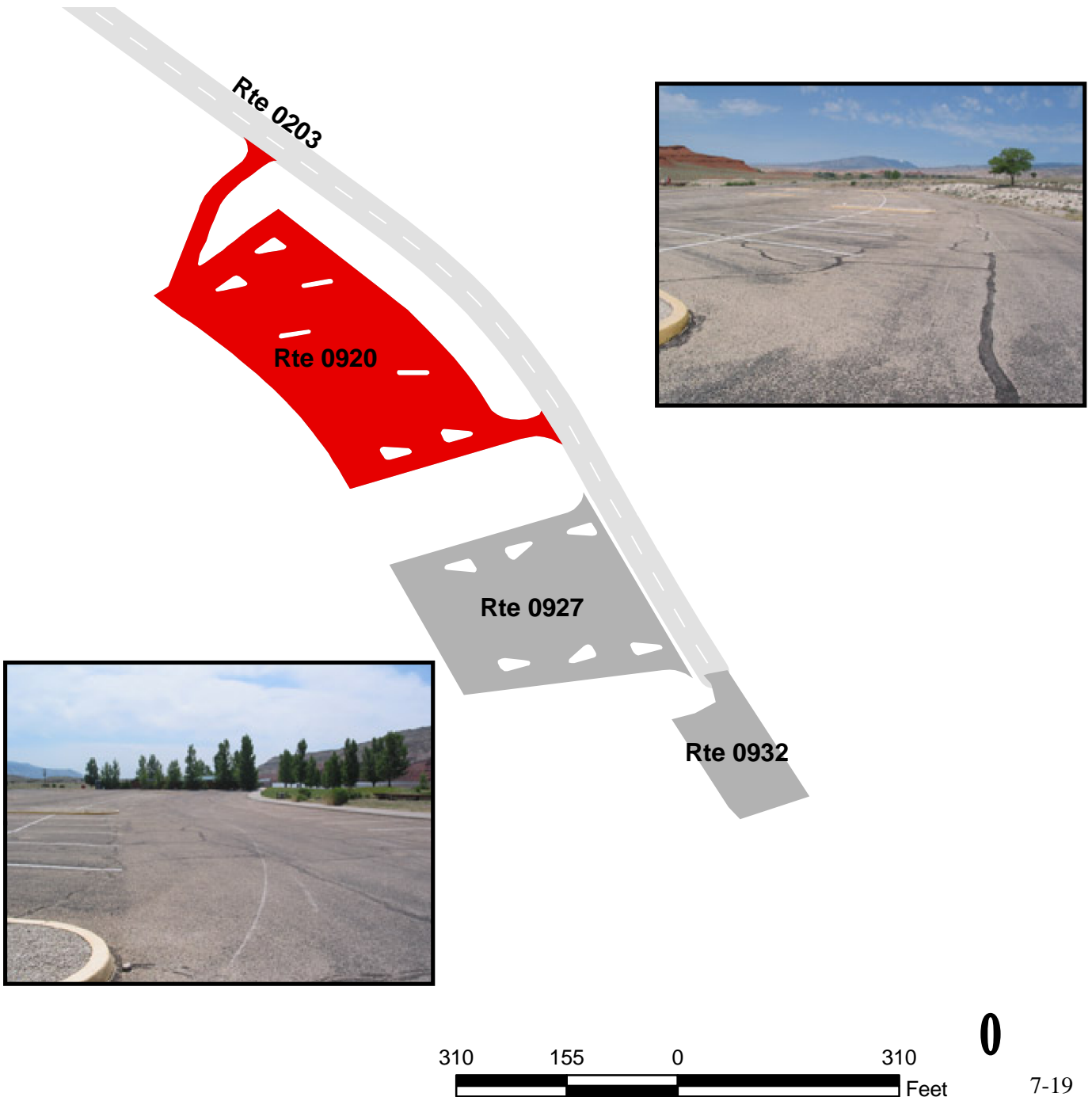
HORSESHOE BEND PARKING

FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.49 (ON RIGHT)

TO ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.59 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0920	PUBLIC	6/27/2007		66,837	1.15	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	CONCRETE CURB AND GUTTER	CONCRETE CURB	POOR/45

* Lane miles are based on 11' lane widths



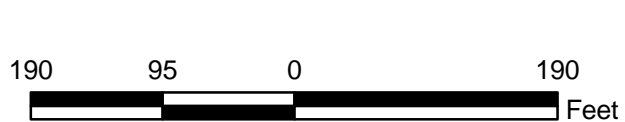
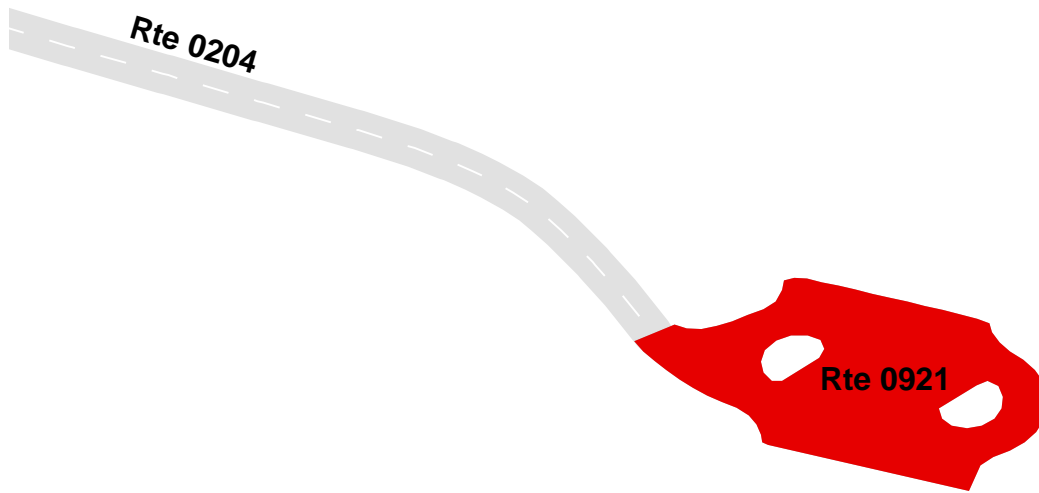
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0921

DEVIL'S CANYON OVERLOOK PARKING
 FROM ROUTE 0204 (DEVIL'S CANYON OVERLOOK ROAD) AT END
 TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0921	PUBLIC	6/27/2007		17,598	0.30	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	CONCRETE CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

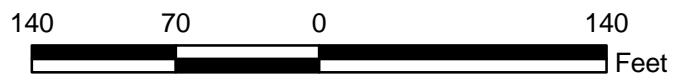
Route 0923

YELLOWTAIL POWER PLANT PARKING

FROM ROUTE 0211 (YELLOWTAIL POWER PLANT ROAD) AT END
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0923	NONPUBLIC	6/26/2007		16,008	0.28	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	2	0	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

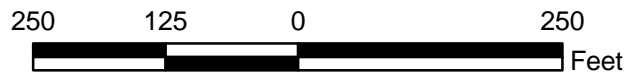
Route 0924

BUREAU OF RECLAMATION PARKING

FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 4.04 (ON LEFT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0924	PUBLIC	6/26/2007		15,223	0.26	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
1	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0925

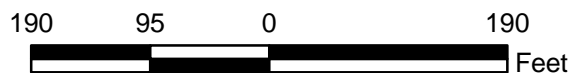
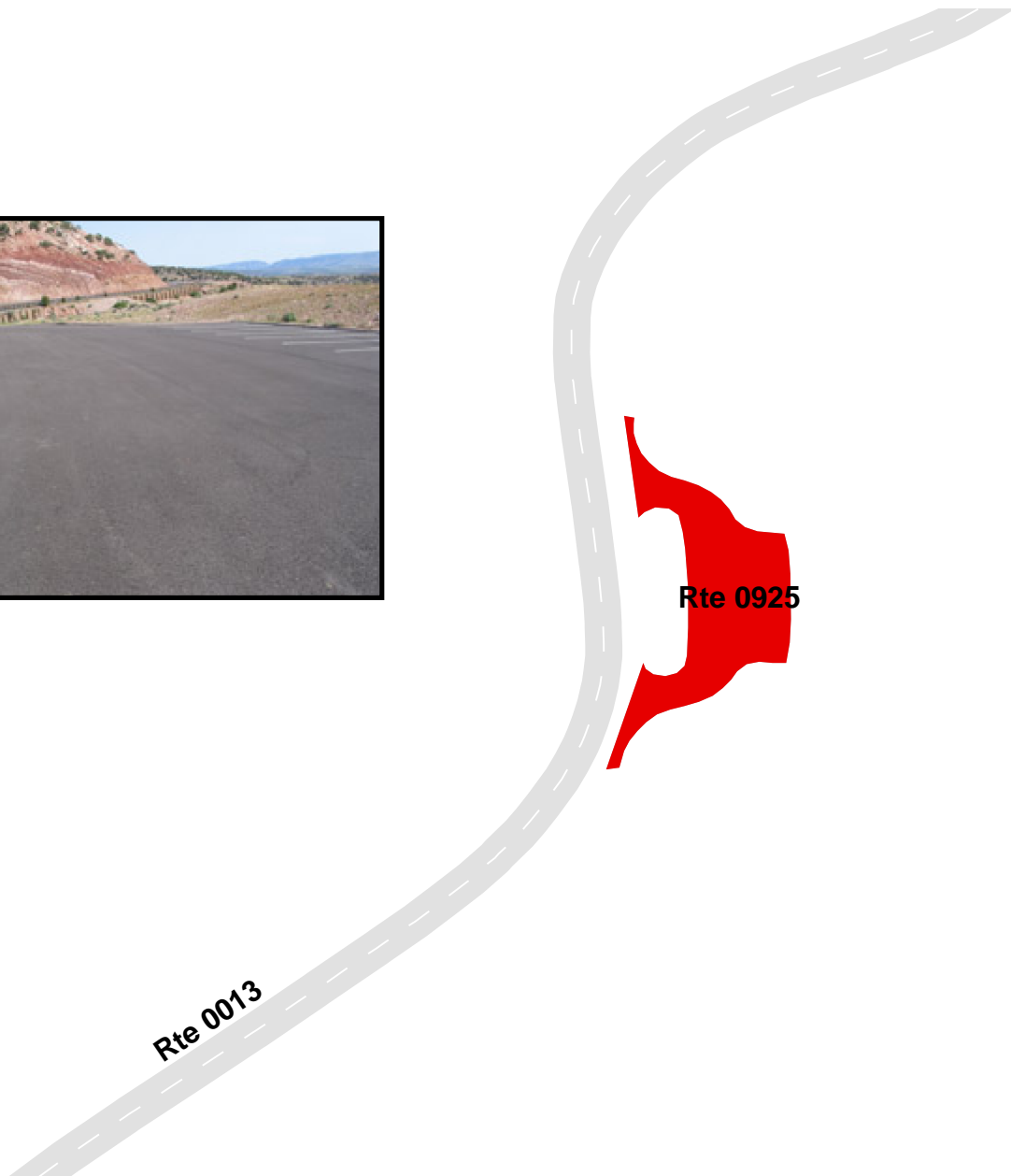
BAD PASS PARKING B

FROM ROUTE 0013 (BAD PASS ROAD) AT MP 7.60 (ON RIGHT)

TO ROUTE 0013 (BAD PASS ROAD) AT MP 7.63 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0925	PUBLIC	6/27/2007		11,771	0.20	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



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0926

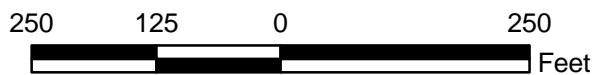
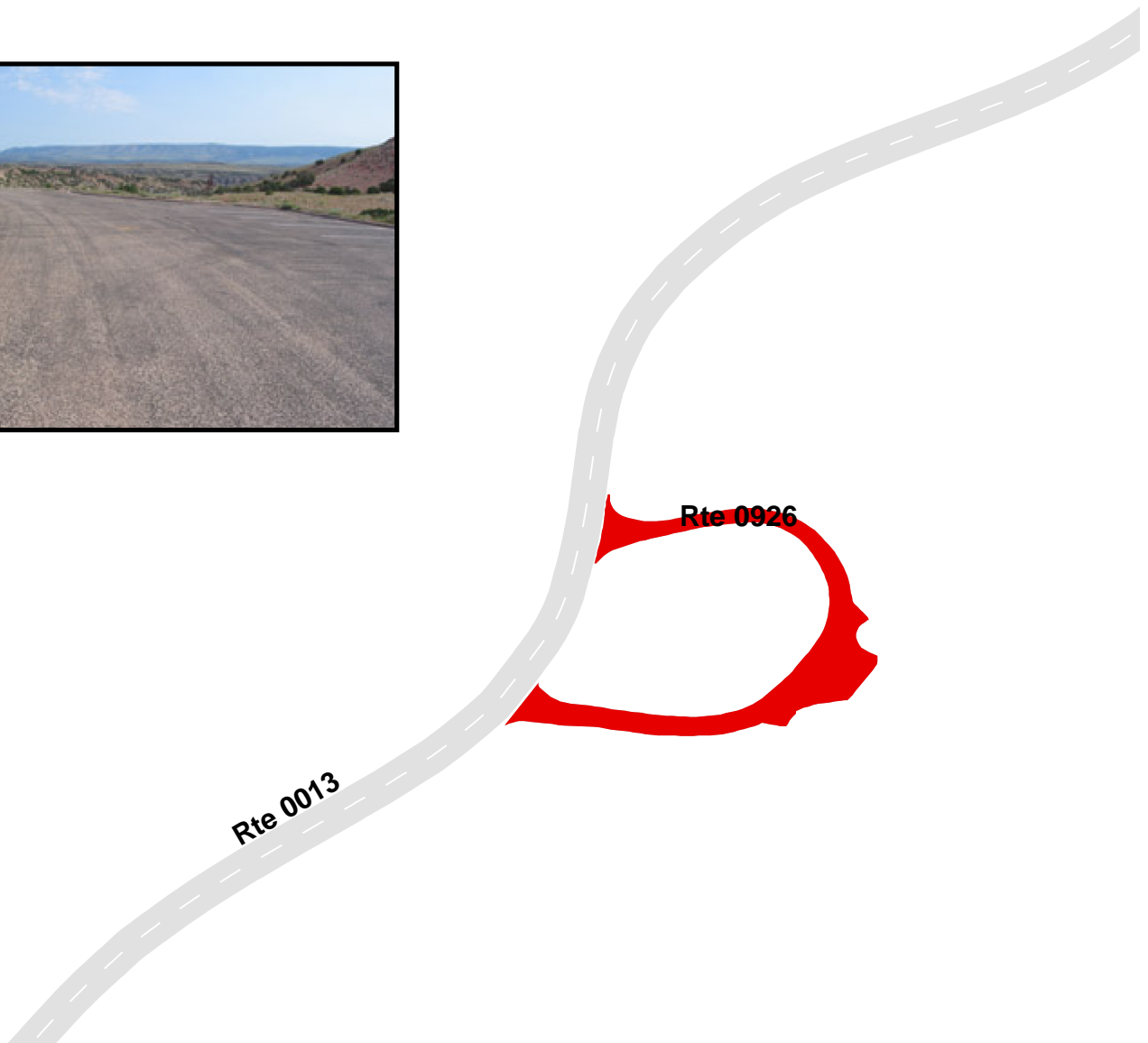
BAD PASS PARKING A

FROM ROUTE 0013 (BAD PASS ROAD) AT MP 7.18 (ON RIGHT)

TO ROUTE 0013 (BAD PASS ROAD) AT MP 7.22 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0926	PUBLIC	6/27/2007		15,540	0.27	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	NO CURB AND GUTTER	CONCRETE CURB	FAIR/73

