
National Park Service
Cultural Landscapes Inventory

2006

Revised: /



North Rim Entrance Road Corridor
Grand Canyon National Park

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Cultural Landscapes in the Cultural Resources Inventory System:

The Cultural Resources Information System (CRIS)

CRIS is the National Park Service's database of cultural resources on its lands, consisting of archeological sites, historic structures, ethnographic resources and cultural landscapes. The set of CRIS records for cultural landscapes is referred to as CRIS-CL. CRIS-CL records conform to a standardized data structure known as the Cultural

Landscapes Inventory (CLI).

The legislative, regulatory and policy directions for conducting and maintaining the CRIS are: Section 110 of the National Historic Preservation Act, NPS Management Policies (2006), Director's Order 28 (Cultural Resources) and Director's Order 28a (Archeology).

The Cultural Landscapes Inventory (CLI)

The CLI is the data structure within CRIS used to document and evaluate all potentially significant cultural landscapes in which NPS has, or plans to acquire any enforceable legal interest.

Each CRIS-CL record is certified complete when the landscape is determined to meet one of the following:

- Landscape individually meets the National Register of Historic Places criteria for evaluation; or,
- Landscape is a contributing element of a property that is eligible for the National Register; or,
- Landscape does not meet the National Register criteria, but is managed as cultural resources because of law, policy or decisions reached through the park planning process.

Cultural landscapes vary from historic sites, historic designed landscapes, historic vernacular landscapes to historic ethnographic landscapes, but may also fit within more than one type. Those eligible for the National Register have significance in the nation's history on a national, state or local level, as well as integrity or authenticity.

The legislative, regulatory and policy directions for conducting and maintaining the CLI within CRIS are: *National Historic Preservation Act of 1966 (16 USC 470h-2(a)(1)). Each Federal agency shall establish...a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places...of historic properties...*

Executive Order 13287: Preserve America, 2003. Sec. 3(a)...Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA...No later than September 30, 2004, each covered agency shall complete a report of the assessment and make it available to the Chairman of the Advisory Council on Historic Preservation and the Secretary of the Interior...

Executive Order 13287: Preserve America, 2003. Sec. 3(c) Each agency with real property management responsibilities shall, by September 30, 2005, and every third year thereafter, prepare a report on its progress in identifying... historic properties in its ownership and make the report available to the Council and the Secretary...

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act, 1998. Standard 2: An agency provides for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions (Sec. 110 (a)(2)(A) Management Policies 2006. 5.1.3.1 Inventories: The Park Service will (1) maintain and expand the following inventories...about cultural resources in units of the national park system...Cultural Landscape Inventory of historic designed landscapes, historic vernacular landscapes,... and historic sites...

Cultural Resource Management Guideline, 1997, Release No. 5, page 22 issued pursuant to Director's Order #28. As cultural resources are identified and evaluated, they should also be listed in the appropriate Service-wide inventories of cultural resources.

Inventory Unit Description:

The North Rim Entrance Road Corridor component landscape is composed of the North Rim Entrance Road Corridor, and within it, the Entrance Station Sub Area. The generally north-south corridor encompasses the Entrance Road and its associated pull offs, the viewsheds— including adjacent meadow and forest areas—and other adjacent nodes and features, such as the 1939 park entrance sign and metal culverts with rubble headwalls. The corridor passes the Entrance Station, which is comprised of the checking/registration station, divided entrance and exit lanes, a parking lot, and a nearby employee residence and access roads, and extends in a series of gentle curves, traveling approximately ten miles in a southerly direction through scenic, largely undeveloped forests and meadows.

For this CLI, the road corridor begins where Arizona Highway 67 crosses the northern boundary into Grand Canyon National Park; it ends at the northern edge of the CC Hill/North Kaibab Trailhead parking lot access drive, as the key characteristics that define the corridor are different at this point with development at Bright Angel Peninsula. It is important to note that the road continues south (outside the boundaries of the North Rim Entrance Road Inventory Unit) through the Bright Angel Peninsula, running along the high point of the ridge all the way to the Grand Canyon Lodge at the southern tip of the peninsula. Because the road continues to the south, it is also addressed in the Grand Canyon Lodge and Bright Angel Peninsula CLIs. The Entrance Road also extends farther north outside of the park boundary to Jacobs Lake, Arizona; however, this portion of the road is on Forest Service land (North Kaibab Ranger District) and is not included in the CLI boundary.

The North Entrance Road and the Entrance Station were constructed as part of an NPS effort to make the North Rim of the Grand Canyon accessible to visitors. In 1927, the Utah Parks Company was named concessionaire for visitor facilities on the North Rim, and a year later in 1928, the construction of the first Grand Canyon Lodge was begun. To access these new amenities, the North Rim Entrance Station was built in 1928, and the Entrance Road was constructed between 1930 and 1931, improving upon an earlier rutted wagon road leading to Bright Angel Point. The original road alignment ran from the Entrance Station to the Bright Angel Peninsula by connecting to Cape Royal Road. When Civilian Conservation Corps (CCC) camps arrived in the park in 1933, they further improved the road by focusing on fuel reduction practices, re vegetation efforts, and erosion prevention measures. All of these developmental, recreational, and conservation initiatives were typical of NPS practices during the period, and the effects of which continue to characterize the Entrance Road today.

At the state level, the North Rim Historic Entrance Road is significant under Criteria A and C for important events and design efforts within the areas of Landscape Architecture, Transportation, Conservation, Entertainment/Recreation, and Politics/Government. The period of significance for the corridor extends from 1928 to 1942. This period begins when the Entrance Station was built in 1928, demarcating the official park boundary and entrance point as well as setting the initial alignment of the future North Rim Entrance Road. The period of significance ends in 1942 with the completion of New Deal era improvements within the road corridor. As with many other facilities on the North Rim, the Historic Entrance Road Corridor owes its form to NPS park planning principles and design aesthetics developed during the 1920s and 1930s. Along the course of the curvilinear road, landscape architects and planners created formal and informal overlooks and viewpoints. Smooth curves and grades wind through meadows and around slopes. According to HAER historian, Michael Anderson, the entrance road is significant as an early example of the cooperative agreement between the NPS and the Bureau of Public Roads (BPR) to build quality automotive roads within national parks (Anderson 1994, 37).

Today, the overall historic circulation patterns remain relatively intact; the essential spatial characteristics persist; and views and vistas have changed little since the period of significance. In addition, many of the natural features, such as topography, meadows, and forested slopes, remain intact. Furthermore, important historic aspects of the Entrance Station persist relatively unchanged, such as its use and its setting on a rise to take advantage of scenic views. The North Rim Entrance Road Corridor therefore possesses a high degree of integrity. Additionally, the overall condition of the landscape is good.

Site Plan

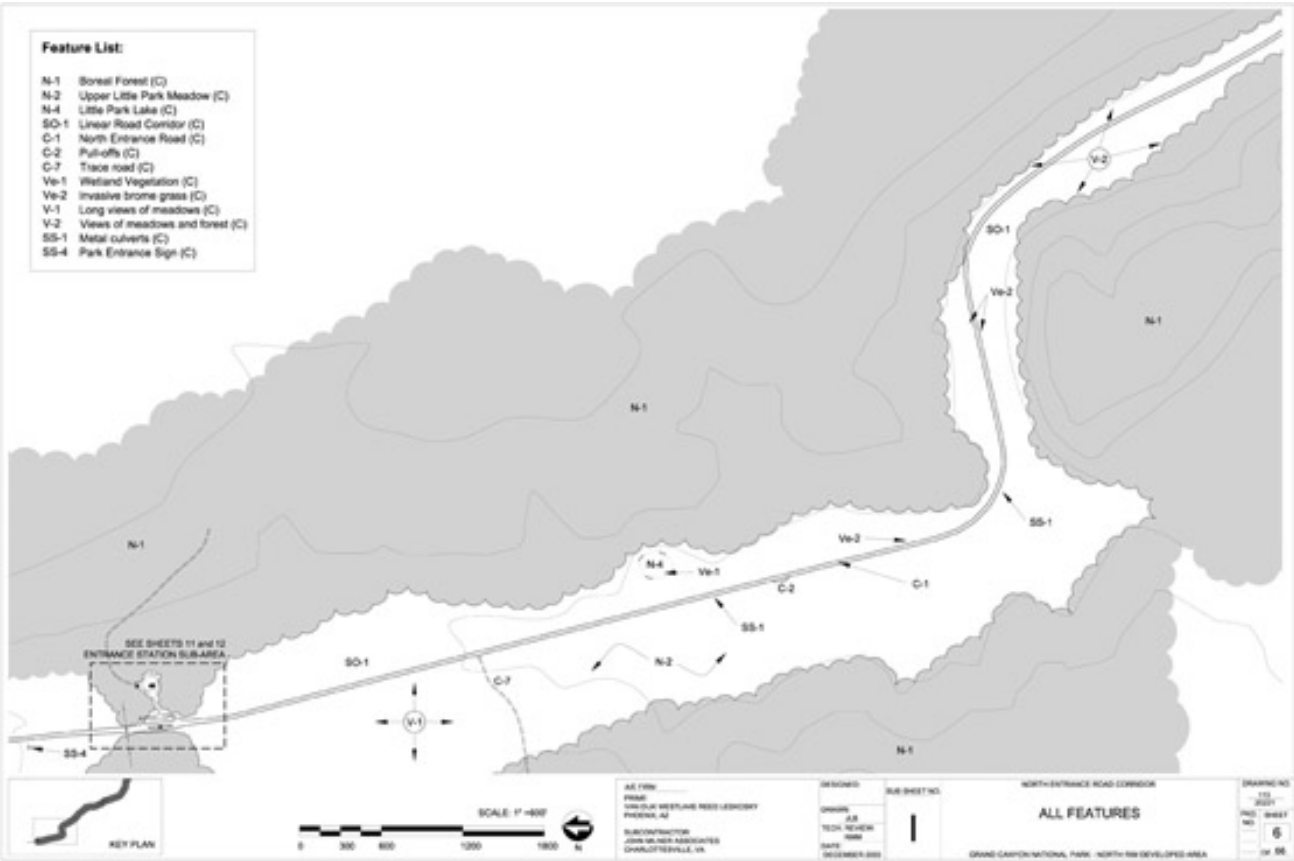


Figure 2: Detailed site plan 1 of 5 showing the northern-most portion of the Entrance Road and Entrance Station sub-area. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

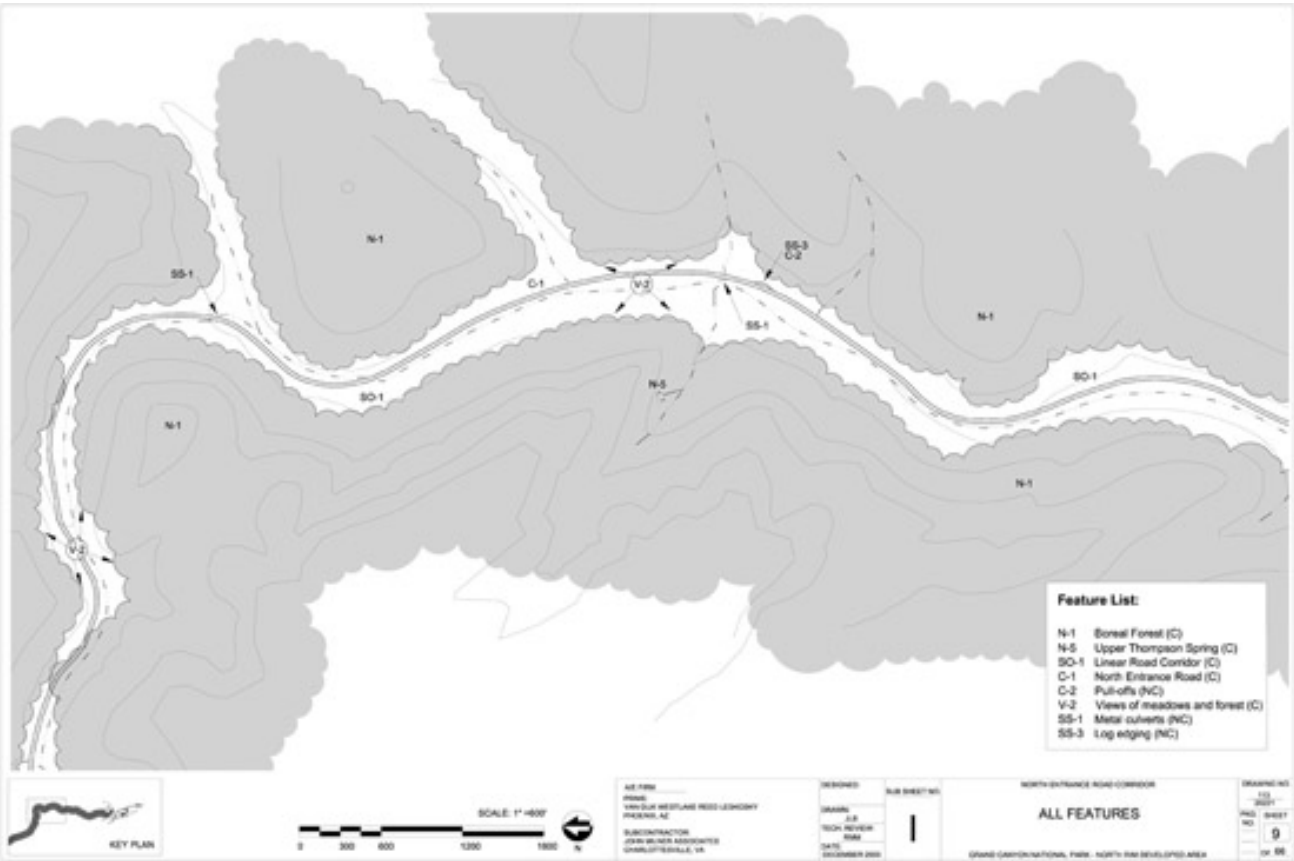


Figure 5: Detailed site plan 4 of 5 showing middle section of the Entrance Road moving southeast toward the Lodge. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

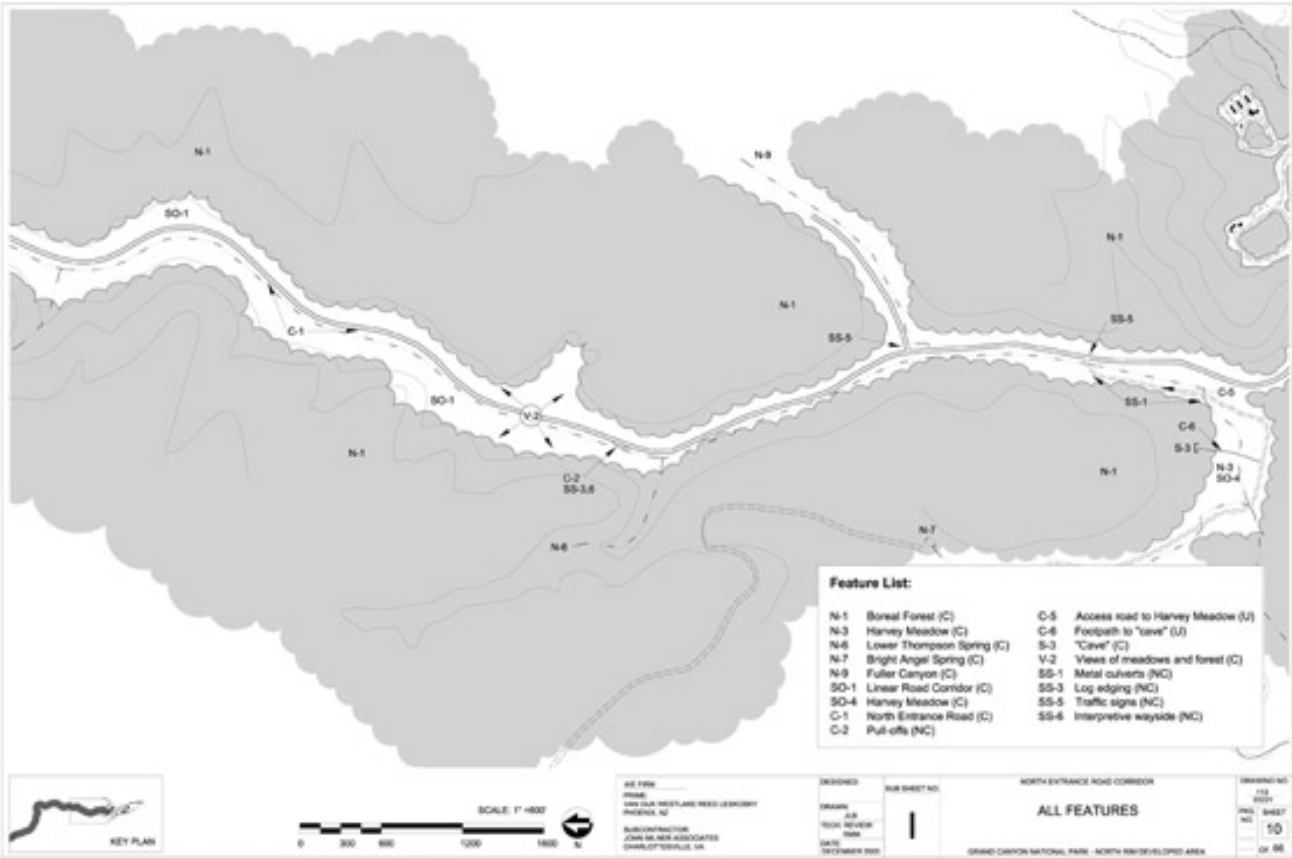


Figure 6: Detailed site plan 5 of 5 showing southern section of the Entrance Road at Harvey Meadow and Widforss Trailhead road. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

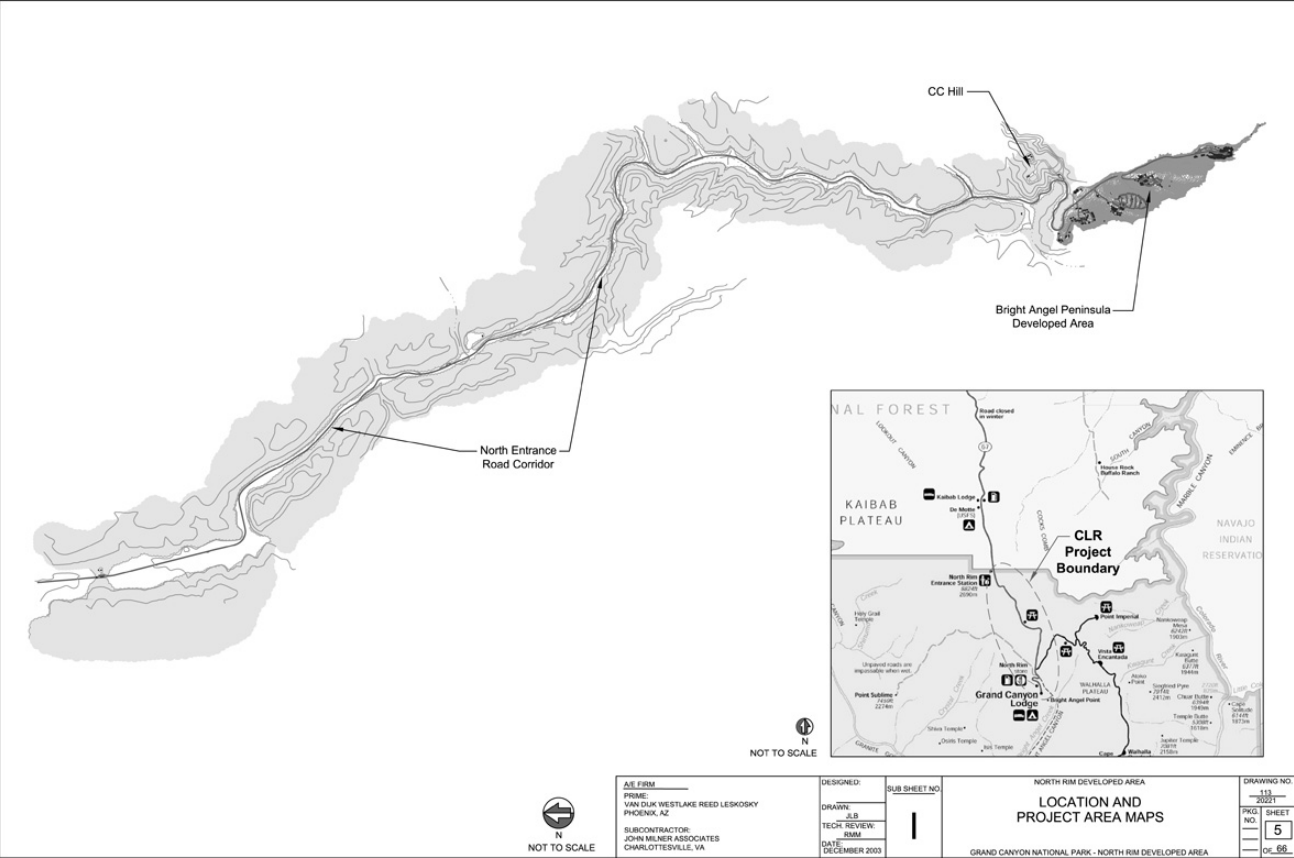


Figure 1: Site plan showing North Rim Entrance Road Corridor leading to the Bright Angel Peninsula Developed Area. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

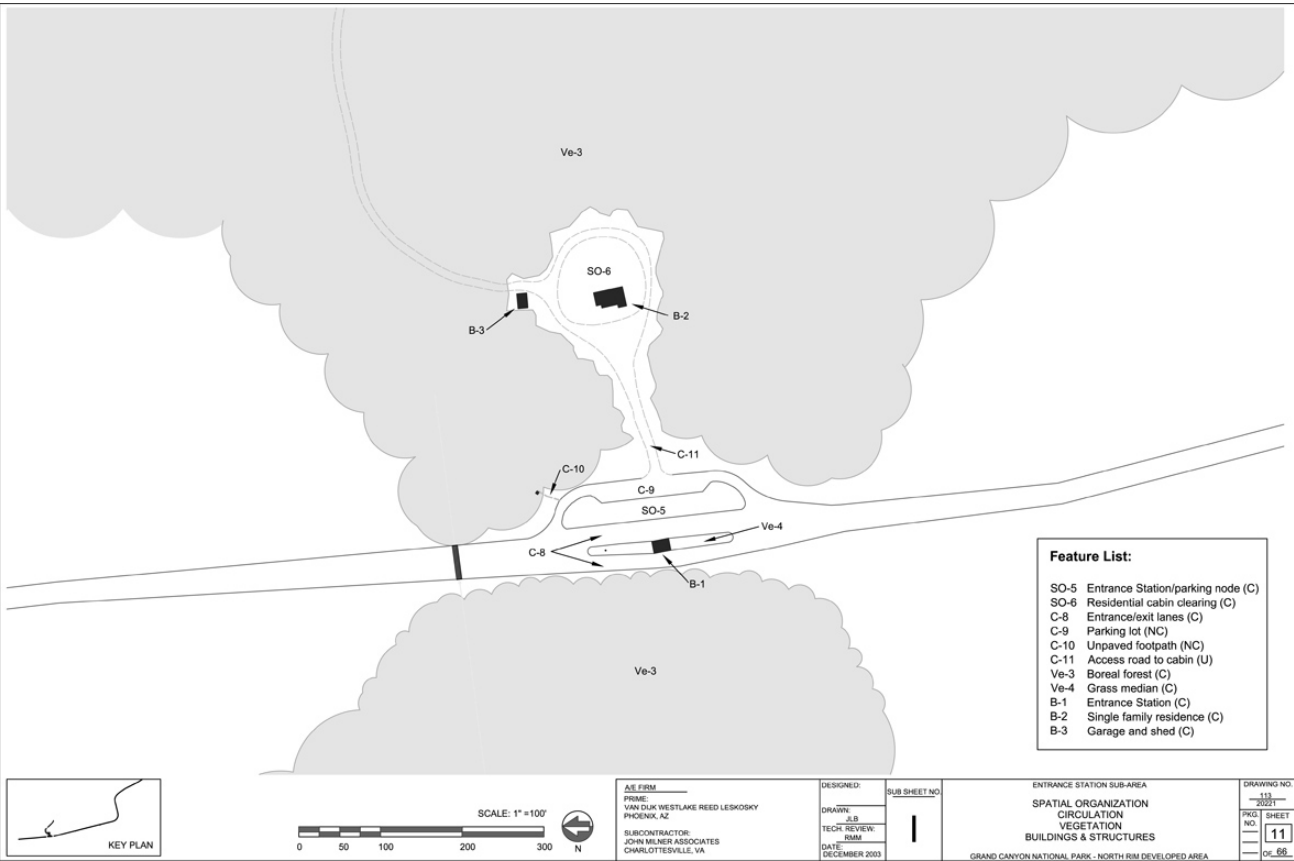


Figure 7: Site plan 1 of 2 showing Entrance Station and contributing resources. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