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

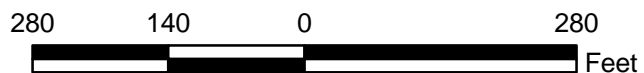
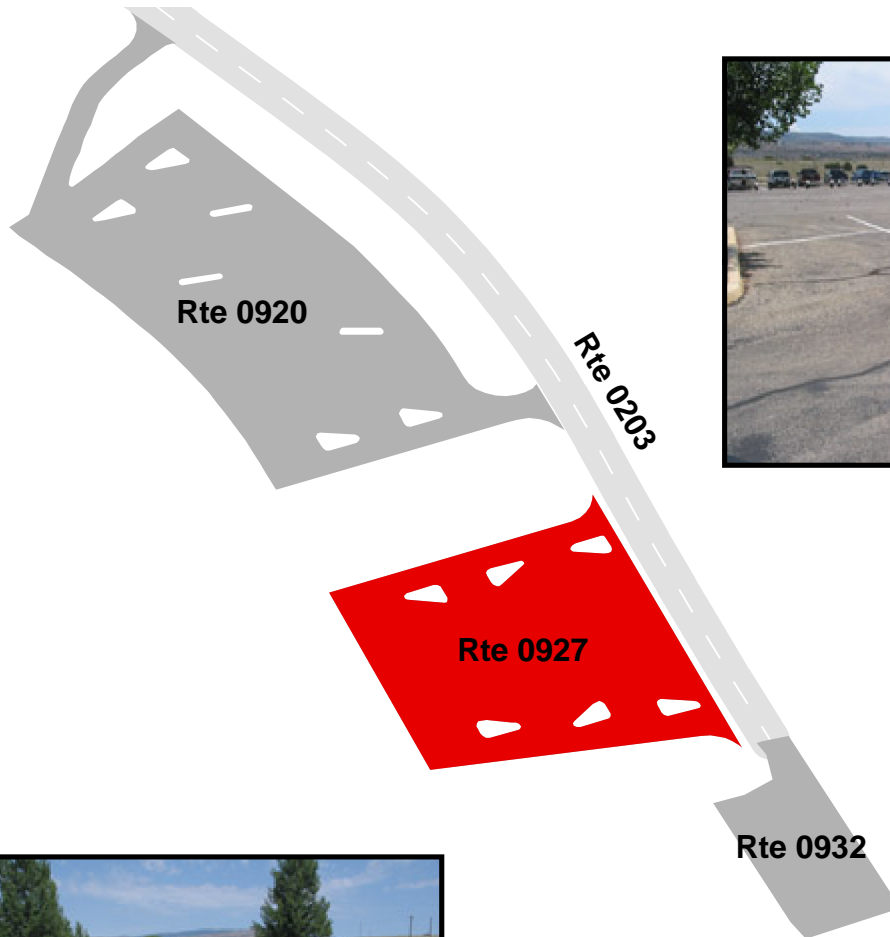
Route 0927

HORSESHOE BEND MARINA PARKING

ADJACENT ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.61 (ON RIGHT)
TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0927	PUBLIC	6/27/2007		46,182	0.80	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	CONCRETE CURB	POOR/45

* Lane miles are based on 11' lane widths



0

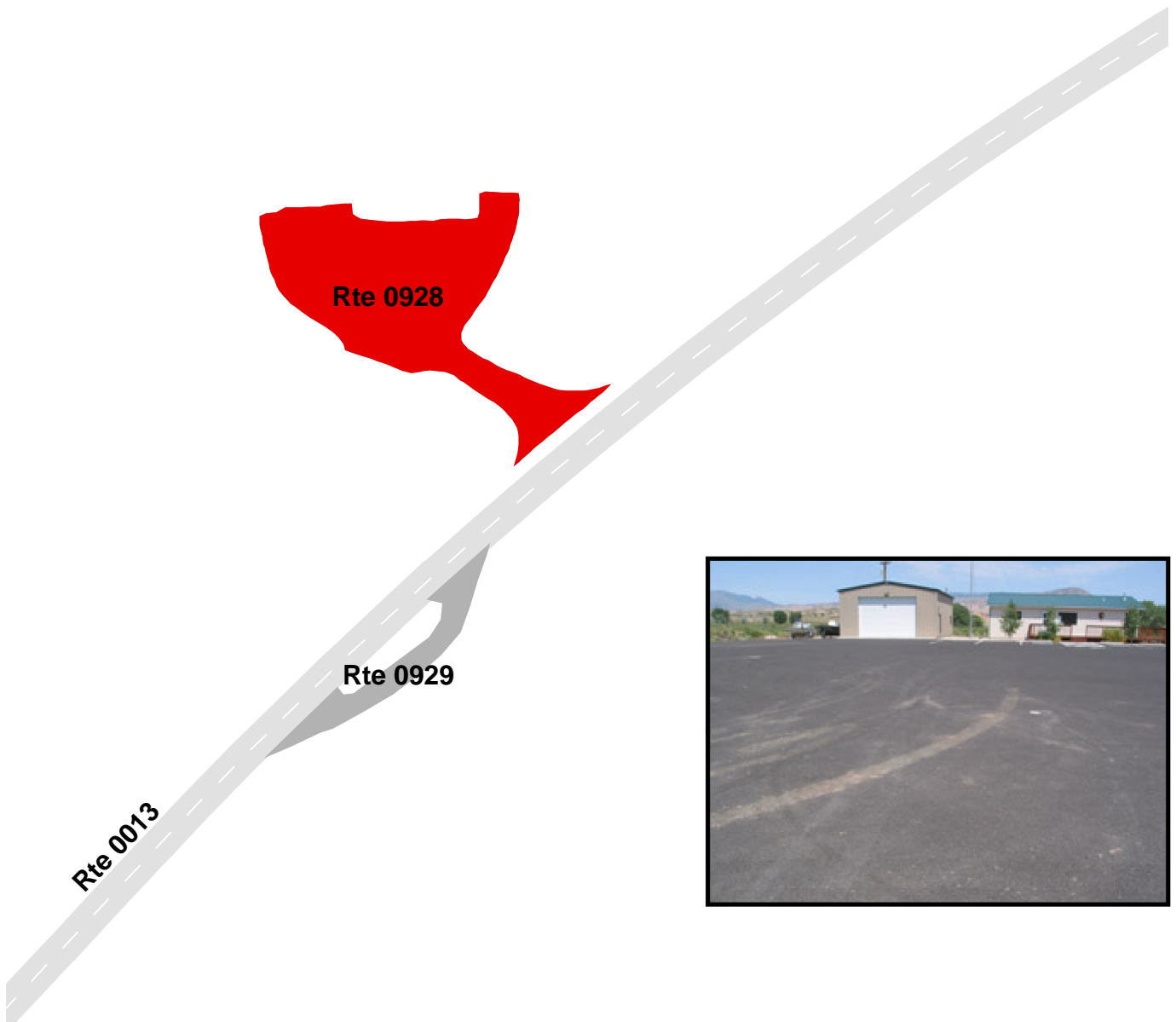
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0928

CROOKED CREEK CONTACT STATION PARKING
 FROM ROUTE 0013 (BAD PASS ROAD) AT MP 0.62 (ON LEFT)
 TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0928	NONPUBLIC	6/27/2007		21,564	0.37	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



0

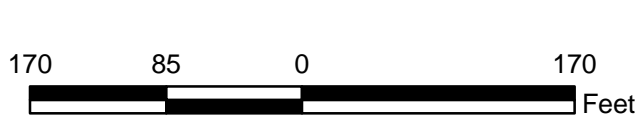
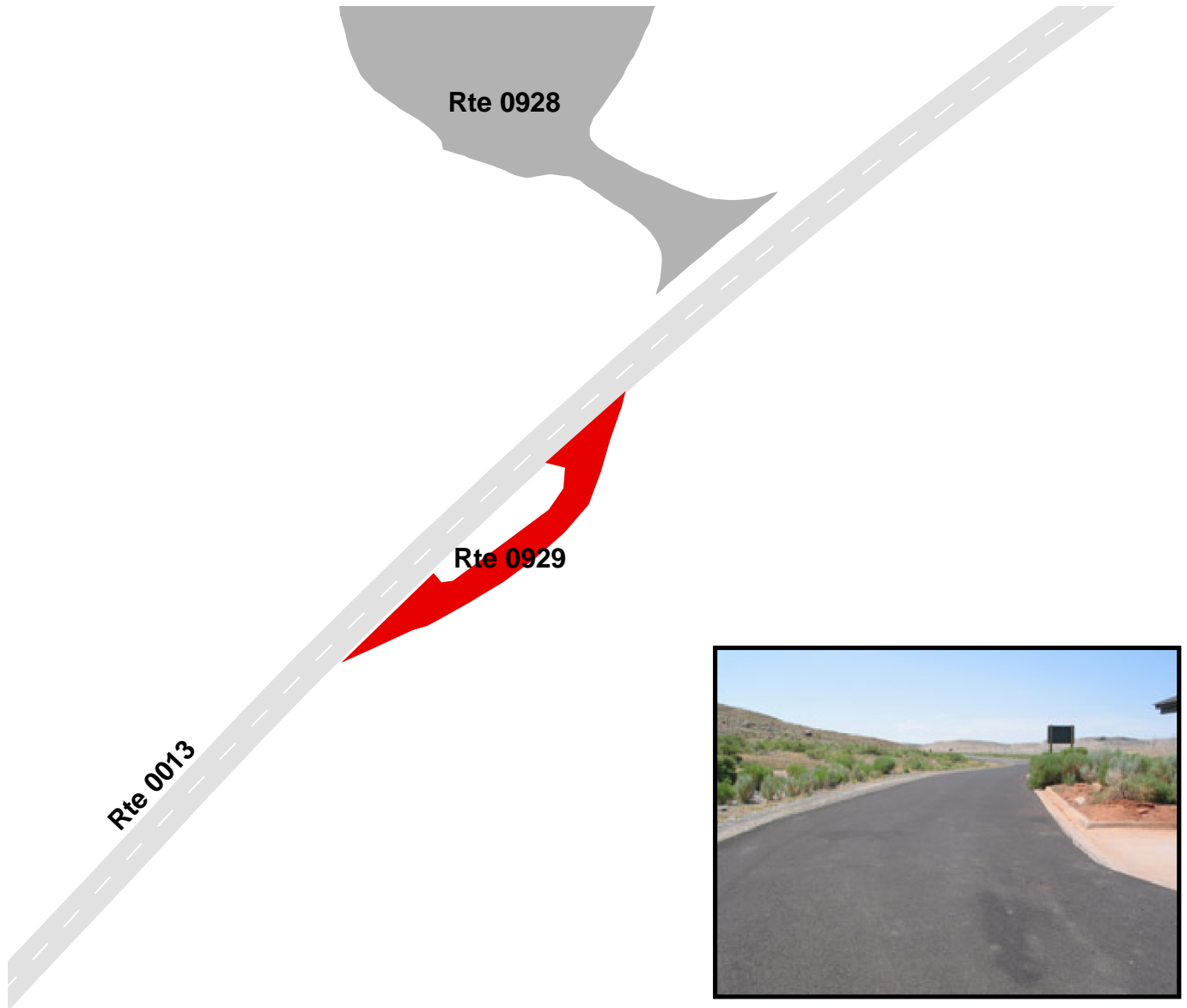
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0929

CROOKED CREEK AUTOMATIC FEE PAY STATION
 FROM ROUTE 0013 (BAD PASS ROAD) AT MP 0.56 (ON RIGHT)
 TO ROUTE 0013 (BAD PASS ROAD) AT MP 0.59 (ON RIGHT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0929	PUBLIC	6/27/2007		4,089	0.07	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

Route 0930

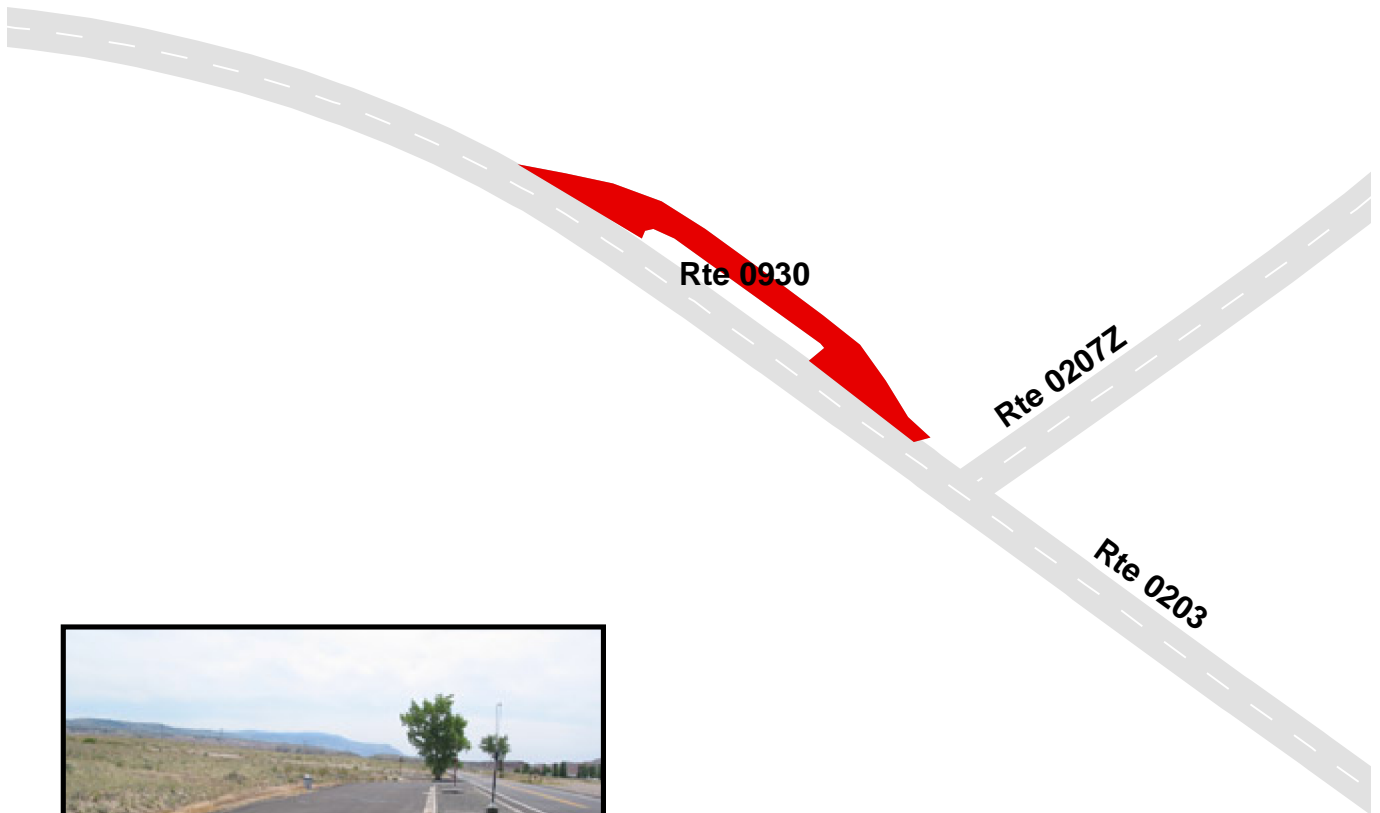
HORSESHOE BEND DUMP STATION

FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.31 (ON LEFT)

TO ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.35 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0930	PUBLIC	6/27/2007		4,076	0.07	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	CONCRETE CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



0

BIGHORN CANYON NATIONAL RECREATION AREA

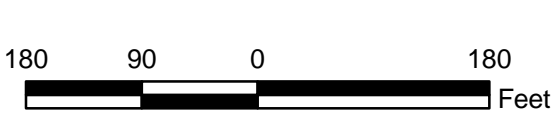
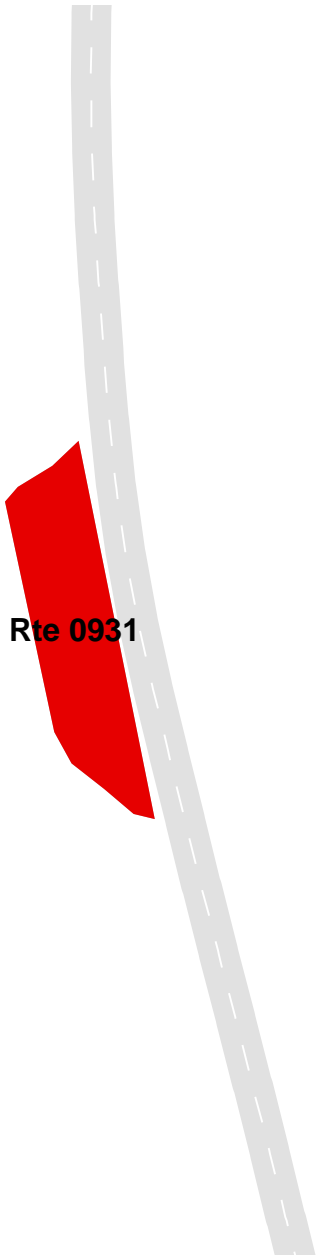
Route 0931

CROOKED CREEK OVERLOOK PARKING

ADJACENT TO ROUTE 0013 (BAD PASS ROAD) AT MP 3.35 (ON LEFT)

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0931	PUBLIC	6/27/2007		11,483	0.20	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	0	0	0	NO CURB AND GUTTER	ASPHALT CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