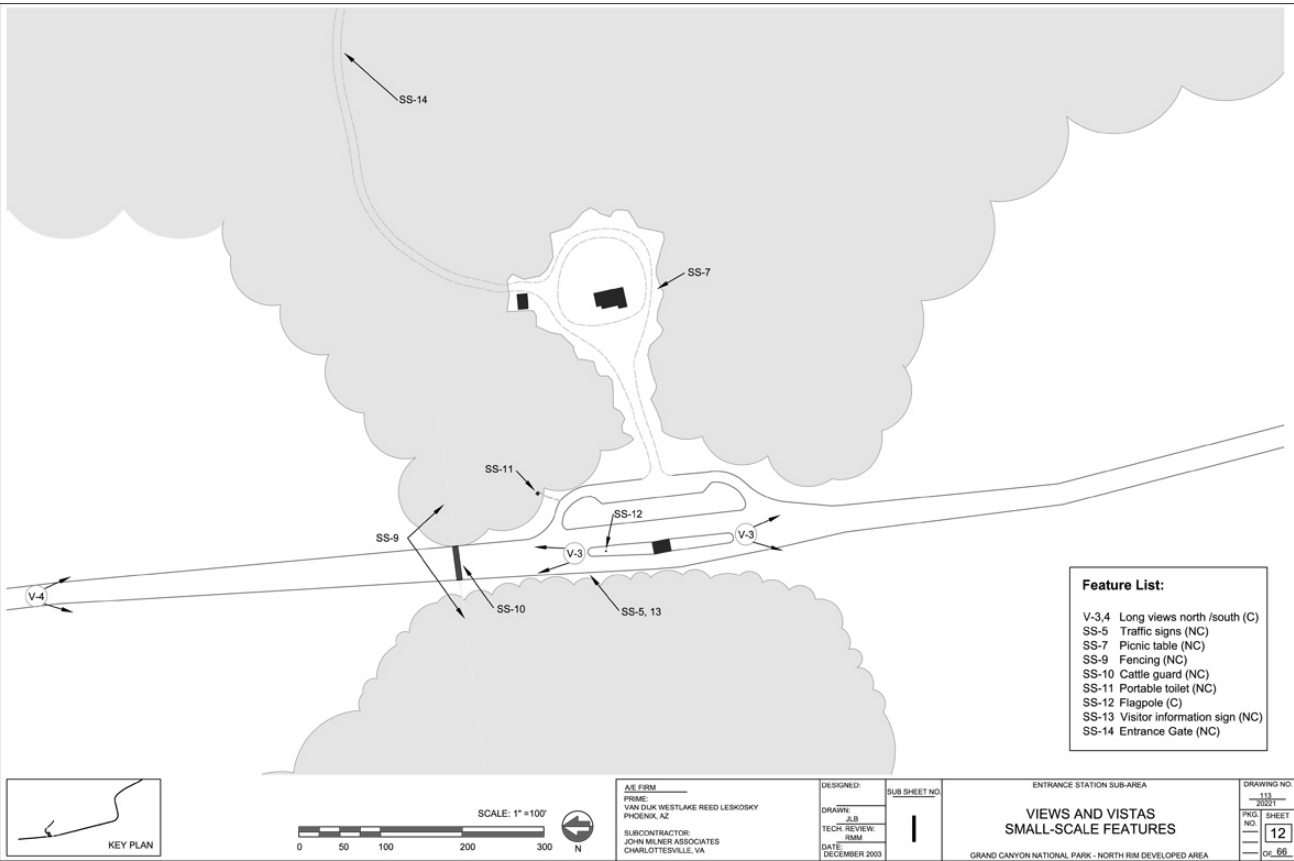


Figure 8: Site plan 2 of 2 showing Entrance Station and contributing resources. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

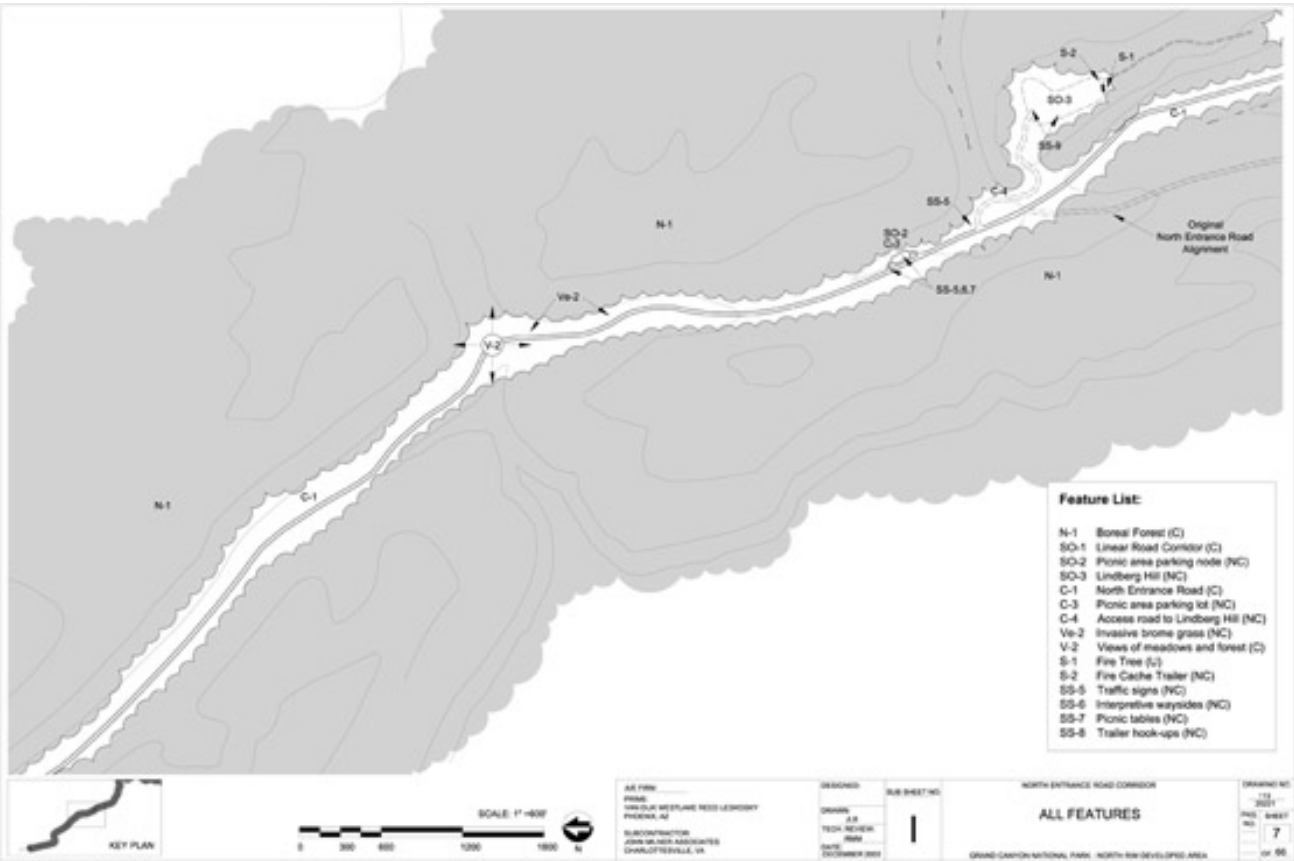


Figure 3: Detailed site plan 2 of 5 showing the Lindberg Hill area with parking lot, picnic area, and original road alignment. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

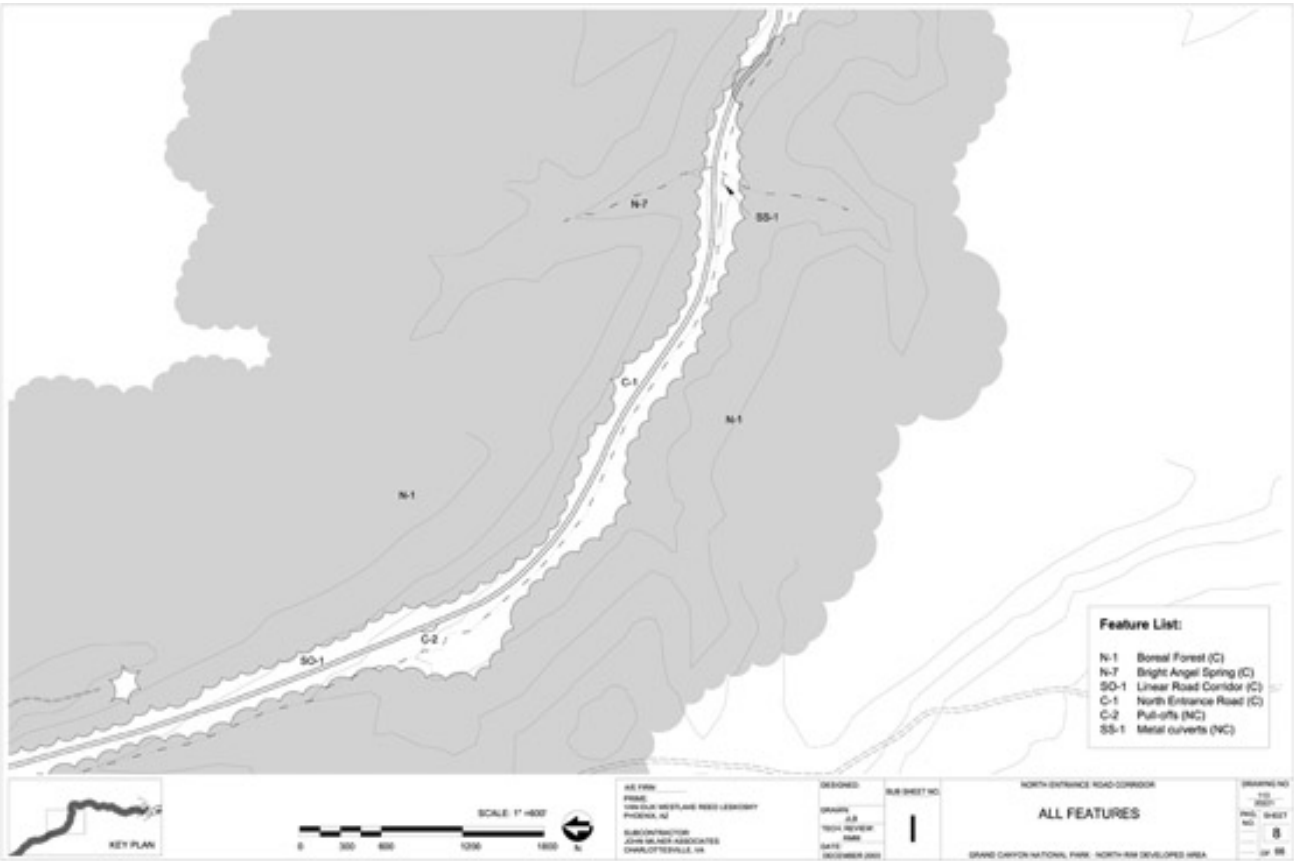


Figure 4: Detailed site plan 3 of 5 showing middle section of the Entrance Road moving southeast toward the Lodge. (Source: North Rim Bright Angel Peninsula Developed Area CLR)

Property Level and CLI Numbers

Inventory Unit Name:	North Rim Entrance Road Corridor
Property Level:	Landscape
CLI Identification Number:	850120
Parent Landscape:	850122

Park Information

Park Name and Alpha Code:	Grand Canyon National Park - North Rim Entrance Road Corridor - GRCA
Park Organization Code:	8210
Park Administrative Unit:	Grand Canyon National Park

CLI Hierarchy Description

The North Rim Entrance Road Corridor is one of several cultural landscapes within Grand Canyon National Park.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

This CLI was originally adapted from the North Rim Bright Angel Peninsula Developed Area Cultural Landscape Report (CLR), prepared by John Milner Associates in December 2003-January 2004. The CLR recommended considering the North Entrance Road Corridor for a new National Register historic districts. The park superintendent concurred with the findings of the CLI on 12/18/2006; however, the document was not sent to the Arizona SHPO for their concurrence.

In 2009, the NPS entered into a cooperative agreement with Arizona State University (ASU) to write a determination of eligibility (DOE) for SHPO concurrence on the CLI. This DOE was written by Meaghan Heisinger of ASU and edited by Carrie Mardorf, CLI Coordinator in 2010 and 2011.

Concurrence Status:

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	12/18/2006
National Register Concurrence:	Ineligible -- Managed As Cultural Resource
Date of Concurrence Determination:	09/20/2011

National Register Concurrence Narrative:

A cultural landscape inventory (CLI) and National Register nomination were prepared in 2006 for the North Rim Entrance Road Corridor Historic District; the National Register nomination was revised in 2011. This historic district includes the North Rim Entrance Station and 10.6 miles of the North Rim Entrance Road and its associated pull offs, viewsheds, and other adjacent features (the final three miles of the road is included in the Bright Angel Peninsula Historic District). The historic district boundary begins at the northern boundary of the park and extends to CC Hill, ending just before the northern edge of the North Kaibab Trailhead parking lot turnoff. The cultural landscape is a principal component of this historic district (NPS 2011). The North Rim Entrance Road National Register form (2011) notes that the road corridor retains the “highest levels of integrity” and that “the appearance and character of the scenic entrance road” that most visitors associate with their experience of park scenery and wilderness remains intact from the North Rim Entrance Road’s period of significance (1928–1931) (NPS 2006a, 2011). This historic district is being treated as eligible for National Register listing. It is not listed in the National Register or been determined eligible for listing through a consensus determination of eligibility with the SHPO.

Concurrence Graphic Information:

Attachment File Path



United States Department of the Interior
NATIONAL PARK SERVICE
INTERMOUNTAIN REGION
Intermountain Regional Office
1100 Old Santa Fe Trail
PO Box 728
Santa Fe, New Mexico 87505-0360



IN REPLY REFER TO:

H30

DATE: September 20, 2011

Memorandum

To: Superintendent, Grand Canyon National Park

From: Regional CLI Coordinator, Intermountain Regional Office (Santa Fe)

Subject: 2011 Cultural Landscape Condition Update for Grand Canyon National Park

This memo requests your concurrence on the updated conditions for four Cultural Landscape Inventory (CLI) areas for Grand Canyon National Park. The update includes condition ratings and supporting statements for resource conditions. Upon your concurrence the approved files will be uploaded on the national database, and the park's FY 2011 Government Performance and Results Act goal Ia7, completed for these resources. If you have any questions regarding the information or approval process, please call Carrie Mardorf, Intermountain Region CLI Coordinator at (505) 988-6730.