0

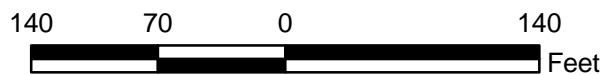
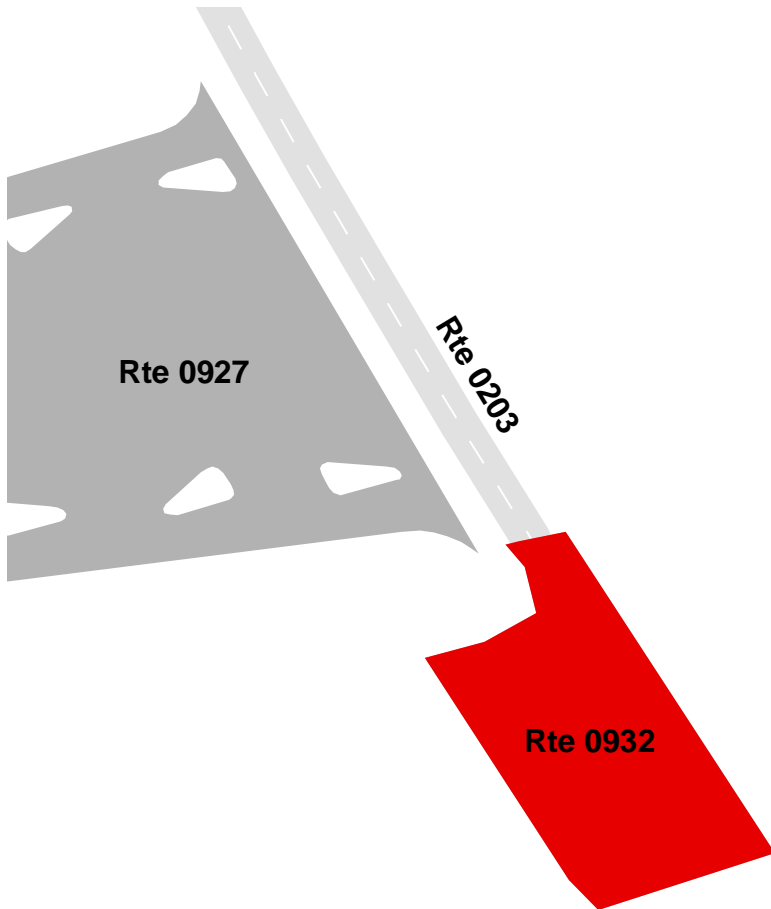
BIGHORN CANYON NATIONAL RECREATION AREA

Route 0932

HORSESHOE BEND BOAT LAUNCH PARKING
 FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT END
 TO PARKING

Route Number	Public / NonPublic	Date Visited		Area (sq ft)	Lane Miles *	Surface Type
0932	PUBLIC	6/27/2007		13,377	0.23	AS
Culverts	Drop Inlets	Gates	Fire Hydrants	Curb & Gutter	Curb	PCR
0	1	0	0	CONCRETE CURB AND GUTTER	NO CURB	EXCELLENT/97

* Lane miles are based on 11' lane widths



0

Bighorn Canyon National Recreation Area



Section 8 **Parkwide / Route Maintenance** **Features Summaries**

BICA: PARKWIDE MAINTENANCE FEATURES SUMMARY

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count below includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

FEATURE	LINEAR FEET	COUNT
BARRIER	33,285	--
BOLLARD	6,394	--
BRIDGE	--	2
CABLE	0	--
CATTLE GUARD	--	10
CULVERT	--	202
CURB	21,511	--
DROP INLET	--	80
FIRE HYDRANT	--	18
GATE	--	4
GUARD/GUIDE RAIL	26,173	--
GUARD/GUIDE WALL	7,112	--
INTERSECTION	--	213
LOW WATER CROSSING	0	0
MILE MARKER	--	3
OVERPASS	--	0
OVERHEAD SIGN	--	0
PARK BOUNDARY	--	1
PAVED DITCH	36,421	--
PULLOUT	--	7
RAILROAD CROSSING	--	0
RETAINING WALL	--	0
SIGN	--	311
STATE BOUNDARY	--	0
TEMPORARY BARRIER	0	--
TRAFFIC LIGHT	--	0
TUNNEL	--	0
TURNOUT	0	--

BICA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0010 FORT SMITH ACCESS ROAD	ROUTE 0011 OK-A-BEH ROAD	ROUTE 0012 AFTER BAY ROAD	ROUTE 0013 BAD PASS ROAD	ROUTE 0200 AFTER BAY CAMPGROUND ROAD	ROUTE 0201 AFTER BAY BOAT RAMP ROAD	UNIT
BARRIER	7,846	9,272	1,536	6,362	0	0	LINEAR FEET
BOLLARD	0	4,155	0	0	0	0	LINEAR FEET
BRIDGE	0	0	1	1	0	0	EACH
CABLE	0	0	0	0	0	0	LINEAR FEET
CATTLE GUARD	1	3	0	4	0	0	EACH
CULVERT	18	33	3	82	0	0	EACH
CURB	132	4,055	48	560	0	0	LINEAR FEET
DROP INLET	2	58	5	0	0	0	EACH
FIRE HYDRANT	0	0	0	0	0	0	EACH
GATE	2	0	0	0	0	0	EACH
GUARD/GUIDE RAIL	7,846	5,116	818	6,362	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	4,155	718	0	0	0	LINEAR FEET
INTERSECTION	22	14	16	17	4	3	EACH
LOW WATER CROSSING	0	0	0	0	0	0	EACH
LOW WATER CROSSING	0	0	0	0	0	0	LINEAR FEET
MILE MARKER	2	0	0	1	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	1	0	0	EACH
PAVED DITCH	0	23,887	2,334	4,905	0	0	LINEAR FEET
PULLOUT	0	0	0	4	0	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
SIGN	66	22	20	43	8	2	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
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

BICA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0202 M-K HILL PICNIC ROAD	ROUTE 0203 HORSESHOE BEND ROAD	ROUTE 0204 DEVIL'S CANYON OVERLOOK ROAD	ROUTE 0207ZZ HORSESHOE BEND CAMPGROUND ROADS	ROUTE 0208 AIRSTRIP ACCESS ROAD	ROUTE 0210 WAPPA UPPER SWITCHYARD ROAD	UNIT
BARRIER	0	2,239	0	0	0	1,721	LINEAR FEET
BOLLARD	0	2,239	0	0	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	16	7	4	0	5	EACH
CURB	0	190	79	0	0	0	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	1	0	0	0	0	EACH
GATE	0	0	0	0	0	1	EACH
GUARD/GUIDE RAIL	0	0	0	0	0	1,721	LINEAR FEET
GUARD/GUIDE WALL	0	2,239	0	0	0	0	LINEAR FEET
INTERSECTION	5	17	4	15	4	3	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	190	0	0	4,013	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
SIGN	4	16	6	10	3	7	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
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

BICA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0211 YELLOWTAIL POWER PLANT ROAD	ROUTE 0212ZZ AVENUE B ROADS	ROUTE 0213 DITCRIDER ROAD	ROUTE 0214 BIGHORN CANAL ROAD	ROUTE 0219 BARRY'S LANDING BOAT RAMP ROAD	ROUTE 0410 AVENUE A	UNIT
BARRIER	2,540	0	0	0	1,769	0	LINEAR FEET
BOLLARD	0	0	0	0	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	1	0	1	0	EACH
CULVERT	7	3	0	0	18	0	EACH
CURB	2,682	2,265	0	0	243	1,399	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	0	1	0	0	0	0	EACH
GATE	1	0	0	0	0	0	EACH
GUARD/GUIDE RAIL	2,540	0	0	0	1,769	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0	0	0	LINEAR FEET
INTERSECTION	5	21	3	4	6	9	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	201	0	0	892	0	LINEAR FEET
PULLOUT	0	0	0	0	3	0	EACH
RAILROAD CROSSING	0	0	0	0	0	0	EACH
RETAINING WALL	0	0	0	0	0	0	EACH
SIGN	14	19	1	3	22	11	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
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

BICA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0411 AVENUE C	ROUTE 0412 FIRST STREET	ROUTE 0413 SECOND STREET	ROUTE 0414 THIRD STREET	ROUTE 0415 FOURTH STREET	ROUTE 0416 SIXTH STREET	UNIT
BARRIER	0	0	0	0	0	0	LINEAR FEET
BOLLARD	0	0	0	0	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	1	0	0	0	EACH
CURB	2,144	517	1,114	1,748	2,218	1,679	LINEAR FEET
DROP INLET	0	0	0	0	0	0	EACH
FIRE HYDRANT	2	1	3	1	3	2	EACH
GATE	0	0	0	0	0	0	EACH
GUARD/GUIDE RAIL	0	0	0	0	0	0	LINEAR FEET
GUARD/GUIDE WALL	0	0	0	0	0	0	LINEAR FEET
INTERSECTION	9	4	6	6	8	5	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
SIGN	10	1	5	3	6	8	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
TURNOUT	0	0	0	0	0	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

BICA: ROUTE MAINTENANCE FEATURES SUMMARY

FEATURE	ROUTE 0417 SEVENTH STREET	UNIT
BARRIER	0	LINEAR FEET
BOLLARD	0	LINEAR FEET
BRIDGE	0	EACH
CABLE	0	LINEAR FEET
CATTLE GUARD	0	EACH
CULVERT	0	EACH
CURB	438	LINEAR FEET
DROP INLET	0	EACH
FIRE HYDRANT	1	EACH
GATE	0	EACH
GUARD/GUIDE RAIL	0	LINEAR FEET
GUARD/GUIDE WALL	0	LINEAR FEET
INTERSECTION	3	EACH
LOW WATER CROSSING	0	EACH
LOW WATER CROSSING	0	LINEAR FEET
MILE MARKER	0	EACH
OVERHEAD SIGN	0	EACH
OVERPASS	0	EACH
PARK BOUNDARY	0	EACH
PAVED DITCH	0	LINEAR FEET
PULLOUT	0	EACH
RAILROAD CROSSING	0	EACH
RETAINING WALL	0	EACH
SIGN	1	EACH
STATE BOUNDARY	0	EACH
TEMPORARY BARRIER	0	LINEAR FEET
TRAFFIC LIGHT	0	EACH
TUNNEL	0	EACH
TURNOUT	0	LINEAR FEET

Notice: Culverts and drop inlets were marked by NPS and inventoried by RIP in Cycle 4, therefore the culvert and drop inlet count above includes those on ARAN-driven routes, Manually Rated Routes and in Paved Parking Areas.

BICA: STRUCTURE LIST

ROUTE NUMBER	FUNCTIONAL CLASS	MILEPOST START	MILEPOST END	FEATURE	STRUCTURE NUMBER
0012	1	0.56	0.596	BRIDGE	1320-003
0013	1	0.798	0.807	BRIDGE	1320-002

Bighorn Canyon National Recreation Area



Section 9 **Park Route Maintenance Features** **Road Logs**

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: FORT SMITH ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM STATE HIGHWAY 313 AT CATTLEGUARD (3 MILES NE OF ENTRANCE SIGN)
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (STATE HIGHWAY 313(STATE MAINTAINED/NON NPS))
0.040	0.040	SIGN	RIGHT	REGULATORY, SPEED LIMIT 55
0.091	0.091	CULVERT	N/A	
0.200	0.200	SIGN	RIGHT	WARNING, SCHOOL BUS STOP AHEAD
0.202	0.202	MILE MARKER	LEFT	
0.202	0.202	MILE MARKER	RIGHT	
0.266	0.424	GUARD/GUIDE RAIL	RIGHT	
0.267	0.384	GUARD/GUIDE RAIL	LEFT	
0.677	0.677	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.678	0.678	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.784	0.784	SIGN	RIGHT	WARNING, SCHOOL BUS STOP AHEAD
1.054	1.054	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.075	1.075	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
1.077	1.077	SIGN	RIGHT	GUIDE, OVERLOOK
1.325	1.373	GUARD/GUIDE RAIL	LEFT	
1.326	1.375	GUARD/GUIDE RAIL	RIGHT	
1.345	1.345	CULVERT	N/A	
1.555	1.555	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
1.655	1.655	CULVERT	N/A	
1.720	1.720	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
1.773	1.773	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
1.805	1.805	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
1.966	1.966	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
1.972	1.972	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
1.976	1.976	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.095	2.095	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.279	2.279	SIGN	RIGHT	WARNING, SCHOOL BUS STOP AHEAD
2.287	2.287	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.394	2.394	SIGN	RIGHT	REGULATORY, SPEED LIMIT 55
2.431	2.431	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.560	2.560	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: FORT SMITH ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
2.561	2.561	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
2.566	2.566	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
2.592	2.592	CATTLE GUARD	N/A	
2.609	2.609	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.639	2.639	SIGN	RIGHT	GUIDE, FIRE DANGER TODAY
2.644	2.644	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.655	2.655	INTERSECTION	LEFT	UNPAVED ROUTE (5TH AVENUE)
2.666	2.666	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.719	2.719	CULVERT	N/A	
2.734	2.734	SIGN	RIGHT	GUIDE, WELCOME TO FORT SMITH
2.769	2.769	SIGN	RIGHT	WARNING, WATCH FOR PEDESTRIANS
2.796	2.796	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
2.796	2.796	SIGN	RIGHT	WARNING, SLOW CHILDREN
2.797	2.797	INTERSECTION	RIGHT	UNPAVED ROUTE (FORT SMITH STREET)
2.829	2.829	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
2.909	2.909	SIGN	RIGHT	REGULATORY, GRAPHIC SIGN, NO TEXT
2.909	2.909	SIGN	RIGHT	WARNING, SLOW CHILDREN
2.914	2.914	INTERSECTION	RIGHT	UNPAVED ROUTE (YELLOW TAIL STREET)
2.914	2.914	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
2.948	2.948	SIGN	RIGHT	GUIDE, FIRE WORKS PROHIBITED
2.948	2.948	SIGN	RIGHT	GUIDE, FEE PASS REQUIRED BEYOND THIS POINT
2.948	2.948	SIGN	RIGHT	GUIDE, CAMP ONLY IN DESIGNATED SITES NO SHOOTING ZONE
2.990	2.990	SIGN	RIGHT	GUIDE, FEE STATION
2.990	2.990	SIGN	RIGHT	GUIDE, VISITOR CENTER BIGHORN RIVER AFTERBAY LAUNCH AREA BIGHORN LAKE YELLOWTAIL DAM
3.021	3.021	INTERSECTION	RIGHT	ROUTE 0012 (AFTER BAY ROAD)
3.043	3.043	SIGN	RIGHT	GUIDE, BIGHORN CANYON NATIONAL RECREATION AREA YELLOWTAIL DAM
3.045	3.045	SIGN	RIGHT	WARNING, RIGHT LANE ENDS
3.103	3.185	GUARD/GUIDE RAIL	RIGHT	
3.104	3.185	GUARD/GUIDE RAIL	LEFT	
3.153	3.153	CULVERT	N/A	
3.265	3.265	INTERSECTION	LEFT	ROUTE 0011 (OK-A-BEH ROAD)
3.268	3.268	SIGN	LEFT	GUIDE, BIGHORN LAKE OK-A-BEH MARINA 10 MILES

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: FORT SMITH ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
3.268	3.268	SIGN	RIGHT	GUIDE, BIGHORN LAKE OK-A-BEH MARINA 10 MILES
3.354	3.354	SIGN	RIGHT	WARNING, SLOW CHILDREN
3.356	3.356	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
3.480	3.480	INTERSECTION	LEFT	ROUTE 0212BZ (AVENUE B (EAST))
3.491	3.491	SIGN	LEFT	GUIDE, AVENUE B
3.492	3.492	SIGN	RIGHT	GUIDE, AVENUE B
3.529	3.624	GUARD/GUIDE RAIL	RIGHT	
3.531	3.555	GUARD/GUIDE RAIL	LEFT	
3.537	3.537	CULVERT	N/A	
3.598	3.598	CULVERT	N/A	
3.671	3.671	INTERSECTION	LEFT	ROUTE 0419 (AVENUE A ACCESS ROAD)
3.769	3.769	SIGN	RIGHT	REGULATORY, SPEED ZONE AHEAD
3.827	3.827	INTERSECTION	LEFT	ROUTE 0413 (SECOND STREET)
3.870	3.870	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
3.872	3.872	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
3.881	3.909	GUARD/GUIDE RAIL	RIGHT	
3.882	3.928	GUARD/GUIDE RAIL	LEFT	
3.898	3.898	CULVERT	N/A	
3.908	3.908	SIGN	RIGHT	GUIDE, VISITOR CENTER DAM CAMPGROUNDS
3.966	3.966	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
3.967	3.967	INTERSECTION	RIGHT	ROUTE 0200 (AFTER BAY CAMPGROUND ROAD)
3.976	3.976	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
3.976	3.976	SIGN	LEFT	GUIDE, AVENUE B
4.044	4.044	INTERSECTION	LEFT	ROUTE 0924 (BUREAU OF RECLAMATION PARKING)
4.046	4.046	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
4.085	4.085	INTERSECTION	LEFT	UNPAVED ROUTE (SERVICE ROAD)
4.088	4.088	SIGN	LEFT	REGULATORY, SERVICE ROAD NO PUBLIC USAGE
4.157	4.214	GUARD/GUIDE RAIL	RIGHT	
4.158	4.206	GUARD/GUIDE RAIL	LEFT	
4.182	4.182	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
4.187	4.187	CULVERT	N/A	
4.224	4.224	INTERSECTION	RIGHT	ROUTE 0211 (YELLOWTAIL POWER PLANT ROAD)
4.234	4.234	SIGN	RIGHT	GUIDE, YELLOWTAIL DAM AND POWERPLANT BUREAU OF RECLAMATION

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: FORT SMITH ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
4.267	4.267	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
4.267	4.267	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
4.268	4.268	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
4.269	4.269	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
4.402	4.456	GUARD/GUIDE RAIL	LEFT	
4.517	4.559	GUARD/GUIDE RAIL	RIGHT	
4.519	4.562	GUARD/GUIDE RAIL	LEFT	
4.540	4.540	CULVERT	N/A	
4.581	4.605	GUARD/GUIDE RAIL	RIGHT	
4.597	4.597	CULVERT	N/A	
4.604	4.604	SIGN	RIGHT	WARNING, BARRICADE 100 METERS
4.653	4.653	INTERSECTION	RIGHT	UNPAVED PARKING
4.686	4.734	GUARD/GUIDE RAIL	RIGHT	
4.687	4.687	SIGN	N/A	WARNING, UNABLE TO READ FROM VIDEO
4.687	4.687	SIGN	N/A	REGULATORY, NO TRESPASSING
4.687	4.687	GATE	N/A	
4.687	4.687	SIGN	N/A	REGULATORY, AREA CLOSED
4.726	4.726	CULVERT	N/A	
4.756	4.756	SIGN	RIGHT	WARNING, BARRICADE 100 METERS
4.765	4.765	INTERSECTION	RIGHT	UNPAVED PARKING
4.809	5.251	GUARD/GUIDE RAIL	RIGHT	
4.820	4.820	CULVERT	N/A	
4.914	4.914	CULVERT	N/A	
5.010	5.010	DROP INLET	LEFT	
5.075	5.075	CULVERT	N/A	
5.102	5.102	CULVERT	N/A	
5.160	5.160	CULVERT	N/A	
5.224	5.224	CULVERT	N/A	
5.238	5.238	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
5.260	5.260	INTERSECTION	RIGHT	ROUTE 0900 (YELLOWTAIL DAM VISITOR CENTER PARKING)
5.265	5.290	CURB-AND-GUTTER	RIGHT	
5.278	5.278	DROP INLET	RIGHT	
5.280	5.280	INTERSECTION	LEFT	ROUTE 0210 (WAPPA UPPER SWITCHYARD ROAD)
5.290	5.290	GATE	N/A	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0010: FORT SMITH ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
5.290	5.290	INTERSECTION	N/A	ROUTE 0010 (FORT SMITH ACCESS ROAD)
5.290	5.290	SIGN	N/A	REGULATORY, NO TRESPASSING
5.290	5.290	ROUTE END	N/A	TO ROUTE 0900 (YELLOWTAIL DAM VISITOR CENTER PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.27 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.004	0.004	CULVERT	N/A	
0.008	0.008	SIGN	RIGHT	REGULATORY, STOP
0.009	0.009	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.009	0.009	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.010	0.010	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.010	0.010	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.067	0.067	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
0.081	0.081	CULVERT	N/A	
0.159	0.159	INTERSECTION	LEFT	UNPAVED ROUTE
0.228	0.228	SIGN	RIGHT	WARNING, STOP AHEAD
0.288	0.288	DROP INLET	RIGHT	
0.294	0.294	SIGN	RIGHT	GUIDE, ENTERING CROW INDIAN LANDS NON TRIBAL MEMBERS RESTRICTED TO PAVED ROADS
0.305	0.305	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.314	0.314	CATTLE GUARD	N/A	
0.319	0.319	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.323	0.323	SIGN	RIGHT	REGULATORY, OPEN RANGE LIVE STOCK AT LARGE
0.376	0.376	DROP INLET	RIGHT	
0.462	0.462	CULVERT	N/A	
0.529	0.529	CATTLE GUARD	N/A	
0.548	0.548	CULVERT	N/A	
0.630	0.630	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
0.653	0.653	DROP INLET	RIGHT	
0.683	0.683	INTERSECTION	RIGHT	UNPAVED ROUTE
0.710	0.742	PAVED DITCH	LEFT	
0.758	0.767	GUARD/GUIDE RAIL	RIGHT	
0.760	0.769	GUARD/GUIDE RAIL	LEFT	
0.762	0.762	CULVERT	N/A	
0.807	0.827	GUARD/GUIDE RAIL	RIGHT	
0.812	0.832	GUARD/GUIDE RAIL	LEFT	
0.823	0.823	CULVERT	N/A	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.900	0.900	CULVERT	N/A	
0.959	0.959	DROP INLET	RIGHT	
1.006	1.006	DROP INLET	RIGHT	
1.081	1.081	DROP INLET	RIGHT	
1.131	1.131	INTERSECTION	RIGHT	UNPAVED ROUTE (NON NPS)
1.141	1.166	GUARD/GUIDE RAIL	LEFT	
1.142	1.175	GUARD/GUIDE RAIL	RIGHT	
1.150	1.150	CULVERT	N/A	
1.183	1.237	PAVED DITCH	LEFT	
1.235	1.235	CULVERT	N/A	
1.245	1.278	PAVED DITCH	LEFT	
1.267	1.297	GUARD/GUIDE RAIL	RIGHT	
1.301	1.301	DROP INLET	LEFT	
1.365	1.413	GUARD/GUIDE RAIL	RIGHT	
1.368	1.368	DROP INLET	LEFT	
1.388	1.415	PAVED DITCH	LEFT	
1.427	1.427	DROP INLET	LEFT	
1.428	1.437	PAVED DITCH	LEFT	
1.450	1.469	PAVED DITCH	LEFT	
1.482	1.482	DROP INLET	LEFT	
1.500	1.525	GUARD/GUIDE RAIL	RIGHT	
1.550	1.550	DROP INLET	LEFT	
1.556	1.571	PAVED DITCH	LEFT	
1.618	1.666	GUARD/GUIDE WALL	RIGHT	
1.654	1.654	CULVERT	N/A	
1.683	1.750	PAVED DITCH	LEFT	
1.742	1.780	GUARD/GUIDE WALL	RIGHT	
1.770	1.770	CULVERT	N/A	
1.806	1.843	GUARD/GUIDE RAIL	RIGHT	
1.826	1.826	CULVERT	N/A	
1.914	1.957	GUARD/GUIDE RAIL	RIGHT	
1.929	1.929	CULVERT	N/A	
1.959	2.028	PAVED DITCH	LEFT	
1.969	1.969	SIGN	RIGHT	WARNING, 25 M.P.H.

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.969	1.969	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
2.047	2.116	GUARD/GUIDE RAIL	RIGHT	
2.049	2.080	GUARD/GUIDE RAIL	LEFT	
2.054	2.054	CULVERT	N/A	
2.085	2.085	INTERSECTION	LEFT	UNPAVED ROUTE (NON NPS)
2.120	2.120	CULVERT	N/A	
2.133	2.209	PAVED DITCH	LEFT	
2.144	2.393	PAVED DITCH	RIGHT	
2.224	2.224	DROP INLET	RIGHT	
2.282	2.282	DROP INLET	RIGHT	
2.337	2.357	GUARD/GUIDE RAIL	LEFT	
2.348	2.348	DROP INLET	RIGHT	
2.359	2.526	PAVED DITCH	LEFT	
2.412	2.412	DROP INLET	LEFT	
2.442	2.457	GUARD/GUIDE RAIL	RIGHT	
2.468	2.468	DROP INLET	LEFT	
2.553	2.553	CULVERT	N/A	
2.555	2.650	PAVED DITCH	RIGHT	
2.564	2.583	GUARD/GUIDE RAIL	LEFT	
2.594	2.594	DROP INLET	RIGHT	
2.600	2.644	PAVED DITCH	LEFT	
2.666	2.756	PAVED DITCH	LEFT	
2.685	2.685	DROP INLET	LEFT	
2.715	2.890	PAVED DITCH	RIGHT	
2.760	2.760	DROP INLET	RIGHT	
2.818	2.818	DROP INLET	RIGHT	
2.831	3.154	PAVED DITCH	LEFT	
2.901	2.901	DROP INLET	LEFT	
2.970	2.970	DROP INLET	LEFT	
3.036	3.036	DROP INLET	LEFT	
3.123	3.123	DROP INLET	LEFT	
3.127	3.191	PAVED DITCH	RIGHT	
3.129	3.129	SIGN	RIGHT	WARNING, 25 M.P.H.
3.129	3.129	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
3.208	3.522	PAVED DITCH	RIGHT	
3.256	3.256	DROP INLET	RIGHT	
3.322	3.322	DROP INLET	RIGHT	
3.391	3.391	DROP INLET	RIGHT	
3.455	3.455	DROP INLET	RIGHT	
3.475	3.661	PAVED DITCH	LEFT	
3.542	3.542	DROP INLET	LEFT	
3.570	3.797	PAVED DITCH	RIGHT	
3.609	3.609	DROP INLET	LEFT	
3.850	3.919	PAVED DITCH	LEFT	
3.884	4.210	PAVED DITCH	RIGHT	
3.954	3.954	DROP INLET	RIGHT	
4.030	4.030	DROP INLET	RIGHT	
4.088	4.088	DROP INLET	RIGHT	
4.092	4.092	INTERSECTION	LEFT	UNPAVED ROUTE
4.144	4.144	DROP INLET	RIGHT	
4.354	4.393	PAVED DITCH	LEFT	
4.362	4.385	PAVED DITCH	RIGHT	
4.487	4.487	CULVERT	N/A	
4.494	4.550	PAVED DITCH	RIGHT	
4.503	4.533	PAVED DITCH	LEFT	
4.575	4.575	INTERSECTION	RIGHT	ROUTE 0906 (OK-A-BEH EXHIBIT PARKING)
4.649	4.649	CULVERT	N/A	
4.772	4.798	PAVED DITCH	RIGHT	
4.796	4.829	GUARD/GUIDE RAIL	LEFT	
4.798	4.834	GUARD/GUIDE RAIL	RIGHT	
4.809	4.809	CULVERT	N/A	
4.981	4.981	CULVERT	N/A	
5.007	5.080	PAVED DITCH	RIGHT	
5.370	5.370	CULVERT	N/A	
5.495	5.495	DROP INLET	RIGHT	
5.578	5.578	CATTLE GUARD	N/A	
5.627	5.627	CULVERT	N/A	
5.781	5.886	PAVED DITCH	LEFT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
5.796	5.813	PAVED DITCH	RIGHT	
5.845	5.895	PAVED DITCH	RIGHT	
5.907	5.907	CULVERT	N/A	
5.943	6.014	PAVED DITCH	RIGHT	
6.017	6.017	CULVERT	N/A	
6.153	6.181	PAVED DITCH	RIGHT	
6.213	6.213	CULVERT	N/A	
6.293	6.293	CULVERT	N/A	
6.468	6.468	CULVERT	N/A	
6.544	6.659	PAVED DITCH	LEFT	
6.655	6.655	DROP INLET	LEFT	
6.728	6.728	CULVERT	N/A	
6.742	6.996	PAVED DITCH	LEFT	
6.844	6.844	DROP INLET	LEFT	
6.911	6.911	DROP INLET	LEFT	
7.008	7.008	CULVERT	N/A	
7.079	7.079	CULVERT	N/A	
7.158	7.158	DROP INLET	LEFT	
7.273	7.273	DROP INLET	LEFT	
7.312	7.392	PAVED DITCH	LEFT	
7.328	7.328	DROP INLET	LEFT	
7.385	7.385	DROP INLET	LEFT	
7.450	7.450	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
7.460	7.460	CULVERT	N/A	
7.551	7.551	INTERSECTION	LEFT	UNPAVED ROUTE (ENTRANCE TO TRIBAL LANDS)
7.559	7.559	SIGN	RIGHT	WARNING, 30 M.P.H.
7.559	7.559	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
7.559	7.559	SIGN	RIGHT	WARNING, HILL
7.589	7.647	PAVED DITCH	LEFT	
7.602	8.265	GUARD/GUIDE WALL	RIGHT	
7.639	7.911	CURB	RIGHT	
7.646	7.646	DROP INLET	LEFT	
7.722	7.722	DROP INLET	LEFT	
7.780	7.780	DROP INLET	LEFT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
7.836	7.836	DROP INLET	LEFT	
7.892	7.892	DROP INLET	LEFT	
7.914	8.274	CURB	RIGHT	
7.950	7.950	DROP INLET	LEFT	
8.008	8.008	DROP INLET	LEFT	
8.065	8.065	DROP INLET	LEFT	
8.120	8.120	DROP INLET	LEFT	
8.178	8.178	DROP INLET	LEFT	
8.235	8.235	DROP INLET	LEFT	
8.271	8.271	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
8.277	8.450	GUARD/GUIDE RAIL	RIGHT	
8.292	8.292	DROP INLET	LEFT	
8.332	8.332	SIGN	RIGHT	WARNING, SLOW
8.389	8.424	GUARD/GUIDE RAIL	LEFT	
8.444	8.444	CULVERT	N/A	
8.557	8.683	PAVED DITCH	RIGHT	
8.603	8.603	INTERSECTION	LEFT	ROUTE 0905 (OK-A-BEH OVERLOOK PARKING)
8.630	8.630	DROP INLET	RIGHT	
8.642	8.677	PAVED DITCH	LEFT	
8.682	8.726	CURB	LEFT	
8.691	8.745	GUARD/GUIDE RAIL	LEFT	
8.692	8.776	GUARD/GUIDE RAIL	RIGHT	
8.758	8.841	PAVED DITCH	LEFT	
8.781	8.908	PAVED DITCH	RIGHT	
8.859	8.880	GUARD/GUIDE RAIL	LEFT	
8.864	8.864	DROP INLET	RIGHT	
8.896	8.965	CURB	LEFT	
8.977	9.005	GUARD/GUIDE RAIL	LEFT	
8.978	9.007	GUARD/GUIDE RAIL	RIGHT	
8.985	8.985	CULVERT	N/A	
9.014	9.015	GUARD/GUIDE WALL	LEFT	
9.069	9.092	GUARD/GUIDE RAIL	RIGHT	
9.097	9.134	GUARD/GUIDE WALL	RIGHT	
9.117	9.146	PAVED DITCH	LEFT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0011: OK-A-BEH ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
9.129	9.152	CURB	RIGHT	
9.142	9.142	INTERSECTION	LEFT	UNPAVED ROUTE
9.153	9.153	INTERSECTION	RIGHT	ROUTE 0903 (UPPER OK-A-BEH PARKING)
9.156	9.329	PAVED DITCH	LEFT	
9.168	9.364	PAVED DITCH	RIGHT	
9.212	9.212	DROP INLET	RIGHT	
9.316	9.316	DROP INLET	RIGHT	
9.362	9.362	SIGN	LEFT	GUIDE, DANGER DO NOT CROSS FENCE
9.370	9.370	INTERSECTION	N/A	ROUTE 0904 (LOWER OK-A-BEH PARKING)
9.370	9.370	ROUTE END	N/A	TO ROUTE 0904 (LOWER OK-A-BEH PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0012: AFTER BAY ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.02 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.012	0.012	SIGN	RIGHT	REGULATORY, STOP
0.059	0.059	SIGN	RIGHT	GUIDE, FEE STATION
0.060	0.060	INTERSECTION	LEFT	ROUTE 0901 (FORT SMITH CONTACT STATION PARKING)
0.114	0.114	INTERSECTION	LEFT	ROUTE 0901 (FORT SMITH CONTACT STATION PARKING)
0.187	0.187	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.212	0.212	INTERSECTION	RIGHT	ROUTE 0213 (DITCHRIDER ROAD)
0.217	0.384	PAVED DITCH	LEFT	
0.275	0.377	PAVED DITCH	RIGHT	
0.388	0.397	CURB	LEFT	
0.425	0.425	INTERSECTION	RIGHT	ROUTE 0214 (BIGHORN CANAL ROAD)
0.443	0.539	GUARD/GUIDE RAIL	RIGHT	
0.505	0.505	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.505	0.505	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.514	0.514	INTERSECTION	LEFT	UNPAVED PARKING
0.527	0.541	GUARD/GUIDE RAIL	LEFT	
0.528	0.528	SIGN	RIGHT	REGULATORY, NO STOPPING ON DAM ANYTIME
0.533	0.533	SIGN	LEFT	WARNING, UNABLE TO READ FROM VIDEO
0.539	0.607	GUARD/GUIDE WALL	RIGHT	
0.541	0.609	GUARD/GUIDE WALL	LEFT	
0.544	0.544	DROP INLET	RIGHT	
0.555	0.555	DROP INLET	RIGHT	
0.556	0.556	DROP INLET	LEFT	
0.560	0.560	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.560	0.596	BRIDGE	N/A	1320-003 (AFTERBAY DAM BRIDGE)
0.570	0.570	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.580	0.580	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.596	0.596	DROP INLET	LEFT	
0.597	0.597	DROP INLET	RIGHT	
0.607	0.607	SIGN	RIGHT	WARNING, PEDESTRIAN CROSSING
0.607	0.647	GUARD/GUIDE RAIL	RIGHT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0012: AFTER BAY ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.609	0.614	GUARD/GUIDE RAIL	LEFT	
0.611	0.611	SIGN	RIGHT	REGULATORY, NO STOPPING ON DAM ANYTIME
0.691	0.691	SIGN	RIGHT	GUIDE, RIVER AFTERBAY
0.700	0.700	SIGN	RIGHT	WARNING, PEDESTRIAN CROSSING
0.702	0.702	INTERSECTION	LEFT	ROUTE 0902 (AFTER BAY OVERLOOK PARKING)
0.702	0.702	INTERSECTION	RIGHT	ROUTE 0215 (AFTER BAY RIVER LAUNCH ROAD)
0.740	0.740	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
0.809	0.809	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.922	0.922	SIGN	RIGHT	REGULATORY, SPEED ZONE AHEAD
1.033	1.033	INTERSECTION	LEFT	ROUTE 0201 (AFTER BAY BOAT RAMP ROAD)
1.125	1.125	CULVERT	N/A	
1.147	1.147	INTERSECTION	LEFT	UNPAVED ROUTE
1.362	1.362	INTERSECTION	RIGHT	ROUTE 0208 (AIRSTRIIP ACCESS ROAD)
1.387	1.464	PAVED DITCH	LEFT	
1.614	1.614	CULVERT	N/A	
1.631	1.631	INTERSECTION	LEFT	ROUTE 0216 (GRAPEVINE CAMPGROUND ROAD)
1.633	1.633	SIGN	RIGHT	GUIDE, CAMPGROUND
1.647	1.743	PAVED DITCH	LEFT	
1.778	1.778	INTERSECTION	RIGHT	PAVED ROUTE (NON NPS)
1.845	1.845	INTERSECTION	RIGHT	UNPAVED ROUTE (SERVICE ROAD)
1.846	1.846	SIGN	RIGHT	REGULATORY, SERVICE ROAD NO PUBLIC USAGE
1.886	1.886	SIGN	RIGHT	WARNING, PAVEMENT ENDS
1.898	1.898	CULVERT	N/A	
1.910	1.910	INTERSECTION	N/A	ROUTE 0012 (AFTER BAY ROAD) UNPAVED SECTION
1.910	1.910	ROUTE END	N/A	TO END OF PAVEMENT