For your convenience the definitions for conditions have been included at the end of this memo.

GRCA CLI 2011 Updated Records

Landscape Area	Previous Condition	Current Condition	Comment
Bright Angel Peninsula	Fair (2003)	Fair (2011)	Landscape vegetation degraded from social trails, footpaths and use of service carts. Intrusion of new buildings into the landscape (EMS facility) that are visible from the entrance road. This issue can be resolved

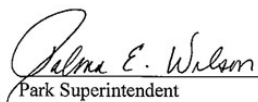


Superintendent concurrence on the updated landscape condition, page 1, 9/26/2011.

North Rim Entrance Road Corridor
Grand Canyon National Park

			with continued re-vegetation to screen the facility from the entrance road. Removal of six external frame cabins from the Grand Canyon Inn sub-area (approved removal).
North Rim Entrance Road	Good (2006)	Good (2006)	Historical and natural features and values are preserved.
Grand Canyon Village	Good (2007)	Good (2011)	Historical and natural features and values are preserved.
Lodge (Grand Canyon Lodge)	Fair (2006)	Fair (2011)	Landscape vegetation degraded from social trails, footpaths and use of service carts. Loss of a small landscape feature (North Rim Lodge Stone Drinking Fountain) during construction of a greenway trail (unapproved removal).

If the FY 2011 survey meets with your approval, please indicate your concurrence by signing below. Once the document has been signed please forward it back to my attention. Thank you for your time and consideration regarding this matter.


Park Superintendent

9/26/11
Date

Page 2 of 3

Superintendent concurrence on the updated landscape condition, page 2, 9/26/2011.

North Rim Entrance Road Corridor
Grand Canyon National Park

Correction sent 1.11.07



United States Department of the Interior

NATIONAL PARK SERVICE
INTERMOUNTAIN REGION
Cultural Landscapes Program
P.O. Box 728, Santa Fe, New Mexico 87505-0728
505-988-6895, 988-6876 (fax)



November 16, 2006

MEMORANDUM

To: Joe Alston, Superintendent
Grand Canyon National Park
Park P.O. Box 129
Grand Canyon, AZ 86023

From: Michele Curran, Landscape Historian
NPS-IMR CLI Coordinator
Box 728
Santa Fe, NM 87504-0728

Re: North Rim Historic Entrance Road Corridor Cultural Landscape Inventory (CLI)

We are pleased to submit the updated Cultural Landscape Inventory for the North Rim Historic Entrance Road Corridor in the Grand Canyon National Park. Your cultural resource park staff have reviewed the CLI, and their corrections have been incorporated into the datafields. The CLI report is not a published document; it is a print out of the data fields in the CLI database.

In order for the North Rim Historic Entrance Road Corridor CLI to be a complete record that will help the park meet GPRA goal 1a7 and WASO to meet GPRA goal 1b2B in FY 2007, we need your signed concurrence for our records in the IMR Santa Fe office. Once I have received your signed concurrence, I will proceed with the National Register nomination of the new historic district for the park's submission to the AZ SHPO. When the AZ SHPO concurs in writing with the revised nomination, the CLI will be a complete, accurate, and reliable record.

We are seeking your concurrence on the following:

The CLI has identified the North Rim Historic Entrance Road Corridor component landscape as a "Historic Designed Landscape." The CLI recommends that the National Register listing of the North Rim Historic Entrance Road Corridor should be as a Historic District.

1. The CLI rates the condition as "Good" (pg. 46) and the Management Category is listed as "Should be Preserved and Maintained" (pg. 10).
2. The period of significance for the North Rim Historic Entrance Road Corridor is 1928-1931 (pg. 16), and the Statement of Significance is located on pg. 11-15.
4. The contributing features are listed in the "Analysis and Evaluation" section (pg. 26-45).

Since August 2005, the CLI website houses the CLI data that was formerly in the CLAIMS database. It is now possible for park staff to have access to the CLI database, and I will be glad to establish user accounts for anyone at the park, who would like to review the data.

We have attached a concurrence form for your convenience, if you would like to use it. We would like to thank your staff for their time and assistance with the completion of the CLI. Please remember the CLI can be revised and/or updated at any time upon the park's request. If you have any questions on the findings of the CLI, please contact Michele Curran at 505-988-6895.



Superintendent concurrence on the findings of the CLI, page 1, with corrected data, 12/18/2006.

North Rim Entrance Road Corridor
Grand Canyon National Park

Concurrence 12/18/06

United States Department of the Interior
NATIONAL PARK SERVICE
INTELMANAGEMENT DIVISION
Cultural Landscapes Program
P.O. Box 725, Fort Collins, CO 80522-0725
(970) 225-7000

MEMORANDUM

To: Deputy Associate Regional Director
Cultural Resources
12795 W. Alameda Pkwy.
Lakewood, CO 80228

From: Superintendent, Grand Canyon National Park
Park P.O. Box 129
Grand Canyon, AZ 86023

Subject: North Rim Historic Entrance Road Corridor Cultural Landscape Inventory
(CLI)

I hereby concur with the content and the assessment of the North Rim Historic Entrance Road Corridor cultural landscape for the Grand Canyon National Park.

The CLI has identified the North Rim Historic Entrance Road Corridor component landscape as a "Historic Designed Landscape." The CLI recommends that the National Register listing of the North Rim Historic Entrance Road Corridor should be as a Historic District.

1. The CLI rates the condition as "FAIR" (pg. 63) and the Management Category is listed as "Must be Preserved and Maintained" (pg. 9).
2. The period of significance for the Grand Canyon Lodge is 1917-1942 (pg. 15), and the Statement of Significance is located on pg. 10-13.
4. The contributing features are listed in the "Analysis and Evaluation" section (pg. 35-62).

[Signature]
Superintendent, Grand Canyon National Park

12/18/06
Date

Cc: Michele Curran, IMR, CLI Coordinator
Jill Cowley, IMR, Historical Landscape Architect

TAKE PRIDE IN AMERICA

Superintendent concurrence on the findings of the CLI, page 2, 12/18/2006. See page 1 of Superintendent concurrence for corrected data.

Revisions Impacting Change in Concurrence: Other

Revision Date:

Revision Narrative:

The draft CLI, completed in 2006, was largely based on the Bright Angel Peninsula Developed Area CLR completed by John Milner Associates. However, the draft mainly focused on the Bright Angel Peninsula (a separate area), not the North Rim Entrance Road. The CLI was revised in 2011 to add information pertaining to the road corridor, as identified in the DOE.

Geographic Information

Geographic Information & Location Map

State and County:

State:	Arizona
County	Coconino County

Size (Acres) 635

Land Tract Number(s)

Inventory Unit Boundary Description:

The North Rim Entrance Road Corridor begins at the GRCA/Kaibab National Forest boundary and stretches southward to the CC Hill/North Kaibab Trailhead Access Drive. It encompasses the North Rim Entrance Station, the North Entrance Road and its associated pull-offs, and the viewshed from the road, including adjacent meadow and forest areas.

Boundary Coordinates:

Source: GPS-Differentially Corrected
Type of Point: Area
Latitude: 36.3364739491327
Longitude: -112.118364799623
Narrative:

Source: GPS-Differentially Corrected
Type of Point: Area
Latitude: 36.336579433549
Longitude: -112.115758990921
Narrative:

Source: GPS-Differentially Corrected
Type of Point: Area
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Longitude: -112.109873357529
Narrative:

Source: GPS-Differentially Corrected
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Narrative:

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Narrative:

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Narrative:

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Narrative:

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Narrative:

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Longitude: -112.061216523964
Narrative:

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Narrative:

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Longitude: -112.057303001769
Narrative:

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Longitude: -112.064181613614
Narrative:

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Narrative:

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Narrative:

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Narrative:

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Narrative:

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Longitude: -112.055043842951
Narrative:

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Longitude: -112.076842393434
Narrative:

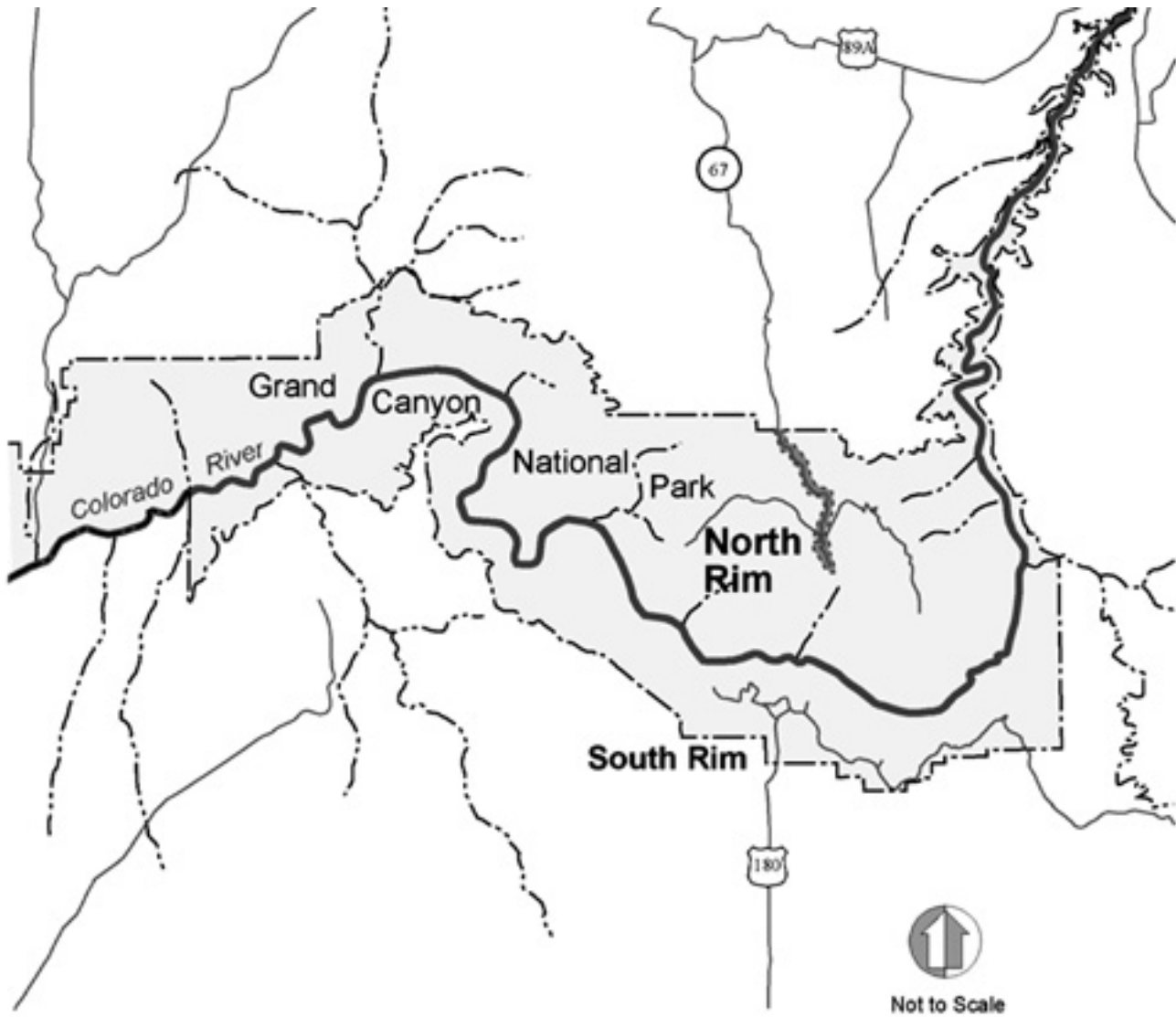
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Narrative:

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Longitude: -112.087217694618
Narrative:

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Narrative:

Source: GPS-Differentially Corrected
Type of Point: Area
Latitude: 36.3151236586628
Longitude: -112.113849156262
Narrative:

Location Map:



The North Rim Historic Entrance Road Corridor is part of the North Rim Developed Area in Grand Canyon National Park. It lies within Coconino County in northern Arizona.

Regional Context:

Type of Context: Physiographic

Description:

In comparison to the South Rim, the North Rim of the Grand Canyon is minimally developed, partly due to its less-accessible nature. Virtually cut off from the rest of the state of Arizona to the south, the North Rim is distant in both perception and reality from the South Rim. Limits on accessibility include lack of convenient vehicular access from the South Rim, from airports, and major interstate thoroughfares in Arizona. Seasonal snowfall averaging four feet or more closes the North Rim to traffic from late October to May.

Management Information

General Management Information

Management Category: Should be Preserved and Maintained

Management Category Date: 12/18/2006

Management Category Explanatory Narrative:

This CLI for the North Rim Entrance Road finds the corridor eligible for listing on the National Register of Historic Places. As a result, the property should be preserved and maintained. Park Superintendent concurred with this finding on 12/18/2006.

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement:

Type of Context:

Management Agreement Explanatory Narrative:

There are no management agreements associated with the road.

NPS Legal Interest:

Type of Interest: Fee Simple

Narrative: The NPS owns the North Rim Entrance Road Corridor in fee simple, no encumbrances.

Located in managed wilderness?: Unknown

Public Access:

Type of Interest: Unrestricted

Explanatory Narrative:

As the main route to the North Rim of the Grand Canyon, the public has unrestricted access along the road corridor.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Land Narrative:

The boundaries for this CLI were selected to include the road, entrance station, associated culverts, gutters, and drainage ditches, as well as natural scenic features that are visually important to the corridor within lands owned by the National Park Service. The entrance road does extend farther north outside of the park boundary to Jacobs Lake, Arizona; however, this portion of the road is on Forest Service land (North Kaibab Ranger District) and is not included in the CLI boundary. Nevertheless, these adjacent lands contribute to the character of the road.

National Register Information

Documentation Status:

Entered Documented

National Register Explanatory Narrative:

A cultural landscape inventory (CLI) and National Register nomination were prepared in 2006 for the North Rim Entrance Road Corridor Historic District; the National Register nomination was revised in 2011. This historic district includes the North Rim Entrance Station and 10.6 miles of the North Rim Entrance Road and its associated pull offs, viewsheds, and other adjacent features (the final three miles of the road is included in the Bright Angel Peninsula Historic District). The historic district boundary begins at the northern boundary of the park and extends to CC Hill, ending just before the northern edge of the North Kaibab Trailhead parking lot turnoff. The cultural landscape is a principal component of this historic district (NPS 2011). The North Rim Entrance Road National Register form (2011) notes that the road corridor retains the “highest levels of integrity” and that “the appearance and character of the scenic entrance road” that most visitors associate with their experience of park scenery and wilderness remains intact from the North Rim Entrance Road’s period of significance (1928–1931) (NPS 2006a, 2011). This historic district is being treated as eligible for National Register listing. It is not listed in the National Register or been determined eligible for listing through a consensus determination of eligibility with the SHPO.

Concurrence Narrative:

A cultural landscape inventory (CLI) and National Register nomination were prepared in 2006 for the North Rim Entrance Road Corridor Historic District; the National Register nomination was revised in 2011. This historic district includes the North Rim Entrance Station and 10.6 miles of the North Rim Entrance Road and its associated pull offs, viewsheds, and other adjacent features (the final three miles of the road is included in the Bright Angel Peninsula Historic District). The historic district boundary begins at the northern boundary of the park and extends to CC Hill, ending just before the northern edge of the North Kaibab Trailhead parking lot turnoff. The cultural landscape is a principal component of this historic district (NPS 2011). The North Rim Entrance Road National Register form (2011) notes that the road corridor retains the “highest levels of integrity” and that “the appearance and character of the scenic entrance road” that most visitors associate with their experience of park scenery and wilderness remains intact from the North Rim Entrance Road’s period of significance (1928–1931) (NPS 2006a, 2011). This historic district is being treated as eligible for National Register listing. It is not listed in the National Register or been determined eligible for listing through a consensus determination of eligibility with the SHPO.

National Register Eligibility

National Register Concurrence:	Ineligible -- Managed As Cultural Resource
Contributing/Individual:	Contributing
National Register Classification:	District
Significance Level:	State
Significance Criteria:	A - Associated with events significant to broad patterns of our history
Significance Criteria:	C - Embodies distinctive construction, work of master, or high artistic values

Period of Significance:

Time Period:	CE 1928 - 1942
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Recreation
Facet:	Tourism
Other Facet:	None
Time Period:	CE 1928 - 1942
Historic Context Theme:	Developing the American Economy
Subtheme:	Transportation by Land and Air
Facet:	Planned Roads, Highways and Freeways
Other Facet:	None

Time Period: CE 1928 - 1942

Historic Context Theme: Expressing Cultural Values

Subtheme: Architecture

Facet: Rustic Architecture

Other Facet: None

Time Period: CE 1928 - 1942

Historic Context Theme: Expressing Cultural Values

Subtheme: Landscape Architecture

Facet: Impacts Of Railroads On The American
Landscape

Other Facet: None

Time Period: CE 1928 - 1942

Historic Context Theme: Expressing Cultural Values

Subtheme: Landscape Architecture

Facet: Regional Planning

Other Facet: Other –
NPS Master Planning/Community Planning

Time Period: CE 1928 - 1942

Historic Context Theme: Expressing Cultural Values

Subtheme: Landscape Architecture

Facet: The 1930's: Era Of Public Works

Other Facet: None

Time Period:	CE 1928 - 1942
Historic Context Theme:	Transforming the Environment
Subtheme:	Conservation of Natural Resources
Facet:	Origin And Development Of The National Park Service
Other Facet:	None

Area of Significance:

Area of Significance Category: Landscape Architecture

Area of Significance Sub Category: None

Area of Significance Category: Transportation

Area of Significance Category: Conservation

Area of Significance Sub Category: None

Area of Significance Category: Entertainment - Recreation

Area of Significance Sub Category: None

Area of Significance Category: Politics - Government

Area of Significance Sub Category: None

Statement of Significance:

The historic context for evaluating the North Rim Entrance Road Corridor Historic District is illustrated in "The Historic Landscape Design of the National Park Service, 1916 to 1942," by Linda Flint McClelland, which has been developed as part of the multiple property documentation "Historic Park Landscapes in National and State Parks," that was entered into the National Register on October 4, 1995. The multiple property documentation was developed according to the Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation and the guidelines were developed by the National Register of Historic Places for documenting and registering multiple property groups. The multiple property documentation was intended to streamline the documentation of contexts for National Register nominations, historic resource studies, and cultural landscape reports for the NPS in keeping with the NPS's Cultural Resource Management Guideline (Director's Order 28). The North Rim Entrance Road Corridor Historic District fits within the context of "park road systems and parkways" in the western United States and western Canada, and especially in the National Parks.

Collectively, the district is significant under Criteria A for its association with the developmental history of Grand

Canyon National Park in the areas of landscape architecture, politics/government, transportation, recreation/entertainment, and conservation. . It is also significant under Criterion C for its distinctive characteristics of road construction which represent the collaborative efforts of the National Park Service (NPS) and the Bureau of Public Roads (BPR) and the construction of the road in the “Rustic” style. The period of significance for the road corridor extends from 1928 through 1942. The year 1928 marks the year that the road was first planned, followed by construction shortly thereafter. The period of significance ends in 1942 with the end of CCC improvements at the North Rim of the Grand Canyon.

Criteria A: The North Rim Entrance Road Corridor is significant for its association with early NPS efforts in landscape architecture and comprehensive planning as well as with New Deal era CCC planning, design, and implementation. Stephen Mather, the first director of the NPS, created a landscape architecture division to plan for development in national parks, which was concerned with the construction of roads and trails within the national parks. Mather believed that the extension of road systems through the National Parks would encourage greater tourism. Additionally, under Mather’s model roads were to harmonize with their natural surrounding and enhance the visitor experience through presenting the most attractive views along the road. The surviving landscape features of the North Rim Entrance Road Corridor including the setting and environs of buildings and road, overlooks, vegetation, views and vistas, contribute significantly to the understanding of this period of landscape architecture design and the concern for accessibility. “The North Entrance Road is significant as an early example of the cooperative agreement between the NPS and BPR to build quality automotive roads within national parks. Although most road related structures reflect utilitarian reconstruction of the 1980s, it retains its rustic log entrance station and original alignment” (Anderson, 1994).

While major road construction projects were under the BPR from 1928 to 1931, important maintenance and landscape work associated with the road was relegated to the CCC crews in the mid-1930s. Between 1933 and 1935, the CCC undertook numerous roadway improvement projects, such as the installation of catch basins, stone culvert headwalls and drop inlets, retaining walls and vegetation clearing measures. Crews also implemented conservation practices along the corridor that helped to save natural resources and mitigate human impact on the North Rim environment. Conservation practices included fuel reduction to prevent fires, slope rounding and other erosion prevention practices, preservation of wildlife habitat and native vegetation, and protection of scenic features; many of these practices continue today.

Locally, the construction of the North Rim Entrance Road enabled a significant increase in local tourism to Grand Canyon National Park, and marked a dramatic shift in the patterns of visitor use at the North Rim as it encouraged use of private automobiles as the primary means to see the park. Since the road opened to the public, driving the road still remains the primary way that visitors see and experience the North Rim of the Grand Canyon.

Criteria C: The North Rim Entrance Road Corridor is significant under Criteria C for the distinctive characteristics of the road construction in the “Rustic style” which represent the collaborative efforts of the National Park Service and the Bureau of Public Roads. The rustic design idiom was reinforced as the CCC continued to improve the road corridor throughout the 1930s until 1942.

The NPS Rustic style, embraced by the NPS from the 1920s to the 1940s, is rooted in the English gardening tradition and popularized in the United States by the pastoral ideas conveyed in writings of Andrew Jackson Downing during the 19th century. In 1918, development policy drafted by the newly formed NPS stated that the construction of roads, trails, buildings and other improvements should harmonize with the landscape. “Successfully handled, it is a style that, through the use of native materials in proper scale... gives the feeling of having been executed by pioneer craftsmen with limited hand tools. It thus achieves sympathy with natural surroundings and with the past” (Good, 1938). Overall, the design and practices of the era focused on solutions that promoted asymmetry, casual continuity, a sensitivity to landform, and a skillful use of built as well as natural features in the landscape (McClelland, 1993).

Viewpoints and vistas, the character of road-related structures, and the creation of a road that followed the natural contours were given equal importance as practical and technical details of road construction. Solutions to gradient, drainage, grading required justification based on aesthetic values and an enhanced roadway experience. NPS road designers endeavored to eliminate hazardous curves, sharp turns and steep inclines in favor of curvilinear stretches of road grade. Using segments of primitive roads and wagon routes pre-dating the establishment of the park, these alterations were made to create the new alignment of the Entrance Road.

Paramount in designing the North Rim Entrance Road was the alignment to scenery. The nineteenth-century road design tradition, creating a sequential experience in which the visitor would pass through spaces of varying character and picturesque features prior to arriving at scenic vistas, was employed at Grand Canyon. The road program at the park, perhaps more than any other aspect of park development, endeavored to make parklands accessible to the public while leaving them unimpaired for the future.

As a result of these Rustic design philosophies, the North Rim Entrance Road, running from the Entrance Station to the Grand Canyon Lodge, follows an undulating and curvilinear alignment. Smooth curves and grades wind through meadows and around slopes, eventually hugging the edge of Roaring Springs Canyon on the Bright Angel Peninsula. Right angles were avoided, even at smaller scales such as within parking lots whose islands, aisles, and entrance/exit lanes were curvilinear in form. Additionally, landscape architects and planners created both formal and informal overlooks and viewpoints. The Entrance Station was purposely sited on a rise of land to allow long views to the north and south across the North Rim Entrance Road and meadows.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Designed Landscape

Current and Historic Use/Function:

Primary Historic Function:	Parkway (Landscape)
Primary Current Use:	Parkway (Landscape)
Other Use/Function	Other Type of Use or Function
Automobile	Current, Historic
Road-Related-Other	Current, Historic

Current and Historic Names:

Name	Type Of Name
North Rim Entrance Road Corridor	Current
North Entrance Road	Both Current And Historic
North Rim Entrance Road	Both Current And Historic

Chronology:

Year	Event	Annotation
CE 1870 - 1880	Built	Mormon bishop Levi Stewart wears a wagon road from Fredonia to Big Spring to access his ranch and sawmill at that site.

Year	Event	Annotation
CE 1870 - 1900	Built	The earliest recorded roads on the Kaibab Plateau provided the first European Americans access to the area for grazing, timbering, and hunting. These roads extended from the Mormon communities of Kanab, Utah and Fredonia, Arizona south to preferred sites for these activities.
CE 1872	Built	Road built to Big Springs by 1872.
CE 1880 - 1890	Built	Road built to V.T. Park, today called DeMotte Park, by 1890.
CE 1883 - 1915	Built	Prior to the arrival of NPS, all roads leading to Grand Canyon from the south, east, and north are built or worn in from 1883-1915.
CE 1900	Built	Road built to Indian Hollow near the head of Thunder River Trail by this time.
CE 1900	Built	Road built to Walhalla Plateau by this time.
CE 1902	Explored	Cartographer Francois Emile Matthes spent two summer seasons on the North Rim preparing accurate surveys that would result in the 1906 publication of the Bright Angel and Vishnu topographic maps.
CE 1906	Built	David Rust of Kanab, Utah, establishes a tourist camp at the later site of Phantom Ranch.
CE 1906	Built	Road built to the edge of Marble Canyon near the base of the Kaibab Plateau by this time.
CE 1906	Established	Portions of forest preserve were set aside as the Grand Canyon Game Preserve by Presidential Proclamation 694, November 28, 1906. This act followed Congress's authorization of protection of Kaibab Plateau deer herds.
CE 1906	Inhabited	James Owens arrives in Bright Angel Point area.
CE 1908	Established	The Grand Canyon Forest and Game Preserves are incorporated into Grand Canyon National Monument established under the Forest Service by Presidential Proclamation 794, January 11, 1908.
CE 1909	Explored	Gordon Wooley's automobile party reaches the general area of Bright Angel Point.
CE 1910	Built	Forest ranger station at Jacob Lake built.
CE 1913	Built	Forest Service starts construction of a road known as Grand Canyon Highway from Jacob Lake, Arizona to the North Rim. Although advertised as an "excellent auto road" the 56-mile road merely upgraded an old cattle and lumbermen's trail from the northern National Forest boundary at LeFevre Canyon to the Bright Angel Ranger Station located at Harvey Meadow (Anderson 1998, 151).
CE 1916	Explored	Joseph and Anna Brown's automobile party reaches the general area of Bright Angel Point.
CE 1917	Built	Thomas and Elizabeth Wylie McKee set up the first North Rim concession, the Wylie Way Tent Camp at the approximate site of today's Grand Canyon Lodge on Bright Angel Point.