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM PARK BOUNDARY
0.000	0.000	INTERSECTION	N/A	PAVED ROUTE (STATE HIGHWAY 37 (STATE MAINTAINED/NON NPS))
0.000	0.000	MILE MARKER	LEFT	
0.000	0.000	PARK BOUNDARY	N/A	PARK BOUNDARY
0.000	0.000	SIGN	RIGHT	REGULATORY, BEGIN STATE MAINTENANCE
0.030	0.030	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
0.049	0.082	PULLOUT	RIGHT	
0.051	0.077	PULLOUT	LEFT	
0.079	0.079	SIGN	RIGHT	GUIDE, BIGHORN CANYON NATIONAL RECREATION AREA
0.260	0.260	CULVERT	N/A	
0.364	0.364	SIGN	RIGHT	GUIDE, BIGHORN CANYON NATIONAL RECREATION AREA AUTOMATED FEE STATION 1000 FEET AHEAD PLEASE STOP AND PAY FE
0.364	0.364	SIGN	RIGHT	GUIDE, US FEE AREA
0.503	0.503	SIGN	RIGHT	GUIDE, FEE STATION
0.547	0.547	CULVERT	N/A	
0.558	0.558	INTERSECTION	RIGHT	ROUTE 0929 (CROOKED CREEK AUTOMATIC FEE PAY STATION)
0.566	0.585	CURB-AND-GUTTER	RIGHT	
0.569	0.569	SIGN	RIGHT	GUIDE, ENTRANCE FEES
0.588	0.588	INTERSECTION	RIGHT	ROUTE 0929 (CROOKED CREEK AUTOMATIC FEE PAY STATION)
0.618	0.618	INTERSECTION	LEFT	ROUTE 0928 (CROOKED CREEK CONTACT STATION PARKING)
0.645	0.645	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45
0.674	0.674	SIGN	RIGHT	GUIDE, HORSESHOE BEND 2 MI
0.674	0.674	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.743	0.743	INTERSECTION	RIGHT	ROUTE 0203 (HORSESHOE BEND ROAD)
0.786	0.816	GUARD/GUIDE RAIL	RIGHT	
0.791	0.820	GUARD/GUIDE RAIL	LEFT	
0.798	0.807	BRIDGE	N/A	1320-002 (CROOKED CREEK BRIDGE)
0.825	0.825	SIGN	RIGHT	GUIDE, HORSESHOE BEND 2 MI
0.844	0.844	CULVERT	N/A	
0.901	0.901	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
1.939	1.939	SIGN	RIGHT	GUIDE, WILD HORSE RANGE DRIVE CAREFULLY
1.945	1.945	CATTLE GUARD	N/A	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.994	1.994	SIGN	RIGHT	GUIDE, LEAVING WILD HORSE RANGE
2.035	2.035	CULVERT	N/A	
2.112	2.112	CULVERT	N/A	
2.190	2.190	INTERSECTION	RIGHT	UNPAVED PARKING (CROOKED CREEK BAY)
2.262	2.262	CULVERT	N/A	
2.341	2.341	CULVERT	N/A	
2.429	2.429	CULVERT	N/A	
2.511	2.511	CULVERT	N/A	
2.594	2.594	CULVERT	N/A	
2.635	2.635	CULVERT	N/A	
2.823	2.823	CULVERT	N/A	
2.891	2.891	CULVERT	N/A	
3.015	3.015	CULVERT	N/A	
3.294	3.294	CULVERT	N/A	
3.345	3.345	INTERSECTION	LEFT	ROUTE 0931 (CROOKED CREEK OVERLOOK PARKING)
3.374	3.374	CULVERT	N/A	
3.840	3.840	CULVERT	N/A	
3.993	3.993	CULVERT	N/A	
4.316	4.316	SIGN	RIGHT	GUIDE, MONTANA
4.381	4.381	SIGN	RIGHT	GUIDE, WYOMING
4.413	4.413	SIGN	RIGHT	GUIDE, STATE LINE TRAIL 1 MILE
4.476	4.476	CULVERT	N/A	
4.572	4.572	CULVERT	N/A	
4.821	4.821	CULVERT	N/A	
4.976	4.976	CULVERT	N/A	
5.002	5.002	CULVERT	N/A	
5.003	5.061	PULLOUT	LEFT	
5.010	5.061	CURB	LEFT	
5.013	5.013	SIGN	RIGHT	GUIDE, RANGERS DELIGHT TRAIL 1/2 MILE
5.302	5.302	CULVERT	N/A	
5.430	5.430	CULVERT	N/A	
5.644	5.644	CULVERT	N/A	
5.894	5.894	CULVERT	N/A	
6.083	6.083	SIGN	RIGHT	REGULATORY, SPEED LIMIT 45

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
6.086	6.086	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
6.096	6.096	CULVERT	N/A	
6.130	6.130	CATTLE GUARD	N/A	
6.211	6.211	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
6.229	6.229	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
6.253	6.253	SIGN	RIGHT	WARNING, CAUTION WINDING ROAD NEXT 8 MI.
6.289	6.289	SIGN	RIGHT	GUIDE, BARRYS LANDING 10 MI DEVIL CANYON OVERLOOK 1 MI
6.339	6.339	INTERSECTION	RIGHT	ROUTE 0204 (DEVIL'S CANYON OVERLOOK ROAD)
6.352	6.419	PAVED DITCH	RIGHT	
6.362	6.362	SIGN	RIGHT	GUIDE, DEVIL CANYON OVERLOOK 1 MI HORSESHOE BEND 8 MI
6.411	6.591	GUARD/GUIDE RAIL	LEFT	
6.455	6.455	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
6.480	6.480	CULVERT	N/A	
6.524	6.620	GUARD/GUIDE RAIL	RIGHT	
6.571	6.571	CULVERT	N/A	
6.683	6.683	CULVERT	N/A	
6.806	6.806	CULVERT	N/A	
6.880	6.880	CULVERT	N/A	
6.938	6.938	CULVERT	N/A	
6.974	6.974	CULVERT	N/A	
7.066	7.066	CULVERT	N/A	
7.180	7.180	INTERSECTION	RIGHT	ROUTE 0926 (BAD PASS PARKING A)
7.214	7.214	SIGN	LEFT	REGULATORY, ONE WAY
7.216	7.216	INTERSECTION	RIGHT	ROUTE 0926 (BAD PASS PARKING A)
7.234	7.289	GUARD/GUIDE RAIL	RIGHT	
7.240	7.240	CULVERT	N/A	
7.290	7.290	CULVERT	N/A	
7.351	7.430	GUARD/GUIDE RAIL	RIGHT	
7.386	7.386	CULVERT	N/A	
7.460	7.586	GUARD/GUIDE RAIL	RIGHT	
7.471	7.471	CULVERT	N/A	
7.587	7.594	CURB-AND-GUTTER	RIGHT	
7.591	7.591	SIGN	RIGHT	REGULATORY, PARKING AREA

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
7.595	7.595	INTERSECTION	RIGHT	ROUTE 0925 (BAD PASS PARKING B)
7.601	7.624	CURB-AND-GUTTER	RIGHT	
7.628	7.628	INTERSECTION	RIGHT	ROUTE 0925 (BAD PASS PARKING B)
7.634	7.640	CURB-AND-GUTTER	RIGHT	
7.637	7.637	SIGN	RIGHT	REGULATORY, PARKING AREA
7.640	7.751	GUARD/GUIDE RAIL	RIGHT	
7.654	7.654	CULVERT	N/A	
7.807	7.869	GUARD/GUIDE RAIL	RIGHT	
7.857	7.857	CULVERT	N/A	
7.925	8.109	GUARD/GUIDE RAIL	RIGHT	
8.035	8.089	GUARD/GUIDE RAIL	LEFT	
8.050	8.050	CULVERT	N/A	
8.101	8.243	PAVED DITCH	LEFT	
8.344	8.344	CULVERT	N/A	
8.395	8.395	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
8.417	8.417	CULVERT	N/A	
8.493	8.493	SIGN	RIGHT	REGULATORY, SPEED LIMIT 40
8.503	8.503	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
8.542	8.542	CULVERT	N/A	
8.603	8.603	CULVERT	N/A	
8.635	8.707	PAVED DITCH	LEFT	
8.724	8.724	CULVERT	N/A	
8.886	8.886	CULVERT	N/A	
8.982	9.016	PULLOUT	RIGHT	
9.053	9.053	CULVERT	N/A	
9.208	9.208	CULVERT	N/A	
9.337	9.337	CULVERT	N/A	
9.377	9.377	CULVERT	N/A	
9.660	9.660	CULVERT	N/A	
9.681	9.681	CULVERT	N/A	
9.867	9.867	CULVERT	N/A	
9.964	9.964	CULVERT	N/A	
10.036	10.036	CULVERT	N/A	
10.142	10.142	CULVERT	N/A	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
10.287	10.287	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
10.287	10.287	SIGN	RIGHT	WARNING, HILL
10.305	10.305	CULVERT	N/A	
10.409	10.542	GUARD/GUIDE RAIL	RIGHT	
10.475	10.475	CULVERT	N/A	
10.501	10.544	PAVED DITCH	LEFT	
10.542	10.542	CULVERT	N/A	
10.597	10.597	CULVERT	N/A	
10.611	10.666	PAVED DITCH	LEFT	
10.665	10.665	CULVERT	N/A	
10.687	10.687	CATTLE GUARD	N/A	
10.687	10.687	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
10.724	10.724	SIGN	RIGHT	GUIDE, WILD HORSE RANGE DRIVE CAREFULLY
10.761	10.761	CULVERT	N/A	
10.832	10.832	SIGN	RIGHT	GUIDE, EWING-SNELL HISTORIC RANCH
10.867	10.867	CULVERT	N/A	
10.902	10.902	CULVERT	N/A	
10.930	10.930	INTERSECTION	LEFT	ROUTE 0205 (EWING-SNELL RANCH ROAD)
10.955	10.955	CULVERT	N/A	
10.988	10.988	SIGN	RIGHT	GUIDE, EWING-SNELL HISTORIC RANCH
10.989	11.106	PAVED DITCH	LEFT	
11.429	11.429	INTERSECTION	RIGHT	UNPAVED ROUTE
11.486	11.486	CULVERT	N/A	
11.652	11.652	CULVERT	N/A	
11.738	11.738	CULVERT	N/A	
11.785	11.785	CATTLE GUARD	N/A	
11.818	11.818	INTERSECTION	RIGHT	UNPAVED ROUTE
11.835	11.835	CULVERT	N/A	
11.887	12.034	PAVED DITCH	LEFT	
12.129	12.129	CULVERT	N/A	
12.170	12.170	CULVERT	N/A	
12.362	12.530	PAVED DITCH	RIGHT	
12.556	12.556	CULVERT	N/A	
12.645	12.763	PAVED DITCH	RIGHT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0013: BAD PASS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
12.806	12.806	CULVERT	N/A	
12.829	12.895	GUARD/GUIDE RAIL	RIGHT	
12.840	12.840	CULVERT	N/A	
12.998	12.998	CULVERT	N/A	
13.081	13.081	CULVERT	N/A	
13.354	13.354	CULVERT	N/A	
13.411	13.411	CULVERT	N/A	
13.443	13.443	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
13.457	13.457	SIGN	RIGHT	REGULATORY, SPEED LIMIT 40
13.481	13.481	CULVERT	N/A	
13.491	13.491	SIGN	RIGHT	WARNING, CAUTION WINDING ROAD NEXT 3 MI.
13.538	13.538	SIGN	RIGHT	GUIDE, BARRYS LANDING 2 MI
13.554	13.554	INTERSECTION	RIGHT	ROUTE 0219 (BARRY'S LANDING BOAT RAMP ROAD)
13.582	13.582	SIGN	RIGHT	WARNING, ROAD NARROWS
13.600	13.600	INTERSECTION	N/A	ROUTE 0218 (LOCKHART RANCH ACCESS ROAD)
13.600	13.600	ROUTE END	N/A	TO ROUTE 0218 (LOCKHART RANCH ACCESS ROAD)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0200: AFTER BAY CAMPGROUND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.97 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.018	0.018	SIGN	RIGHT	REGULATORY, STOP
0.027	0.027	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.136	0.136	INTERSECTION	RIGHT	UNPAVED ROUTE
0.206	0.206	SIGN	RIGHT	WARNING, 15 M.P.H.
0.213	0.213	SIGN	RIGHT	WARNING, SPEED BUMP AHEAD
0.216	0.216	SIGN	RIGHT	GUIDE, AFTERBAY BEAR AREA
0.216	0.216	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.218	0.218	SIGN	RIGHT	GUIDE, ALL PETS ON LEASH
0.221	0.221	SIGN	RIGHT	GUIDE, QUIET HOURS
0.230	0.230	INTERSECTION	N/A	UNPAVED PARKING
0.230	0.230	ROUTE END	N/A	TO END OF LOOP

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0201: AFTER BAY BOAT RAMP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 1.03 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0012 (AFTER BAY ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0012 (AFTER BAY ROAD)
0.003	0.003	SIGN	RIGHT	REGULATORY, STOP
0.190	0.190	INTERSECTION	N/A	ROUTE 0909 (AFTER BAY BOAT RAMP PARKING)
0.190	0.190	SIGN	LEFT	REGULATORY, NO FIRES
0.190	0.190	ROUTE END	N/A	TO ROUTE 0909 (AFTER BAY BOAT RAMP PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0202: M-K HILL PICNIC ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0212ZZ (AVENUE B ROADS)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0212BZ (AVENUE B (EAST))
0.000	0.000	INTERSECTION	LEFT	ROUTE 0212BZ (AVENUE B (EAST))
0.006	0.006	SIGN	RIGHT	REGULATORY, YIELD
0.008	0.008	SIGN	LEFT	GUIDE, AVENUE B
0.008	0.008	SIGN	RIGHT	GUIDE, AVENUE B
0.009	0.009	SIGN	RIGHT	GUIDE, M K HILL PICNIC AREA DAY USE ONLY
0.045	0.045	INTERSECTION	RIGHT	ROUTE 0401 (FIREBREAK ROAD)
0.260	0.260	INTERSECTION	RIGHT	UNPAVED PARKING
0.320	0.320	INTERSECTION	N/A	ROUTE 0202 (M-K HILL PICNIC ROAD)
0.320	0.320	ROUTE END	N/A	TO DEAD END