North Rim Entrance Road Corridor
Grand Canyon National Park

Year	Event	Annotation
CE 1919	Established	The National Monument is abolished and the Grand Canyon, including the North Rim, is added as a unit of the National Park Service (NPS) in 1919.
CE 1923	Established	Arizona Governor Hunt's party visits North Rim.
CE 1924	Built	NPS begins long-delayed land and road improvements at the North Rim, particularly along former wagon roads that led to Point Sublime and Cape Royal. These improvements were meant to facilitate access to forest fires, not to encourage tourism (Anderson 1998, 155).
CE 1924	Established	Parry Brothers of Cedar City, Utah, begin to offer automotive bus trips to these points in cooperation with the Union Pacific Railroad and Utah Parks Company.
CE 1924	Established	The McKees begin to offer automobile trips from their camp at Bright Angel Point and offer wagon trips to Point Sublime and Cape Royal.
CE 1924 - 1926	Planned	Public Roads (BPR) engineers begin initial surveys for scenic automotive highways to Cape Royal and Point Sublime.
CE 1926	Established	On January 18, 1926, the NPS and the USDA signed an interbureau agreement that made the latter's BPR responsible for all construction and improvements of roads and trails within the National Parks. After the agreement was signed, the NPS Engineering Division was reorganized and its landscape engineers collaborated with the BPR at the beginning of each road project (McClelland 1998, 187).
CE 1927	Established	The Utah Parks Company is named concessionaire of the North Rim.
CE 1927	Land Transfer	Congress extends the Grand Canyon National Park's boundaries north of the Colorado River to include fifty-one square miles of the Kaibab National Forest.
CE 1927 - 1929	Built	Cape Royal Road Constructed.
CE 1927 - 1929	Planned	Construction of the twenty-one-mile Cape Royal Road and the Point Imperial spur.
CE 1928	Built	Construction of the North Rim Entrance Station, demarcating the official park boundary and entrance point as well as setting the initial alignment of the future North Rim Entrance Road. Period of significance begins for the North Rim Entrance Road Corridor Historic District with the construction of the Entrance Station.
CE 1928	Built	Fire Tower (Bldg. #132) erected at Bright Angel Point.
CE 1929	Planned	BPR engineers complete reconnaissance, survey, plans and specifications for a new North Entrance Road. Entrance Road survey follows old road beside the Entrance Station and as far south as Lindberg Hill.

North Rim Entrance Road Corridor
Grand Canyon National Park

Year	Event	Annotation
CE 1929	Planned	BPR solicited bids for grading the North Entrance Road and for a separate project to surface the new Cape Royal Road.
CE 1929 - 1931	Planned	In 1926, the NPS initiated a 5-year park development planning program in which each park was required to produce a 5-year development plan. The program was not entirely successful. In 1931, NPS director Horace Albright issued Office Order No. 228 to help standardize the planning process for all parks. The order outlined a standard format for the park plans, required accompanying maps, drawings, and sketches, and directed each park to update its plan annually. These documents came to be known as the park "Master Plans."
CE 1930	Built	Hodgman & HcVicar of Pasadena, California, begin work on the North Entrance Road in late spring 1930 as soon as winter thaw permitted equipment to be moved on-site. Contractors complete construction on 3 October 1930.
CE 1930 - 1931	Built	Construction of the North Rim Entrance Road, which replaced the 1913 Grand Canyon Highway. Construction of the 9.8 mile road was guided under the direction of the resident BPR engineer, Rudolph Thirion.
CE 1931	Built	Employee Residence (Bldg. #122) is built.
CE 1931	Built	Garage and Woodshed (Bldg. #122A) are built.
CE 1931	Paved	O.A. Lindberg of, Stockton, California, awarded contract for Entrance Road reinforcement, and complete surfacing by the end of the 1931 season.
CE 1931	Planned	BPR in San Francisco opens bids for sub grade reinforcement and bituminous-treated surfacing of the 9.98-mile entrance highway.
CE 1932	Established	BPR completes specifications for a seal coat to overlay the oil-mixed, crushed-rock surface applied the year before to a width of twenty feet.
CE 1932	Paved	Contract for the seal coat overlay awarded to O.A. Lindberg, who complete the project on 8 November 1932.
CE 1933	Built	Civilian Conservation Corps (CCC) arrive in the Park to improve the road by focusing on fuel reduction practices, re-vegetation efforts, and erosion prevention measures.
CE 1933	Moved	Fire Tower (Bldg. #132) is moved from Bright Angel Point several miles northeast of the Entrance Station.
CE 1933 - 1942	Established	Period in which CCC crews were employed for the maintenance and construction of the North Rim Entrance Road.
CE 1934	Graded	CCC teams help to grade roads in the North Rim region.

Year	Event	Annotation
CE 1935	Built	By 1935, Entrance Station acquires peeled-log curbing around a traffic channelization island which extended to the north and south the full width of the log cabin
CE 1936	Built	Original Lindberg Hill Tree Tower is constructed.
CE 1936 - 1939	Built	CCC workers build a new boundary fence and corral structure at the North Entrance Station (Mott 1983).
CE 1938	Built	CCC crews invest 1,700 man hours to excavate, clean, and replace culverts within a bed of crushed rock to prevent further clogging.
CE 1938	Designed	The North Entrance Sign is designed.
CE 1938 - 1940	Altered	From 1938 to 1940, under the supervision of the BPR, the road approaching the North Rim of the Grand Canyon from Jacob Lake, Arizona was regraded, realigned, and resurfaced (GRCA Annual Report, 1938).
CE 1939	Built	CCC crews built North Entrance Sign at a cost of 46 man days and \$31.67.
CE 1939	Built	During 1939, CCC crews continue construction of the north boundary fence (Mott, Memorandum, 1983).
CE 1941	Established	Grand Canyon National Park placed on standby for the duration of World War II.
CE 1942	Established	The completion of New Deal era improvements within the road corridor, marking the end of the period of significance for the North Rim Entrance Road Corridor Historic District.
CE 1946 - 1953	Damaged	Lack of adequate funding leads to a decrease in maintenance of the North Rim Entrance Road.
CE 1954	Altered	The Entrance Station's ceiling, doors, windows, wiring, fireplace and outlets are replaced. The Entrance Station (Bldg. #121) is also painted.
CE 1954 - 1964	Altered	Carports are removed from the Entrance Station.
CE 1964	Damaged	North Rim District Ranger reports that roads are in a bad state of repair and that maintenance work being done will not sustain the road for the next season.
CE 1964 - 1983	Altered	The Entrance Station's shake shingle roof is replaced or overlaid with corrugated metal, and light fixtures, signs, and other odd entrance paraphernalia are attached to the structure.
CE 1964 - 1983	Altered	The traffic channelization island is reconfigured (shortened and tapered toward the ends) and log curbing is replaced (perhaps years earlier) by concrete curbing.
CE 1965	Damaged	Snow drifts on North Rim Entrance Road persist into July and fire roads remained closed until the end of June. An early storm on 18 September caused more than 500 aspen trees to fall across the road, requiring a second seasonal road clearance project. This followed immediately after a project to chip seal the entire entrance road in July and August 1965.

Year	Event	Annotation
CE 1966	Damaged	Torrential rains cause heavy road damage. The Park applies for emergency federal funds that are denied.
CE 1967	Damaged	Due to 1966 rains, Point Imperial spur remains closed for the entire 1967 season.
CE 1967	Moved	Lindberg Hill Tree Tower is moved.
CE 1970	Planned	An NPS committee considers reconstruction of North Entrance Road.
CE 1977	Planned	The NPS and Federal Highway Administration assess the needs of the North Rim Entrance Road.
CE 1982 - 1984	Altered	Thirteen miles of the North Entrance Road were repaired, widened, and repaved. New drainage culverts and under drains were also installed along the 12.62 mile stretch of road from the Entrance Station to Bright Angel Point.
CE 1984	Paved	W.R. Skousen contracting of Mesa, Arizona, wins a surfacing contract for the North Rim Entrance Road. Road work also includes widening to 24-feet. Work is finished by mid July.
CE 1992	Developed	A Multiple Property Listing for the "Roads and Trails of Grand Canyon, Arizona" is drafted by Mike Anderson and Debra Sutphen, Research Assistants, Northern Arizona University (NAU) Center for Colorado Plateau Studies, in June 1992.
CE 1994	Developed	Historic American Engineering Record for the North Rim Entrance Road is Completed by Michael F. Anderson, HAER historian, in September 1994.
CE 1996	Developed	Multiple Property Listing for the "Roads and Trails of Grand Canyon, Arizona" is revised by Robbyn L. Jackson, Historical Architect, NPS Western Regional Office, in December 1996.
CE 2000	Damaged	Outlet Fire sweeps across North Rim burning vegetation along the road corridor.
CE 2000	Developed	Historic Structures Report addressing the Entrance Station is completed.
CE 2002 - 2006	Developed	Multiple Property Listing for the "Roads and Trails of Grand Canyon, Arizona" is revised by Anderson and Amanda Zeman to its current form in August 2002. Minimal editing was again completed by Anderson in December 2006.
CE 2003 - 2004	Developed	A Cultural Landscape Report is completed for the North Rim Entrance Road as part of the Bright Angel Peninsula Developed Area.
CE 2011	Developed	A CLI is completed for the North Entrance Road Corridor.

Physical History:

HISTORIC CONTEXT OF THE NORTH RIM ENTRANCE ROAD CORRIDOR

NOTE: The majority of this text came from the Historic American Engineering Record (HAER), North Entrance Road (Grand Canyon Route #4) HAER No. AZ-43; written by Michael F. Anderson, HAER historian, September 1994. It was augmented with information from the North Rim Bright Angel Peninsula Developed Area Cultural Landscape Report, "Roads and Trails" Multiple Property Submission for Grand Canyon, as well as the "Historic Park Landscapes in National and State Parks" Multiple Property Submission.

Historical Overview

When the National Park Service assumed management of Grand Canyon National Park in 1919, it inherited an insufficient network of ungraded dirt roads. All roads leading to Grand Canyon from the south, east, and north had been built or worn in the years 1883 through 1915 by tourist operators who were concerned only with the passage of horse-drawn stages and wagons. Roads within the park, other than the macadam-paved Hermit Rim Road at South Rim, resembled these early approaches. Summarily, the typical park road in 1919 was an 8'- to 12'-wide sinuous set of wagon tracks through terrain spotted with dense ponderosa pine forest, shallow but steep gullies, and frequent Kaibab Limestone outcroppings. All proved dusty in summer and impassable in winter or following any measurable rain.

Roads approaching Grand Canyon at its North Rim were if anything worse than those on the south, for several reasons. Elevations at North Rim average 1,000 feet higher than South Rim, a fact that created all manner of problems for early ungraded and otherwise unmaintained dirt roads. Rain, snow, frost, and thaw, though present on the South Rim, are far more severe on the north side of the chasm. Snow accumulation alone (and the federal government's choice not to plow) keeps even today's paved highways closed seven months of the year. More plentiful rain falling in frequent storms brought many more days when roadways turned to quagmires, becoming entirely impassable. Although early morning frosts tended to solidify early dirt roads thus making them passable, thaw which followed by mid-morning often stranded unwary motorists in the middle of nowhere.

Severe weather combined with local terrain to make early North Rim roads still worse. Unlike the South Rim where moisture drains away from the chasm leaving reasonably flat surfaces near the Canyon edge, moisture on the North Rim drains in to the Canyon, causing a more "ragged" edge laced with side canyons. Even today this topography requires roads of steeper grades, curves, and embankments, which are susceptible to slides. During the dirt road era the problem proved more severe as rutted wagon tracks served alternately as roads and stream beds.