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0203: HORSESHOE BEND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (BAD PASS ROAD) AT MP 0.74 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (BAD PASS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013 (BAD PASS ROAD)
0.000	0.000	SIGN	N/A	GUIDE, DEVIL CANYON OVERLOOK 8 MI LOVELL 13 MI
0.010	0.010	SIGN	RIGHT	REGULATORY, STOP
0.016	0.016	CULVERT	N/A	
0.040	0.040	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.080	0.080	CULVERT	N/A	
0.101	0.101	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.179	0.179	SIGN	RIGHT	WARNING, 25 M.P.H.
0.179	0.179	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.189	0.189	CULVERT	N/A	
0.363	0.363	SIGN	RIGHT	WARNING, 25 M.P.H.
0.363	0.363	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.409	0.409	CULVERT	N/A	
0.451	0.451	CULVERT	N/A	
0.579	0.579	CULVERT	N/A	
0.637	0.637	CULVERT	N/A	
0.783	1.086	GUARD/GUIDE WALL	RIGHT	
0.841	0.841	CULVERT	N/A	
0.900	0.900	CULVERT	N/A	
0.947	0.947	CULVERT	N/A	
0.984	0.984	CULVERT	N/A	
0.992	1.003	GUARD/GUIDE WALL	LEFT	
1.001	1.001	CULVERT	N/A	
1.175	1.175	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
1.203	1.203	SIGN	RIGHT	GUIDE, RED CLIFFS DAY USE AREA NO CAMPING
1.210	1.210	INTERSECTION	LEFT	UNPAVED ROUTE (SERVICE ROAD)
1.210	1.210	INTERSECTION	RIGHT	UNPAVED ROUTE (DRY BOAT STORAGE)
1.256	1.256	CULVERT	N/A	
1.269	1.269	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
1.276	1.276	INTERSECTION	RIGHT	UNPAVED ROUTE
1.314	1.314	INTERSECTION	LEFT	ROUTE 0930 (HORSESHOE BEND DUMP STATION)
1.323	1.344	CURB-AND-GUTTER	LEFT	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0203: HORSESHOE BEND ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.345	1.345	INTERSECTION	LEFT	ROUTE 0930 (HORSESHOE BEND DUMP STATION)
1.351	1.351	INTERSECTION	RIGHT	UNPAVED ROUTE
1.360	1.360	INTERSECTION	LEFT	ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
1.363	1.363	SIGN	LEFT	GUIDE, CAMPGROUND
1.363	1.363	SIGN	RIGHT	GUIDE, CAMPGROUND
1.371	1.371	FIRE HYDRANT	RIGHT	
1.391	1.391	INTERSECTION	RIGHT	UNPAVED ROUTE
1.405	1.405	CULVERT	N/A	
1.478	1.478	CULVERT	N/A	
1.494	1.494	INTERSECTION	RIGHT	ROUTE 0920 (HORSESHOE BEND PARKING)
1.500	1.585	GUARD/GUIDE WALL	RIGHT	
1.585	1.585	INTERSECTION	LEFT	UNPAVED ROUTE (RIGGING AREA ACCESS ROAD)
1.585	1.585	SIGN	RIGHT	REGULATORY, SPEED LIMIT 25
1.588	1.588	INTERSECTION	RIGHT	ROUTE 0920 (HORSESHOE BEND PARKING)
1.594	1.609	CURB-AND-GUTTER	RIGHT	
1.595	1.620	GUARD/GUIDE WALL	LEFT	
1.596	1.596	SIGN	LEFT	GUIDE, RIGGING AREA
1.614	1.614	INTERSECTION	RIGHT	ROUTE 0927 (HORSESHOE BEND MARINA PARKING)
1.653	1.653	INTERSECTION	RIGHT	ROUTE 0927 (HORSESHOE BEND MARINA PARKING)
1.658	1.658	CULVERT	N/A	
1.660	1.660	INTERSECTION	LEFT	UNPAVED ROUTE (RIGGING AREA ACCESS ROAD)
1.660	1.660	INTERSECTION	N/A	ROUTE 0932 (HORSESHOE BEND BOAT LAUNCH PARKING)
1.660	1.660	SIGN	LEFT	GUIDE, 15 MINUTE DOCKING ZONE NO WAKE ZONE
1.660	1.660	ROUTE END	N/A	TO ROUTE 0932 (HORSESHOE BEND BOAT LAUNCH PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0204: DEVIL'S CANYON OVERLOOK ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (BAD PASS ROAD) AT MP 6.34 (ON RIGHT)
0.000	0.000	SIGN	N/A	GUIDE, UNABLE TO READ FROM VIDEO
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (BAD PASS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013 (BAD PASS ROAD)
0.002	0.002	SIGN	RIGHT	REGULATORY, STOP
0.020	0.056	PAVED DITCH	RIGHT	
0.051	0.051	INTERSECTION	LEFT	UNPAVED PARKING
0.081	0.081	CULVERT	N/A	
0.095	0.095	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.143	0.143	SIGN	RIGHT	REGULATORY, REDUCED SPEED AHEAD
0.211	0.211	CULVERT	N/A	
0.384	0.384	CULVERT	N/A	
0.437	0.437	CULVERT	N/A	
0.567	0.567	CULVERT	N/A	
0.673	0.673	CULVERT	N/A	
0.676	0.676	SIGN	RIGHT	WARNING, 20 MPH SPEED ZONE AHEAD
0.715	0.715	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.787	0.800	CURB-AND-GUTTER	RIGHT	
0.792	0.792	CULVERT	N/A	
0.798	0.800	CURB-AND-GUTTER	LEFT	
0.800	0.800	INTERSECTION	N/A	ROUTE 0921 (DEVIL'S CANYON OVERLOOK PARKING)
0.800	0.800	ROUTE END	N/A	TO ROUTE 0921 (DEVILS CANYON OVERLOOK PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0207AZ: HORSESHOE BEND CAMPGROUND ROAD LOOP A

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
0.004	0.004	CULVERT	N/A	
0.009	0.009	SIGN	RIGHT	REGULATORY, STOP
0.030	0.030	INTERSECTION	LEFT	ROUTE 0207AZ (HORSESHOE BEND CAMPGROUND ROAD LOOP A)
0.036	0.036	SIGN	LEFT	REGULATORY, GRAPHIC SIGN, NO TEXT
0.048	0.048	CULVERT	N/A	
0.068	0.068	SIGN	LEFT	GUIDE, CAMPGROUND HOST
0.330	0.330	INTERSECTION	LEFT	ROUTE 0207AZ (HORSESHOE BEND CAMPGROUND ROAD LOOP A)
0.330	0.330	INTERSECTION	RIGHT	ROUTE 0207AZ (HORSESHOE BEND CAMPGROUND ROAD LOOP A)
0.330	0.330	ROUTE END	N/A	TO END OF LOOP

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0207BZ: HORSESHOE BEND CAMPGROUND ROAD LOOP B

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD) UNPAVED SECTION
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0207Z (HORSESHOE BEND CAMPGROUND ACCESS ROAD)
0.015	0.015	CULVERT	N/A	
0.026	0.026	INTERSECTION	LEFT	ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)
0.030	0.030	SIGN	LEFT	REGULATORY, ONE WAY
0.292	0.292	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.297	0.297	SIGN	RIGHT	GUIDE, NORTH OF THE CANYON TRAIL 1.75 MILES
0.440	0.440	INTERSECTION	RIGHT	ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)
0.440	0.440	INTERSECTION	LEFT	ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)
0.440	0.440	ROUTE END	N/A	TO END OF LOOP

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0207Z: HORSESHOE BEND CAMPGROUND ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0203 (HORSESHOE BEND ROAD) AT MP 1.36 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0203 (HORSESHOE BEND ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0203 (HORSESHOE BEND ROAD)
0.003	0.003	CULVERT	N/A	
0.005	0.005	SIGN	RIGHT	REGULATORY, STOP
0.086	0.086	SIGN	RIGHT	GUIDE, CAMPGROUND QUIET HOURS
0.086	0.086	SIGN	RIGHT	GUIDE, A LOOP
0.092	0.092	INTERSECTION	RIGHT	ROUTE 0207AZ (HORSESHOE BEND CAMPGROUND ROAD LOOP A)
0.151	0.151	SIGN	RIGHT	GUIDE, B LOOP
0.160	0.160	INTERSECTION	N/A	ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B) UNPAVED SECTION
0.160	0.160	INTERSECTION	RIGHT	ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)
0.160	0.160	ROUTE END	N/A	TO ROUTE 0207BZ (HORSESHOE BEND CAMPGROUND ROAD LOOP B)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0208: AIRSTRIP ACCESS ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 1.36 (ON RIGHT)
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.000	0.000	INTERSECTION	LEFT	ROUTE 0012 (AFTER BAY ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0012 (AFTER BAY ROAD)
0.080	0.080	SIGN	RIGHT	REGULATORY, PARKING
0.087	0.087	INTERSECTION	RIGHT	UNPAVED PARKING
0.113	0.113	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.130	0.130	INTERSECTION	N/A	ROUTE 0911 (AIRSTRIP PARKING)
0.130	0.130	ROUTE END	N/A	TO ROUTE 0911 (AIRSTRIP PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0210: WAPPA UPPER SWITCHYARD ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT END
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.006	0.006	CULVERT	N/A	
0.009	0.376	PAVED DITCH	RIGHT	
0.053	0.053	CULVERT	N/A	
0.087	0.168	GUARD/GUIDE RAIL	LEFT	
0.162	0.162	CULVERT	N/A	
0.199	0.301	GUARD/GUIDE RAIL	LEFT	
0.269	0.269	SIGN	RIGHT	WARNING, BARRICADE 100 METERS
0.328	0.328	SIGN	N/A	REGULATORY, NO TRESPASSING
0.328	0.328	SIGN	RIGHT	REGULATORY, RESTRICTED AREA NO UNAUTHORIZED VEHICLES OR PERSONS BEYOND THIS POINT
0.328	0.328	GATE	N/A	
0.328	0.328	SIGN	N/A	REGULATORY, AREA CLOSED
0.358	0.409	PAVED DITCH	LEFT	
0.413	0.471	GUARD/GUIDE RAIL	RIGHT	
0.424	0.424	CULVERT	N/A	
0.436	0.512	PAVED DITCH	LEFT	
0.471	0.587	PAVED DITCH	RIGHT	
0.529	0.571	PAVED DITCH	LEFT	
0.533	0.533	CULVERT	N/A	
0.536	0.536	SIGN	RIGHT	REGULATORY, HIGH VOLTAGE ABOVE
0.560	0.560	SIGN	RIGHT	REGULATORY, HIGH VOLTAGE ABOVE
0.582	0.639	GUARD/GUIDE RAIL	LEFT	
0.639	0.747	PAVED DITCH	LEFT	
0.682	0.682	SIGN	RIGHT	REGULATORY, HIGH VOLTAGE ABOVE
0.782	0.810	GUARD/GUIDE RAIL	RIGHT	
0.810	0.810	INTERSECTION	N/A	UNPAVED PARKING (UPPER SWITCHYARD)
0.810	0.810	ROUTE END	N/A	TO END AT SWITCHYARD

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0211: YELLOWTAIL POWER PLANT ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 4.22 (ON RIGHT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.007	0.007	SIGN	RIGHT	REGULATORY, THIS ROAD CLOSED TO UNAUTHORIZED VEHICLE TRAVEL
0.014	0.014	SIGN	RIGHT	REGULATORY, STOP
0.025	0.025	SIGN	RIGHT	REGULATORY, DEAD END ROAD NO TURN AROUND
0.025	0.025	SIGN	RIGHT	REGULATORY, SPEED LIMIT 35
0.112	0.112	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.112	0.112	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.113	0.113	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.116	0.146	GUARD/GUIDE RAIL	RIGHT	
0.117	0.146	GUARD/GUIDE RAIL	LEFT	
0.278	0.316	GUARD/GUIDE RAIL	RIGHT	
0.287	0.287	SIGN	RIGHT	WARNING, BARRICADE 100 METERS
0.312	0.312	INTERSECTION	LEFT	UNPAVED ROUTE (SERVICE ROAD)
0.317	0.317	SIGN	LEFT	REGULATORY, SERVICE ROAD NO PUBLIC USAGE
0.335	0.335	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.338	0.338	SIGN	RIGHT	REGULATORY, SERVICE ROAD NO PUBLIC USAGE
0.343	0.343	INTERSECTION	RIGHT	UNPAVED ROUTE (SERVICE ROAD)
0.348	0.348	GATE	N/A	
0.349	0.349	SIGN	RIGHT	REGULATORY, THIS ROAD CLOSED TO UNAUTHORIZED VEHICLE TRAVEL
0.349	0.500	GUARD/GUIDE RAIL	RIGHT	
0.490	0.490	CULVERT	N/A	
0.504	0.504	SIGN	RIGHT	GUIDE, CAUTION HAZARDOUS AREA NO PUBLIC USAGE BEYOND THIS POINT
0.544	0.621	GUARD/GUIDE RAIL	RIGHT	
0.556	1.021	CURB	RIGHT	
0.594	0.594	CULVERT	N/A	
0.653	0.653	CULVERT	N/A	
0.795	0.795	CULVERT	N/A	
0.797	0.797	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.965	0.965	CULVERT	N/A	

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0211: YELLOWTAIL POWER PLANT ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.983	1.139	GUARD/GUIDE RAIL	RIGHT	
1.029	1.029	CULVERT	N/A	
1.031	1.074	CURB	RIGHT	
1.105	1.105	CULVERT	N/A	
1.140	1.140	INTERSECTION	N/A	ROUTE 0923 (YELLOWTAIL POWER PLANT PARKING)
1.140	1.140	ROUTE END	N/A	TO ROUTE 0923 (YELLOWTAIL POWER PLANT PARKING)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0212AZ: AVENUE B (WEST)

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.96 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.001	0.001	SIGN	RIGHT	REGULATORY, STOP
0.004	0.004	CULVERT	N/A	
0.005	0.005	SIGN	RIGHT	GUIDE, ACCESS RD
0.006	0.006	SIGN	LEFT	GUIDE, ACCESS RD
0.006	0.044	PAVED DITCH	RIGHT	
0.019	0.019	SIGN	RIGHT	GUIDE, YELLOWTAIL FIELD BRANCH MONTANA AREA OFFICE GREAT PLAINS REGION
0.020	0.020	SIGN	LEFT	GUIDE, YELLOWTAIL FIELD BRANCH
0.036	0.036	SIGN	RIGHT	REGULATORY, SPEED LIMIT 20
0.041	0.041	INTERSECTION	LEFT	ROUTE 0913AZ (PARK HEADQUARTERS PARKING A)
0.045	0.080	CURB-AND-GUTTER	LEFT	
0.080	0.080	INTERSECTION	RIGHT	ROUTE 0914 (MAINTENANCE PARKING)
0.100	0.100	INTERSECTION	LEFT	ROUTE 0913BZ (PARK HEADQUARTERS PARKING B)
0.126	0.126	FIRE HYDRANT	RIGHT	
0.126	0.154	CURB-AND-GUTTER	LEFT	
0.156	0.156	INTERSECTION	RIGHT	UNPAVED ROUTE
0.157	0.157	INTERSECTION	LEFT	ROUTE 0412 (FIRST STREET)
0.169	0.169	INTERSECTION	RIGHT	ROUTE 0411 (AVENUE C)
0.170	0.219	CURB-AND-GUTTER	LEFT	
0.179	0.269	CURB-AND-GUTTER	RIGHT	
0.220	0.220	INTERSECTION	LEFT	ROUTE 0413 (SECOND STREET)
0.229	0.272	CURB-AND-GUTTER	LEFT	
0.269	0.269	SIGN	LEFT	GUIDE, THIRD ST
0.269	0.269	SIGN	RIGHT	GUIDE, THIRD ST
0.272	0.272	INTERSECTION	LEFT	ROUTE 0414 (THIRD STREET)
0.272	0.272	INTERSECTION	RIGHT	ROUTE 0414 (THIRD STREET)
0.279	0.321	CURB-AND-GUTTER	RIGHT	
0.281	0.323	CURB-AND-GUTTER	LEFT	
0.320	0.320	SIGN	LEFT	GUIDE, FOURTH ST
0.320	0.320	SIGN	RIGHT	GUIDE, FOURTH ST

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0212AZ: AVENUE B (WEST)

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.324	0.324	INTERSECTION	LEFT	ROUTE 0415 (FOURTH STREET)
0.324	0.324	INTERSECTION	RIGHT	ROUTE 0415 (FOURTH STREET)
0.330	0.349	CURB-AND-GUTTER	RIGHT	
0.332	0.334	CURB-AND-GUTTER	LEFT	
0.350	0.350	INTERSECTION	LEFT	ROUTE 0915 (BALLFIELD PARKING A)
0.350	0.350	INTERSECTION	N/A	ROUTE 0915 (BALLFIELD PARKING A)
0.350	0.350	ROUTE END	N/A	TO ROUTE 0915 (BALLFIELD PARKING A)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0212BZ: AVENUE B (EAST)