Despite these adverse conditions, wagon and early automobile roads made their appearance at North Rim at the same time as South Rim, relative to their reason for being--pioneer tourist facilities. Although David Rust of Kanab, Utah, established a tourist camp at the later site of Phantom Ranch as early as 1906 (and presumably reached the head of his trail down Bright Angel Creek by way of a wagon road), tourism atop the North Rim lagged more than thirty years behind that at the south. In 1917, Thomas and Elizabeth Wylie McKee set up the first North Rim concession, a Wylie Way tent camp at the approximate site of today's Grand Canyon Lodge. Before that year, only two automobile parties are known to have reached the general area of Bright Angel Point: that of Gordon Wooley in 1909, which required passengers to build much of the road along the way; and a trip made by Joseph and Anna Brown about 1916, which Mrs. Brown in her understated manner has described as "difficult."

Details of North Rim history are less researched than South Rim history, and consistent with this statement, the exact paths followed by the earliest roads to North Rim are not as easy to trace as those to the south. It is clear, however, that the earliest roads and trails did not approach Bright Angel Point, just as the earliest roads and trails to South Rim did not approach Grand Canyon Village. The first European Americans to the North Rim arrived from the Mormon communities at Fredonia, Arizona, and Kanab, Utah, for one of three reasons: to graze cattle, cut timber, or hunt deer and cougar. For all, the rim of Grand Canyon was least amenable to their ends, thus roads and trails led to points such as Indian Hollow near the head of Thunder River Trail before the turn of the century (grazing cattle on the esplanade below the rim); Big Springs by 1872 (timber); V.T. Park, called DeMotte Park today, by the 1880s (cattle); the Walhalla Plateau before the turn of the century

(cattle); and the edge of Marble Canyon near the base of the Kaibab Plateau about 1906 (buffalo).

By the early years of the twentieth century, two roads began to take shape which did approach the area of Bright Angel Point, although they had not been developed to access that point. The first may well have been the "road" followed and partially built by the Gordon Wooley party of 1909. A wagon road from Fredonia to Big Spring, which had been worn by Mormon bishop Levi Stewart as early as the 1870s to access his ranch and sawmill at that site, likely served as the first leg. It is not too difficult to imagine a route continuing from that point up the Kaibab Plateau and on over to DeMotte Park (along the lines of today's Forest Road 422) where cattle belonging to the Mormon church grazed and where cattlemen later established headquarters buildings. Sources do not reveal exactly where Wooley, family, and friends arrived at the rim, but they likely traveled as far as V.T. Park where people might be found, then struck south. A 1927 regional map depicts this developed route as a (comparatively) major approach road as far as V.T. Park.

The second road to approach Bright Angel Point developed from Fredonia east to the base of the Kaibab Plateau then to the east of today's U.S. Highway 89A up LeFevre Canyon generally along Forest Roads 2480, 248A, or 279, crossing the line of U.S. 89 and continuing to the 1910 forest ranger station at Jacob Lake. In 1913, the Forest Service started construction of a road from Jacob Lake, Arizona to the North Rim. This approach would evolve into today's alignment of U.S. 89A and Arizona Highway 67 by the late 1920s and 1930s.

Research for this history did not reveal who was the first to visit Bright Angel Point or to develop a road from V.T. Park south to the point, but it is likely a wagon road approached within a few miles soon after the turn of the century with the arrival of James Owens in 1906. "Uncle Jimmy" was one of the more colorful characters to inhabit the Kaibab Plateau from that year until the middle 1920s, and the part time game warden (full time cougar killer) kept one of several cabins near Bright Angel Spring at Thompson Canyon. Cattlemen, too, passed this way as they drove herds up to the Walhalla Plateau at the turn of the century. When Anna Brown described her 1916 automobile trip to North Rim with husband Joe, her clearest recollection was driving up to Owens' cabin and staying the night before continuing to Bright Angel Point. When Arizona Governor Hunt's party visited North Rim in 1923, they too visited with Owens at his cabin along the way. A 1919 forest map depicts the old road from the north terminating at Bright Angel Spring, though by that year it must have continued as far as the McKee's camp.

A partial alignment of this early road is depicted on late 1920s plans to construct the new Entrance Road. It passed from V.T. Park directly into Little Park along today's alignment (these two meadows are contiguous except for the negligible intervening saddle). It then followed along today's line as far as Lindberg Hill where it veered to the west along a ridge west of Thompson Canyon before rejoining today's line in the vicinity of Bright Angel Spring. It is likely that the McKees themselves developed the remainder of the road after they established their camp in 1917. It is certain that they, the U.S. Forest Service, and the National Park Service after 1919 maintained it as best they could with limited funds for the following ten years.

Beginning in 1917, Thomas and Elizabeth McKee offered wagon trips and by 1924, automobile trips, from their camp at Bright Angel Point to Point Sublime and Cape Royal. In the latter year, they drove their few customers to these scenic points in a Dodge and two seven-passenger Buicks. Also by 1924, the Parry Brothers of Cedar City, Utah, began to offer automotive bus trips to these points in cooperation with the union Pacific Railroad and Utah Parks Company. At this same time, motorists in their private vehicles began to visit North Rim. The number of automobiles entering the park from the north increased approximately 1,000 per year through the middle and late 1920s. To handle the increased traffic, the NPS determined to build two new roads at North Rim: a new scenic highway from Bright Angel Point to Cape Royal, and a new entrance highway from the park boundary at Little Park to intersect with the Cape Royal road within Thompson Canyon. After grading Cape Royal Road in 1927-29, they immediately made plans for North Entrance Road.

Design and Construction

The NPS's planning precepts for the North Rim, as well as those for the Grand Canyon Village on the

South Rim, paralleled the American city planning movement initiated in the 1920s. Beginning with the NPS's administration in 1919, the North Rim was planned to incorporate separate private and public zones. The NPS's private utility and residential facilities were separated from the public visitor areas, as were the Utah Parks Company's utility and employee housing areas. The NPS and the Utah Park Company located their utility and residential areas even farther from the canyon rim, and screened them from the visitor's view by placing them well off the main approach road in the forest. Subsequent development plans for the North Rim adhered to this same basic zoning and siting techniques.

Standing in the way of road building efforts to enable tourists to reach the North Rim by automobile, however, was Ralph Cameron. Cameron held significant mining claims on the South Rim and had developed tourist facilities there. In 1920, Cameron was elected to represent Arizona as a U.S. Senator. Before his election to the Senate, Cameron represented Coconino County, the home of the Grand Canyon, in the U.S. House of Representatives. Due to Cameron's legislative efforts, the NPS was barred from disbursing funds to improve roads or make any other improvements at the North Rim. Not until 1924, when Cameron's opponents in the Senate, led by Utah Senator Reed Smoot, were able to facilitate the flow of federal funds did the NPS began long-delayed land and road improvements.

Between 1924 and 1926, Bureau of Public Roads (BPR) engineers began initial surveys for scenic automotive highways to Cape Royal and Point Sublime. Between 1927 and 1929, the NPS contracted to construct the twenty-one-mile Cape Royal Road and the Point Imperial spur. In 1928, a new cross-canyon link, known as the North Kaibab Trail, and originating at the head of Roaring Springs Canyon near Bright Angel Peninsula, became the chosen site for NPS and private tourist development. The trail led into the canyon from Bright Angel Peninsula and bypassed the alignment of the old cross-canyon trail that originated at Wooley Cabin at the head of Bright Angel Canyon.

In 1927, Congress extended the Grand Canyon National Park's boundaries north of the Colorado River to include fifty-one square miles of the Kaibab National Forest. The new roads and trails helped to increase the number of visitors coming to the North Rim during the summers of 1925 and 1926 to nearly 11,000, more than triple the number earlier in the decade.

BPR engineers completed reconnaissance, survey, plans and specifications for a new North Entrance Road in 1929. Aside from construction to modern standards, the significant difference between the old and new roads would be the alignment which, after climbing Lindberg Hill several miles south of the park boundary, would deviate from the old by descending on a moderate grade to the Thompson Canyon drainage. It would then follow the canyon's serpentine path, generally on the east side and slightly above the drainage bottom, to its intersection with Cape Royal Road. For a few years, administrators would consider this intersection at the confluence of Thompson and Fuller canyons to be the end of North Entrance Road. Inevitably, since tourists always drove directly to Grand Canyon Lodge upon arrival in the park, administrators began to consider the first three miles of the Cape Royal Road from Bright Angel Point to be the terminal portion of the Entrance Road.

The BPR solicited bids for grading the new road in December 1929, coincident with bids for a separate project to surface the new Cape Royal Road. United States Department of the Interior (USDI) awarded the contract to Hodgman & HcVicar of Pasadena, California, who began work in late spring 1930 as soon as winter thaw permitted equipment to be moved on-site. Under the direction of BPR resident engineer Rudolph Thirion, who had also directed construction of the Cape Royal Road, the contractors completed grading of the 9.979-mile-long, 18'-wide, 1926 forest standard highway (Station 0+00 at the north boundary to Station 520 + 38 at the Cape Royal Road intersection) on 3 October 1930. Project costs totaled \$92,192.24.

In March 1931, the BPR in San Francisco opened bids for sub grade reinforcement and bituminous-treated surfacing of the 9.98-mile entrance highway. USDI awarded the contract to O.A. Lindberg of, Stockton, California for the low bid of \$81,380.40, which was \$14,630.80 below engineers' estimates. The contractor began operations in June and apparently completed surfacing to a width of twenty feet by the end of the 1931 season, although one source indicates that the contract was not fulfilled until the following season, on 3 August 1932. Project costs totaled \$93,161.98.

In July 1932, the BPR completed specifications for a seal coat to overlay the oil-mixed, crushed-rock surface applied the year before to a width of twenty feet. This contract included bituminous surface treatment and a seal coat to the new 25.84- mile-long Cape Royal Road, the first portion of which (Station -10+00 to 146 +60) would be sealed to a width of twenty feet to conform with the Entrance Road, while the remainder of Cape Royal Road and Point Imperial spur would be surfaced to a width of eighteen feet. USDI awarded this contract to O.A. Lindberg in July for the low bid of \$59,460. Lindberg completed the project 8 November 1932.

No construction report was found for this project, but it appears to have been performed according to specifications, thus, we have some information on early seal coat projects at North Rim. The government supplied required fuel oil and asphaltic oil free of charge, but the contractor had to retrieve the oil at the railroad station in Cedar City, Utah, nearly 200 miles away, and transport it to the construction site at his own expense. The oil had to contain at least 94 percent asphalt with a penetration of 80 at a temperature of 77 degrees. Fuel oil had to be a 50-60 oil with a specific viscosity (Engler) at 122 degrees of between 10 and 25. The NPS designated quarries for obtaining aggregate screenings 300 feet north of the Entrance Road at Station 220+0Q, and left of Stations 528+00 and 1120+00 and right of Station 1138+00 along Cape Royal Road.

Within the seal coat process, Lindberg had to work on one half of the roadway width at a time, using whatever flagmen and warning signs required to allow traffic to pass on the other lane. The first task consisted of reworking any road segments which showed signs of cracking or moisture damage to the sub grade. This process consisted of scarifying the top layer and blading with a windrow all loosened material to the center of the road. After allowing moisture to evaporate from the pile, it was bladed over the full width of the roadway and again allowed to dry. This process was repeated until the engineer determined that all moisture had been removed down to the level of the base course. The surface was then continuously bladed and allowed to compact under traffic.

After compaction, workmen swept the roadway free of all dirt and other materials with power and hand brooms, then applied a fuel oil prime coat. Fuel oil was heated to at least 140 degrees in a retort or by steam coils and spread with a mechanical spreader at a rate of 1/8 gallon per square yard. Immediately upon application, workmen broomed the surface to accelerate oil penetration, after which traffic was kept off the primed surface until the oil was completely absorbed. The supervising engineer did not allow the contractor to apply the prime coat when the weather was cloudy or foggy, or when the surface was wet.

The contractor also had to follow specific requirements for fine screened aggregate to be used in the seal coat. working within designated quarries, the material first had to pass a 3/4" square mesh screen; be of "sound, tough, durable rock or gravel, free from adobe, vegetable matter, loam, or other deleterious matter"; and wasted within the quarry, if rejected. This material was then crushed and passed through a 3/8" mesh, with 85 percent of the resultant screenings consisting of material which would not pass a number ten mesh screen. The contract required Lindberg to use up all promising material within a quarry then slope the sides and otherwise cleanup the site before moving to another. The government paid for the cost of moving the quarry site under these conditions.

The seal coat could be applied only when temperatures exceeded 65 degrees (a condition which would prevent application at North Rim in early mornings and late evenings, even during summer months). Asphaltic oil was heated to between 300 and 400 degrees, then laid down with a spraying machine at that temperature at a rate of 1/6 gallon per square yard. Screenings were immediately spread atop the oil at a rate of 12-18 pounds per square yard, using trucks with spreaders operating in reverse such that truck wheels would pass over the laid material. The treated surface was then broomed and rolled and the oil/screenings applied a second time. After traffic was allowed over the sealed surface for a period, Lindberg again covered any excess oil with screenings, then reshaped gutters and shoulders and dumped excess material over adjacent fill slopes.