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0416 (SIXTH STREET) AT MP 0.07 (ON RIGHT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0416 (SIXTH STREET)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0416 (SIXTH STREET)
0.000	0.000	SIGN	N/A	GUIDE, NO VEHICLES IN PLAYGROUND
0.004	0.043	CURB-AND-GUTTER	RIGHT	
0.007	0.047	CURB-AND-GUTTER	LEFT	
0.044	0.044	SIGN	RIGHT	GUIDE, SEVENTH ST
0.046	0.046	INTERSECTION	LEFT	ROUTE 0417 (SEVENTH STREET)
0.050	0.050	CULVERT	N/A	
0.076	0.076	INTERSECTION	RIGHT	ROUTE 0202 (M-K HILL PICNIC ROAD)
0.143	0.143	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.144	0.144	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.149	0.149	SIGN	RIGHT	GUIDE, GRAPHIC SIGN, NO TEXT
0.149	0.149	SIGN	LEFT	GUIDE, GRAPHIC SIGN, NO TEXT
0.152	0.152	CULVERT	N/A	
0.153	0.153	SIGN	LEFT	GUIDE, ACCESS RD
0.153	0.153	SIGN	RIGHT	GUIDE, ACCESS RD
0.158	0.158	SIGN	RIGHT	REGULATORY, STOP
0.160	0.160	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.160	0.160	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.160	0.160	ROUTE END	N/A	TO ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.48 (ON LEFT)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0213: DITCHRIDER ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.21 (ON RIGHT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0012 (AFTER BAY ROAD)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0012 (AFTER BAY ROAD)
0.002	0.002	SIGN	RIGHT	REGULATORY, STOP
0.080	0.080	CATTLE GUARD	N/A	
0.080	0.080	INTERSECTION	N/A	ROUTE 0218 (LOCKHART RANCH ACCESS ROAD)
0.080	0.080	ROUTE END	N/A	TO END OF PAVEMENT AT CATTLE GUARD

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0214: BIGHORN CANAL ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0012 (AFTER BAY ROAD) AT MP 0.43 (ON RIGHT)
0.000	0.000	SIGN	RIGHT	REGULATORY, STOP
0.000	0.000	INTERSECTION	LEFT	ROUTE 0012 (AFTER BAY ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0012 (AFTER BAY ROAD)
0.082	0.082	INTERSECTION	RIGHT	UNPAVED ROUTE
0.125	0.125	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.136	0.136	SIGN	RIGHT	REGULATORY, UNABLE TO READ FROM VIDEO
0.140	0.140	INTERSECTION	N/A	ROUTE 0214 (BIGHORN CANAL ROAD) UNPAVED SECTION
0.140	0.140	ROUTE END	N/A	TO END OF PAVEMENT

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0219: BARRY'S LANDING BOAT RAMP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0013 (BAD PASS ROAD) AT MP 13.55 (ON RIGHT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0013 (BAD PASS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0013 (BAD PASS ROAD)
0.000	0.000	SIGN	N/A	GUIDE, UNABLE TO READ FROM VIDEO
0.012	0.012	SIGN	RIGHT	REGULATORY, YIELD
0.022	0.022	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.061	0.061	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
0.083	0.083	CULVERT	N/A	
0.151	0.225	PAVED DITCH	LEFT	
0.249	0.249	SIGN	RIGHT	GUIDE, CAMP IN DESIGNATED SITES ONLY ON TRAIL CREEK
0.249	0.249	SIGN	RIGHT	GUIDE, UNABLE TO READ FROM VIDEO
0.290	0.290	CULVERT	N/A	
0.376	0.376	CULVERT	N/A	
0.409	0.409	CATTLE GUARD	N/A	
0.489	0.489	CULVERT	N/A	
0.561	0.561	CULVERT	N/A	
0.562	0.562	CULVERT	N/A	
0.563	0.619	PAVED DITCH	RIGHT	
0.635	0.635	CULVERT	N/A	
0.672	0.672	SIGN	RIGHT	GUIDE, PARK IN DESIGNATED PARKING SITES ONLY
0.691	0.691	CULVERT	N/A	
0.772	0.823	PULLOUT	RIGHT	
0.805	0.805	SIGN	RIGHT	GUIDE, TENT CAMPGROUND ONLY
0.822	0.822	CULVERT	N/A	
0.914	0.914	CULVERT	N/A	
0.937	0.949	PAVED DITCH	LEFT	
1.000	1.048	PULLOUT	RIGHT	
1.017	1.017	SIGN	RIGHT	GUIDE, TENT CAMPING ONLY
1.090	1.090	SIGN	RIGHT	GUIDE, CAMPING
1.095	1.095	INTERSECTION	RIGHT	UNPAVED PARKING
1.173	1.173	CULVERT	N/A	
1.189	1.189	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
1.189	1.189	SIGN	LEFT	GUIDE, HILLSBORO
1.192	1.192	INTERSECTION	RIGHT	UNPAVED ROUTE

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0219: BARRY'S LANDING BOAT RAMP ROAD

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
1.216	1.472	GUARD/GUIDE RAIL	RIGHT	
1.262	1.262	CULVERT	N/A	
1.302	1.350	PULLOUT	RIGHT	
1.339	1.339	CULVERT	N/A	
1.383	1.383	CULVERT	N/A	
1.408	1.408	CULVERT	N/A	
1.460	1.460	CULVERT	N/A	
1.566	1.566	CULVERT	N/A	
1.666	1.666	CULVERT	N/A	
1.815	1.815	SIGN	RIGHT	REGULATORY, SPEED LIMIT 30
1.886	1.886	SIGN	RIGHT	WARNING, 15 M.P.H.
1.886	1.886	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.920	1.920	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
1.939	1.939	SIGN	RIGHT	GUIDE, END OF ROAD
1.940	1.940	SIGN	LEFT	GUIDE, VEHICLE AND TRAILER PARKING
1.963	1.963	INTERSECTION	LEFT	ROUTE 0922 (BARRYS LANDING PARKING)
1.977	1.977	SIGN	LEFT	GUIDE, HANDICAP PARKING ONLY BEYOND THIS POINT
1.981	2.008	PAVED DITCH	LEFT	
2.011	2.090	GUARD/GUIDE RAIL	LEFT	
2.044	2.090	CURB-AND-GUTTER	LEFT	
2.084	2.084	SIGN	LEFT	GUIDE, 15 MINUTE DOCKING ZONE NO WAKE ZONE
2.084	2.084	SIGN	LEFT	GUIDE, REGISTRATION
2.084	2.084	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
2.090	2.090	INTERSECTION	N/A	PAVED ROUTE (BARRY'S LANDING BOAT LAUNCH)
2.090	2.090	ROUTE END	N/A	TO PAVEMENT CHANGE NEAR WATER

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0410: AVENUE A

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0417 (SEVENTH STREET) AT MP 0.00 (ON RIGHT)
0.000	0.000	INTERSECTION	N/A	ROUTE 0417 (SEVENTH STREET)
0.005	0.005	SIGN	RIGHT	GUIDE, AVENUE A
0.008	0.052	CURB-AND-GUTTER	LEFT	
0.055	0.055	INTERSECTION	LEFT	ROUTE 0416 (SIXTH STREET)
0.064	0.157	CURB-AND-GUTTER	LEFT	
0.065	0.065	SIGN	LEFT	GUIDE, SIXTH ST
0.065	0.065	SIGN	RIGHT	GUIDE, SIXTH ST
0.106	0.106	INTERSECTION	RIGHT	ROUTE 0419 (AVENUE A ACCESS ROAD)
0.116	0.116	SIGN	LEFT	GUIDE, AVENUE A
0.158	0.158	INTERSECTION	LEFT	ROUTE 0415 (FOURTH STREET)
0.166	0.208	CURB-AND-GUTTER	LEFT	
0.167	0.167	SIGN	LEFT	GUIDE, FOURTH ST
0.167	0.167	SIGN	RIGHT	GUIDE, FOURTH ST
0.209	0.209	INTERSECTION	LEFT	ROUTE 0414 (THIRD STREET)
0.215	0.259	CURB-AND-GUTTER	LEFT	
0.217	0.217	SIGN	LEFT	GUIDE, THIRD ST
0.218	0.218	SIGN	RIGHT	GUIDE, THIRD ST
0.261	0.261	INTERSECTION	RIGHT	ROUTE 0413 (SECOND STREET)
0.261	0.261	INTERSECTION	LEFT	ROUTE 0413 (SECOND STREET)
0.268	0.268	SIGN	LEFT	GUIDE, SECOND ST
0.268	0.268	SIGN	RIGHT	GUIDE, SECOND ST
0.268	0.310	CURB-AND-GUTTER	LEFT	
0.310	0.310	SIGN	LEFT	GUIDE, FIRST ST
0.310	0.310	INTERSECTION	LEFT	ROUTE 0412 (FIRST STREET)
0.310	0.310	INTERSECTION	N/A	ROUTE 0410 (AVENUE A)
0.310	0.310	ROUTE END	N/A	TO ROUTE 0412 (FIRST STREET) AT END

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0411: AVENUE C

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.17 (ON RIGHT)
0.000	0.000	INTERSECTION	N/A	ROUTE 0412 (FIRST STREET)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0212AZ (AVENUE B (WEST))
0.000	0.000	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
0.005	0.193	CURB-AND-GUTTER	RIGHT	
0.013	0.020	CURB-AND-GUTTER	LEFT	
0.058	0.058	FIRE HYDRANT	RIGHT	
0.129	0.129	FIRE HYDRANT	RIGHT	
0.147	0.151	CURB-AND-GUTTER	LEFT	
0.158	0.158	INTERSECTION	LEFT	ROUTE 0414 (THIRD STREET)
0.174	0.195	CURB-AND-GUTTER	LEFT	
0.192	0.192	SIGN	RIGHT	REGULATORY, STOP
0.194	0.194	SIGN	LEFT	GUIDE, FOURTH ST
0.194	0.194	SIGN	RIGHT	GUIDE, FOURTH ST
0.198	0.198	INTERSECTION	RIGHT	ROUTE 0415 (FOURTH STREET)
0.198	0.198	INTERSECTION	LEFT	ROUTE 0415 (FOURTH STREET)
0.204	0.300	CURB-AND-GUTTER	RIGHT	
0.206	0.296	CURB-AND-GUTTER	LEFT	
0.207	0.207	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.207	0.207	SIGN	RIGHT	REGULATORY, STOP
0.207	0.207	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.207	0.207	SIGN	RIGHT	WARNING, SLOW CHILDREN
0.243	0.243	INTERSECTION	RIGHT	ROUTE 0918 (SCHOOL PARKING)
0.246	0.246	SIGN	LEFT	GUIDE, AVENUE C
0.289	0.289	INTERSECTION	RIGHT	ROUTE 0918 (SCHOOL PARKING)
0.296	0.296	SIGN	RIGHT	GUIDE, SIXTH ST
0.296	0.296	SIGN	LEFT	GUIDE, SIXTH ST
0.298	0.298	INTERSECTION	LEFT	ROUTE 0416 (SIXTH STREET)
0.300	0.300	ROUTE END	N/A	TO ROUTE 0416 (SIXTH STREET) AT MP 0.00 (ON LEFT)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0412: FIRST STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.16 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0212AZ (AVENUE B (WEST))
0.007	0.084	CURB-AND-GUTTER	RIGHT	
0.011	0.032	CURB-AND-GUTTER	LEFT	
0.031	0.031	FIRE HYDRANT	RIGHT	
0.083	0.083	SIGN	RIGHT	GUIDE, AVENUE A
0.090	0.090	INTERSECTION	N/A	ROUTE 0410 (AVENUE A)
0.090	0.090	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.090	0.090	ROUTE END	N/A	TO ROUTE 0410 (AVENUE A) AT END

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0413: SECOND STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0010 (FORT SMITH ACCESS ROAD) AT MP 3.83 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0010 (FORT SMITH ACCESS ROAD)
0.002	0.002	SIGN	RIGHT	REGULATORY, STOP
0.004	0.004	CULVERT	N/A	
0.007	0.007	SIGN	RIGHT	REGULATORY, SPEED LIMIT 20
0.007	0.007	SIGN	RIGHT	WARNING, SLOW CHILDREN
0.009	0.009	INTERSECTION	LEFT	ROUTE 0410 (AVENUE A)
0.009	0.009	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.016	0.121	CURB-AND-GUTTER	LEFT	
0.017	0.123	CURB-AND-GUTTER	RIGHT	
0.018	0.018	FIRE HYDRANT	LEFT	
0.018	0.018	SIGN	RIGHT	GUIDE, AVENUE A
0.019	0.019	SIGN	LEFT	GUIDE, AVENUE A
0.073	0.073	FIRE HYDRANT	RIGHT	
0.122	0.122	FIRE HYDRANT	RIGHT	
0.130	0.130	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
0.130	0.130	INTERSECTION	RIGHT	ROUTE 0212AZ (AVENUE B (WEST))
0.130	0.130	ROUTE END	N/A	TO ROUTE 0212AZ (AVENUE B (WEST)) AT MP 0.22 (ON LEFT)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0414: THIRD STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0410 (AVENUE A) AT MP 0.21 (ON LEFT)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0410 (AVENUE A)
0.004	0.106	CURB-AND-GUTTER	LEFT	
0.005	0.005	SIGN	LEFT	GUIDE, AVENUE A
0.006	0.109	CURB-AND-GUTTER	RIGHT	
0.058	0.058	FIRE HYDRANT	RIGHT	
0.111	0.111	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
0.111	0.111	INTERSECTION	RIGHT	ROUTE 0212AZ (AVENUE B (WEST))
0.119	0.190	CURB-AND-GUTTER	LEFT	
0.120	0.175	CURB-AND-GUTTER	RIGHT	
0.120	0.120	SIGN	LEFT	GUIDE, AVENUE B
0.120	0.120	SIGN	RIGHT	GUIDE, AVENUE B
0.190	0.190	INTERSECTION	LEFT	ROUTE 0411 (AVENUE C)
0.190	0.190	INTERSECTION	RIGHT	ROUTE 0411 (AVENUE C)
0.190	0.190	ROUTE END	N/A	TO ROUTE 0411 (AVENUE C) AT MP 0.16 (ON LEFT)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0415: FOURTH STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0410 (AVENUE A) AT MP 0.16 (ON LEFT)
0.000	0.000	INTERSECTION	LEFT	ROUTE 0410 (AVENUE A)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.004	0.020	CURB-AND-GUTTER	LEFT	
0.004	0.004	SIGN	LEFT	GUIDE, AVENUE A
0.005	0.107	CURB-AND-GUTTER	RIGHT	
0.025	0.025	INTERSECTION	LEFT	ROUTE 0916 (BALLFIELD PARKING B)
0.036	0.106	CURB-AND-GUTTER	LEFT	
0.052	0.052	SIGN	LEFT	WARNING, NO VEHICLES ON PLAYGROUND
0.057	0.057	FIRE HYDRANT	LEFT	
0.111	0.111	INTERSECTION	LEFT	ROUTE 0212AZ (AVENUE B (WEST))
0.111	0.111	INTERSECTION	RIGHT	ROUTE 0212AZ (AVENUE B (WEST))
0.118	0.178	CURB-AND-GUTTER	LEFT	
0.119	0.119	SIGN	LEFT	GUIDE, AVENUE B
0.119	0.119	SIGN	RIGHT	GUIDE, AVENUE B
0.120	0.180	CURB-AND-GUTTER	RIGHT	
0.148	0.148	FIRE HYDRANT	LEFT	
0.181	0.181	SIGN	RIGHT	GUIDE, AVENUE C
0.182	0.182	INTERSECTION	RIGHT	ROUTE 0411 (AVENUE C)
0.182	0.182	SIGN	LEFT	GUIDE, AVENUE C
0.182	0.182	INTERSECTION	LEFT	ROUTE 0411 (AVENUE C)
0.189	0.245	CURB-AND-GUTTER	RIGHT	
0.191	0.247	CURB-AND-GUTTER	LEFT	
0.250	0.250	FIRE HYDRANT	N/A	
0.250	0.250	INTERSECTION	N/A	ROUTE 0415 (FOURTH STREET)
0.250	0.250	ROUTE END	N/A	TO DEAD END

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0416: SIXTH STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0411 (AVENUE C) AT MP 0.30 (ON LEFT)
0.000	0.000	SIGN	RIGHT	GUIDE, AVENUE C
0.000	0.000	INTERSECTION	LEFT	ROUTE 0411 (AVENUE C)
0.003	0.087	CURB-AND-GUTTER	LEFT	
0.007	0.064	CURB-AND-GUTTER	RIGHT	
0.031	0.031	FIRE HYDRANT	LEFT	
0.046	0.046	SIGN	RIGHT	REGULATORY, SPEED LIMIT 15
0.046	0.046	SIGN	RIGHT	WARNING, GRAPHIC SIGN, NO TEXT
0.062	0.062	SIGN	LEFT	GUIDE, AVENUE B
0.062	0.062	SIGN	RIGHT	GUIDE, AVENUE B
0.066	0.066	INTERSECTION	RIGHT	ROUTE 0212BZ (AVENUE B (EAST))
0.067	0.067	SIGN	LEFT	WARNING, NO VEHICLES ON PLAYGROUND
0.076	0.177	CURB-AND-GUTTER	RIGHT	
0.092	0.092	INTERSECTION	LEFT	ROUTE 0917 (BALLFIELD PARKING C)
0.102	0.178	CURB-AND-GUTTER	LEFT	
0.124	0.124	FIRE HYDRANT	LEFT	
0.125	0.125	SIGN	LEFT	WARNING, NO VEHICLES ON PLAYGROUND
0.178	0.178	SIGN	LEFT	GUIDE, AVENUE A
0.180	0.180	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.180	0.180	INTERSECTION	LEFT	ROUTE 0410 (AVENUE A)
0.180	0.180	ROUTE END	N/A	TO ROUTE 0410 (AVENUE A) AT MP 0.06 (ON LEFT)

BICA: ROUTE MAINTENANCE FEATURES ROAD LOG

ROUTE 0417: SEVENTH STREET

FROM MILEPOST	TO MILEPOST	FEATURE	SIDE	COMMENT
0.000	0.000	ROUTE BEGIN	N/A	FROM ROUTE 0410 (AVENUE A) AT MP 0.00 (SIDE N/A)
0.000	0.000	INTERSECTION	RIGHT	ROUTE 0410 (AVENUE A)
0.001	0.001	SIGN	LEFT	GUIDE, UNABLE TO READ FROM VIDEO
0.007	0.090	CURB-AND-GUTTER	RIGHT	
0.038	0.038	FIRE HYDRANT	RIGHT	
0.090	0.090	INTERSECTION	LEFT	ROUTE 0212BZ (AVENUE B (EAST))
0.090	0.090	INTERSECTION	RIGHT	ROUTE 0212BZ (AVENUE B (EAST))
0.090	0.090	ROUTE END	N/A	TO ROUTE 0212BZ (AVENUE B (EAST)) AT MP 0.05 (ON LEFT)

Bighorn Canyon National Recreation Area



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	Functional 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)

$\%MED = (\text{Total square area WX measured medium severity alligator cracking}) / (\text{Section length} * \text{WX measured lane width})$

$\%HI = (\text{Total square area WX measured high severity alligator cracking}) / (\text{Section length} * \text{WX measured lane width})$

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.

$\%LOW = (\text{Total linear feet WX measured low severity longitudinal cracking}) / (\text{Section length in linear feet})$

$\%MED = (\text{Total linear feet WX measured medium severity longitudinal cracking}) / (\text{Section length in linear feet})$

$\%HI = (\text{Total linear feet WX measured high severity longitudinal cracking}) / (\text{Section length in linear feet})$

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 $\leq 1/4''$, or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity longitudinal cracks have a mean width $> 1/4''$ and $\leq 3/4''$.

High severity longitudinal cracks have a mean width $> 3/4''$.

Transverse Crack Index

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

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 $\text{TC_INDEX} = 60$.

Severity Levels:

Low severity transverse cracks have a mean width $\leq \frac{1}{4}$ " , or are sealed cracks of indeterminate width whose sealant material is in good condition.

Medium severity transverse cracks have a mean width $> \frac{1}{4}$ " and $\leq \frac{3}{4}$ " .

High severity transverse cracks have a mean width $> \frac{3}{4}$ " .

Patching Index

$$\text{PATCH_INDEX} = 100 - 40 * (\% \text{PATCHING} / 80)$$

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 $\text{PATCH_INDEX} = 60$.

There are no severity levels for patching.

Rutting Index

$$\text{RUT_INDEX} = 100 - 40 * [(\% \text{LOW} / 160) + (\% \text{MED} / 80) + (\% \text{HI} / 40)]$$

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 $\geq 0.20''$ and $\leq 0.49''$.

Medium severity ruts have an ARAN measured depth $\geq 0.50''$ and $\leq 0.99''$.

High severity ruts have an ARAN measured depth $\geq 1.00''$.

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.

$$AVG IRI = (ARAN \text{ measured Left IRI} + ARAN \text{ measured Right IRI}) / 2$$

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)

$$\text{Concrete PCR} = -0.0012(IRI^2) + 0.0499(IRI) + 99.542$$

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
<i>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.</i>	

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 MiLLennium, 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	XXXXXXXX	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 Coordinate (decimal degrees)	ARAN Data Collection	Automatic Output	<= 3.00 feet, Referenced from other tables
52	BEG_LON	-999.999999	Route Begin GPS Longitude Coordinate (-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 Coordinate (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 though 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.

Individual road segments (asset subcomponents) may be combined into a single asset. 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

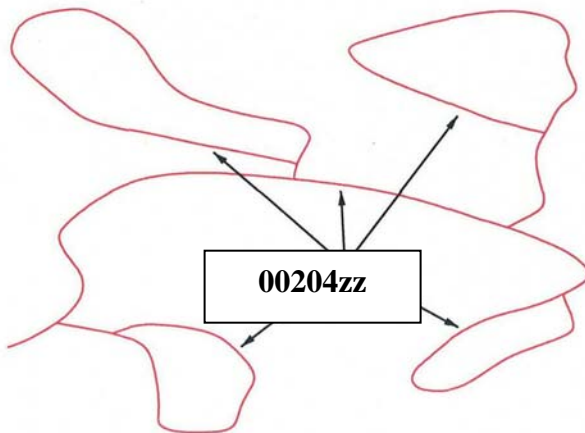


Figure 2: Campground with all loops combined into one route and one asset. This has eliminated four assets.

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.

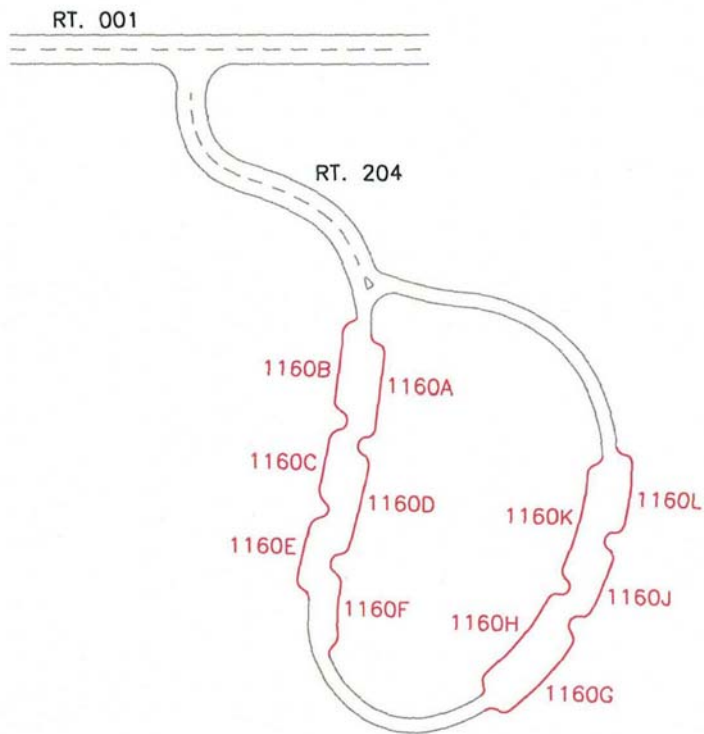


Figure 3: Parking with access route 204 and multiple parking areas (1160 A-L). Currently, this parking area is 12 routes and 12 assets (one 1100 asset and 11 1300 assets).

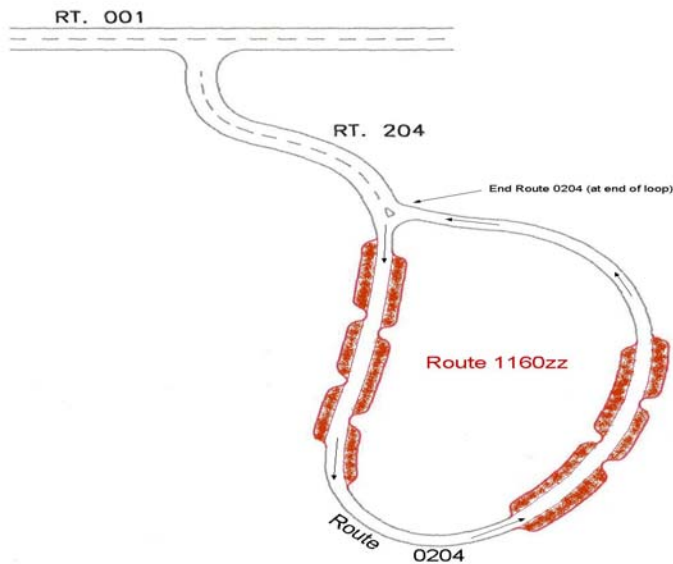


Figure 4: Parking with access route 204 and one parking area 1160zz. Route 204 is assumed longer than 0.25 miles. There are now 2 assets (one 1100 asset, one 1300 asset) instead of 12.

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.

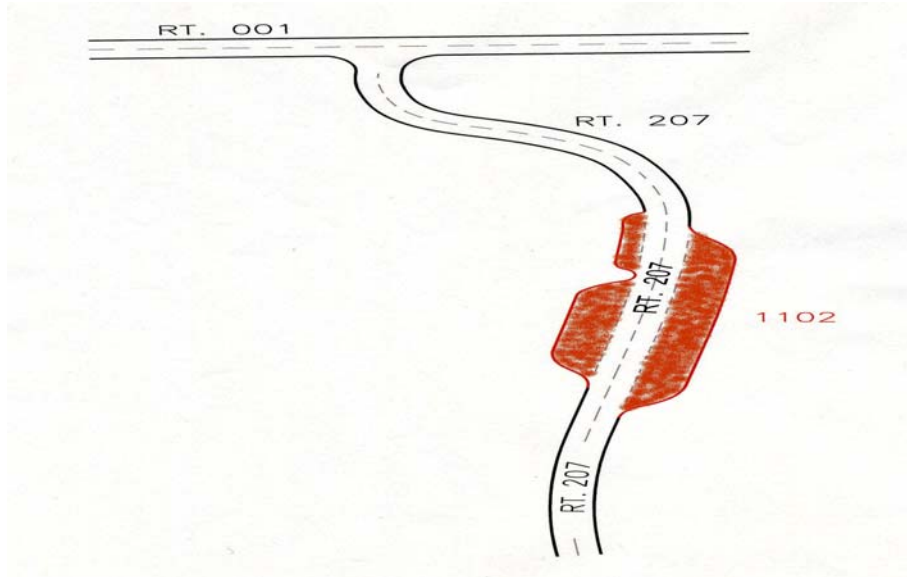


Figure 5: Parking with access route 207 running through and continuing beyond parking 1102. This access route cannot be considered a part of the parking area and two routes and two assets continue to exist.

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.

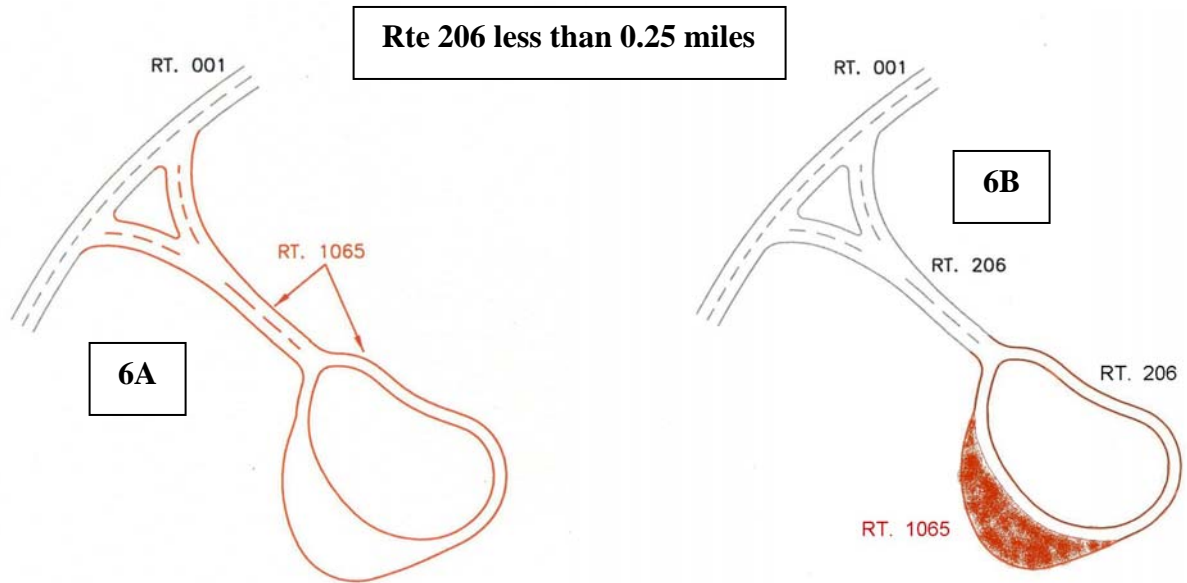


Figure 6: Since the access route is less than .25 miles in length and the only use of the access is to the parking, one route for both the access and the parking area can be established.

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.

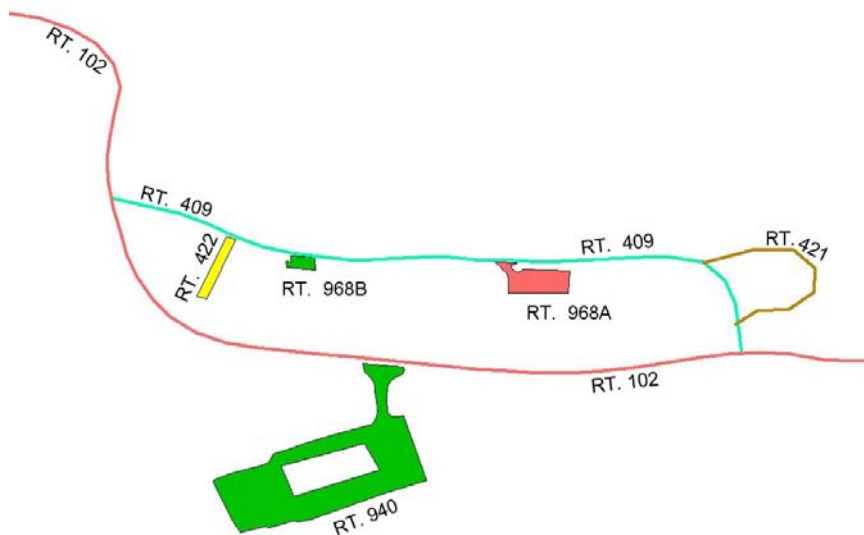


Figure 7 – Current Housing area access configuration. Route 409 is less than 0.25 miles long.

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.

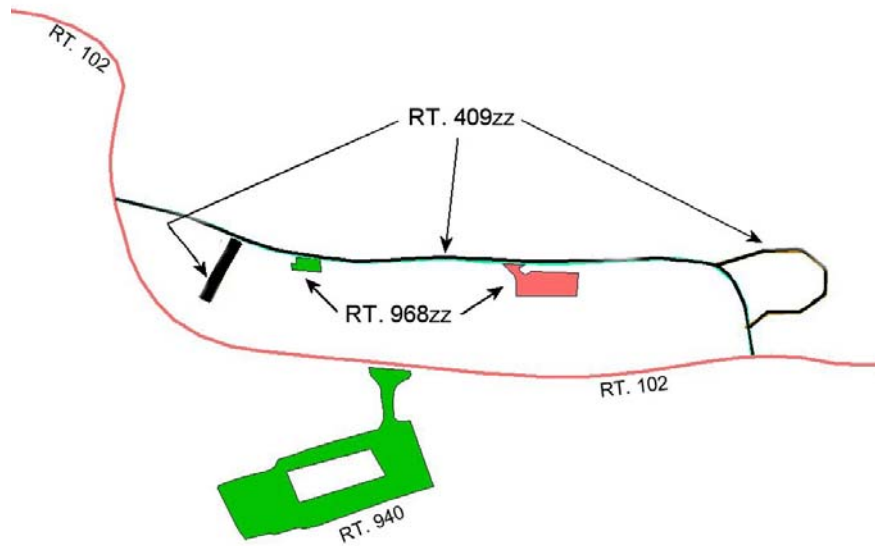


Figure 8 – Combined housing area access configuration – Parking and road assets combined to eliminate 3 assets.