Major Repairs and Alterations

In 1933, showing a perceptive understanding of the path that the NPS would follow throughout the

1930s, GRCA Superintendent Minor R. Tillotson noted that, "from a purely mercenary point of view, the park is in a fair way to gain more in the form of physical improvements by the National Recovery Act than would have transpired for a number of years—in some instances perhaps not at all—under a normal trend of park affairs." Though he cited the June 1933 National Recovery Act in discussing the impact of federal emergency relief funds on the Grand Canyon, the funds that NPS administrators would use to realize the back-log of demand for infrastructure at the national parks were actually administered by several federal relief programs during the 1930s; the two programs under which the vast majority of funds in and around the GRCA were spent were those from the Public Works Administration (PWA) and the Civilian Conservation Corps (CCC). The availability of PWA funds enabled the construction or improvement of the vast majority of roads in and to the North Rim in the mid-1930s to the early 1940s. PWA funds were granted to private contractors to hire workers to build state and federal infrastructure projects. Because the dire economic conditions of the Great Depression caused fierce competition between road builders, the NPS and the BPR, the federal agency responsible for road construction in the national parks, obtained lower prices for their construction projects. They also helped to grade roads in the region. In 1934, CCC teams helped to grade roads in the North Rim region.

As with construction of Cape Royal Road, few road-associated structures were built during these initial grading, surfacing, and seal coat projects. Drainage, of course, would have been provided ahead of grading during the first project, and it is clear that initial culverts were of corrugated metal pipe (CMP), probably with dry rubble masonry headwalls (one such headwall survives) as along Cape Royal Road. Several years later, the BPR supervised a project, somewhat unusual among early Grand Canyon National Park (GCNP) roads, to install approximately 2000 feet of perforated 8" CMP along portions of the roadway which exhibited poor drainage. These drains failed (clogged) within a few years, and in October 1938, CCC crews invested 1,700 man hours to excavate, clean, and replace them within a bed of crushed rock to prevent further clogging.

Other early road-related structures not associated with initial road projects include the Entrance Station, which was constructed in summer 1928. In that year, the pioneer wagon road was the only entrance to the park and the new automotive road had not yet been surveyed. Nonetheless, Congress had revised the park's north boundary in February 1927 to include the saddle between V.T. (DeMotte) Park and Little Park where the station was built the following year. The NPS built the station at the new boundary along the path of the old road, and the 1929 road survey simply followed the old road beside the station (and as far south as Lindberg Hill).

As constructed in 1928, the Entrance Station reflected the "trapper variation" (much favored by Stephen Mather) of rustic style architecture with rough-hewn whole logs of variable lengths overlapping at each of its four corners. Carports over both the entrance and exit sides of the structure formed a continuous line with the original shake shingle roof and were supported by massive peeled logs at each corner. The earliest photograph found during research for this project depicts Ranger Ed Laws standing in front of this remarkable structure two years after construction. Its covered entrance concept remained unique at Grand Canyon until construction of the new South Entrance Station in the late 1980s.

The Entrance Station has evolved over the years-undergoing major internal changes, losing aesthetically pleasing parts of itself, and gaining more modern, undesirable elements-but it retains its core structural integrity. By 1935, it had acquired whole peeled-log curbing around a traffic channelization island which extended to the north and south the full width of the log cabin, as well as the automotive road which now passed beneath its carports. Either CCC or park crews planted pine seedlings beside the cabin within the island, and a small white sign with dark lettering reading "keep to right" sufficed to remind motorists that the correct lane lay to their right. A flag poll had also sprouted from the south side traffic island by 1935. No curbing delineated the nearby parking area. In fact, the all-wood station basically stood alone in what in 1935 could be called a near wilderness, free of distracting structures. With CCC crews keeping the site swept and clear of debris, the station and its rustic-appearing, oil-mixed gravel road surface made for an appealing north entrance portal. In addition to its aesthetics, the road served a necessary function in linking the further development of the buildings and infrastructure at the North Rim. To help facilitate the work to rebuild the Lodge which was destroyed by a fire on September 1, 1932, the NPS, the BPR, and the state of Arizona

attempted to keep the North Entrance Road open for a distance of forty-four miles to the junction with U.S. 89 during the winter of 1936-37. However, heavy snowfalls in January 1937 forced the road to be closed.

By 1949, the pine seedlings beside the cabin had reached the eaves of the roof and the site had acquired a few more signs (35 mph speed limit), but otherwise appeared the same as in the 1930s. The first major alterations to the building took place in 1954. The original fireplace which had stood in the structure's center was replaced by an oil stove and the masonry chimney replaced with a standard metal stove-type chimney. The old wooden floor and center partitions were torn out and a concrete floor poured. The ceiling was lowered by installing new rafters and placing a wall board ceiling. New sectional doors, electrical wiring, windows, and outlets were installed, and the whole structure "painted" (apparently stained, at least on the outside) inside and out. The station's exterior remained basically untouched, other than the new chimney arrangement and stain.

Between 1954 and 1964 the station lost its carports and had begun to acquire more traffic and information signs as well as the ugly day-glow orange "dunce caps" which to this day are used to funnel traffic alongside the station. Between 1964 and 1983, the shake shingle roof was replaced or overlaid with corrugated metal, and light fixtures, signs, and other odd entrance paraphernalia attached themselves to the structure. The traffic channelization island was reconfigured (shortened and tapered toward the ends) and log curbing was replaced (perhaps years earlier) by concrete curbing. This is basically how the Entrance Station appears today: the cabin, an anachronism rather than an adjunct of the forest and the site itself an unappealing portal for park visitors.

Another early addition to the North Entrance Road environment is the North Entrance Sign, designed with an elaborate construction drawing in 1938 and constructed by CCC crews in October 1939 at a cost of 46 man days and \$31.67. The sign seen today is no doubt original, but varies somewhat from its design. The massive peeled whole log posts, horizontal beam, heavy metal straps, masonry base of weathered stone (now buried slightly), sign, and wording are identical to 1938 drawings, but a few features such as a third, shorter massive log fronting the west post are missing. The appeal of this unusual rustic entrance sign is untarnished by its brown painted surface today; it may, in fact, have been painted immediately upon construction.

From the moment they arrived at the North Rim and setup camp at Neal Spring in May 1933, CCC forces were employed each summer season through 1941 in maintenance of North Rim Entrance Road and construction and repair of road-related structures such as the entrance sign. Park administrators appreciated the combination, of nearly unlimited manpower and ample recovery act funds at North Rim, where roads follow along the base of steep canyon slopes and require attention after each winter season to clear slides, clean out ditches, and repair shoulders and surfacing. In some cases CCC crews completed projects with perennial effects such as slope rounding and revegetation to help prevent slides and building guardrails along dangerous segments of roadway.

With the United States' entry into World War II, Grand Canyon National Park--like all national parks--went on "standby" for the duration. With young men of the CCC reassigned to wartime duty, experienced NPS personnel too off to fight the war, a cessation of public works monies, and draconian cuts in operational funds, park administration had little choice. Road construction ceased and maintenance was reduced to essential repairs, but deleterious effects were mitigated by a number of factors. While funding dropped to early 1920s levels, so did visitation numbers as the wartime Office of Defense Transportation called a halt to all scenic bus tours as well as civilian operations of the Grand Canyon Railway. Rubber and gasoline rationing further diminished the number of vehicles traveling (thus wearing) the park's roads. Roadways require maintenance whether used or not, but GCNP and regional roads were all fairly new (1928-39) at the outbreak of the war and they would not fall apart immediately.

The situation at the North Rim more or less mirrored that at South Rim. Through the war years, park road crews still arrived in late spring, cleared North Entrance Road to Grand Canyon Lodge, and performed demand maintenance on the roadway through the summer months. Grand Canyon Lodge closed during the war as did Jack & Mardene Church's mule trip concession, but the deluxe cottages and cafeteria remained open for a diminished number of visitors. Although nothing is written about

North Entrance Road in Superintendent H.C. Bryant's annual reports in these years, it is reasonable to assume that park road crews spent most of their time just keeping the road clear, and little time on routine but not annually essential maintenance activities such as crack sealing, patching, seal coating, shoulder and embankment sloping, and ditch and culvert clearing.

Grand Canyon's roads (and entire infrastructure) really took a turn for the worse after the war when the worst possible set of circumstances for park improvements combined in the years 1946-1953. Superintendent Bryant noted that everyone and their brothers returned to the national parks after the war, spurred by the release of wartime tensions, termination of rationing and travel restraints, and general prosperity. Visitation, which more than tripled in the few years following the war and kept on rising, fueled all other problems. Roads which were entering middle age (as roads go) immediately showed the wear of heavier and more vehicles, yet operational funding did not immediately increase after the war. More funds, as well as war surplus road equipment, began to turn the situation around by 1950, but immediate attention had to be given to South Rim roads as they still carried 90 percent of park visitors.

Road funds began to loosen up in the early 1950s and the NPS Mission 66 program carried the pace of road reconstructions into the 1960s, but again, South Rim received the lion's share of attention. Although Cape Royal Road was reconstructed in the late 1950s and early 1960s, North Entrance Road continued to function solely with routine spring clearance, patching, and an occasional seal coat. By 1964, the North Rim District Ranger reported that:

"As usual, much of the maintenance crew's time was spent repairing the winter damage to the north entrance road; patching, oiling, and chipping where necessary. This road is in such a bad state of repair that even this work is not enough to hold it for next season."

In the following year the park forester highlighted the vagaries of North Rim road maintenance when he reported that crews had plowed through 4'-6' of snow to open the entrance road by 12 May, but storms of 13 May and 24 May dropped another 23". Snow drifts persisted into July and fire roads remained closed until the end of June. On the back side of the season, an early storm on 18 September caused more than 500 aspen trees to fall across the roads, requiring a second seasonal road clearance project. This followed immediately after a project to chip seal the entire entrance road in July and August 1965.

The year 1966 proved even worse. In December, torrential rains and flooding caused heavy road damage such as eroded shoulders, buried ditches and culverts, pavement settlement, and mud and debris atop the entrance and Cape Royal roads. The park applied for emergency federal funds and was turned down because repairs were classified as "heavy maintenance," and had to go after the damage with operating funds in summer 1967. Continuing heavy rains hampered this effort and the Point Imperial spur remained closed for the entire 1967 season. On paved roads alone (Cape Royal Road, Point Imperial spur, North Entrance Road), NPS road crews spent 267 man days removing mud slides and repairing flood damage, another 132 man days on standard maintenance, and twelve additional days on roadside repair. Further, the park contracted with Concrete Construction Company of Phoenix, Arizona, and with Robert E. McLaren of Mentone, California, to assist with the repairs, spending an additional \$46,000.00 for this help.

The years 1966 and 1967 were unusual only for their severity, and after forty years serving without reconstruction, North Entrance Road was one tired roadway. After all other park roads of the 1928-35 era except West Rim Drive had been reconstructed, and after the North Approach Road from Jacob Lake to the Entrance Station had been rebuilt twice (in the 1930s and late 1960s), an NPS committee began finally to consider reconstruction of North Entrance Road in 1970. While these men recognized that the road followed steep slopes with corresponding steep grades and curves, they recommended a project which, would protect the adjacent landscape and follow the original alignment other than slight curve improvements and a wider surface course.

Ideas for reconstruction languished in a "consideration" stage until the NPS and Federal Highway Administration (FHWA, the modern name for the BPR) started at ground zero in 1977 with an assessment of the roadway's needs. All noted that the original (existing) road with its 18'-wide

wearing course, inadequate drainage, and little or no base was insufficient for modern vehicle widths, weight, and numbers and would require complete reconstruction. All reconfirmed that a new roadway should follow the original alignment to avoid landscape scarring and that the segment from the Entrance Station to Cape Royal Road intersection should be completed first, but opinions differed as to design. NPS landscape architects and environmental specialists favored 28 feet of pavement (11' lanes and 3' paved shoulders) while the NPS regional director oddly enough suggested a narrower 24' paved surface (10' lanes and 2' paved shoulders). Ultimately, the parties compromised by doing nothing for another five years.

The most significant changes under the 1976 Master Plan occurred between 1982 and 1984 when thirteen miles of the North Entrance Road were repaired, widened, and repaved. A greatly reduced project to renovate, but not reconstruct, the 50-year-old North Entrance Road emerged in the early 1980s and was followed through to completion in 1984. This began as a project to install new drainage culverts and under drains, repair unstable areas of roadway, and apply a Type 3 Seal coat from the North Entrance station to Bright Angel Point. In July 1982, Hurricane Sand and Gravel of Hurricane, Utah, won the contract for the bid price of \$654,383.64. They began work on 29 July 1982 and apparently had completed all aspects of the contract other than seal coating (which was in progress) by September 1983 when the NPS/FHWA terminated the contract because there, had decided instead to proceed with bituminous surfacing.

The FHWA negotiated Change Order No.5 to the initial contract to allow Hurricane Sand and Gravel to apply bituminous surfacing, but reneged on the agreement when the federal agency claimed that the contractor had defaulted on a separate aggregate supply contract. The aborted agreement brought an end to the project, but not to the dispute, which centered on the contractor's claim that unusual rainfall in summer 1983 had disrupted his operations at the Cedar Knolls pit, 15 miles south of Fredonia, Arizona, and resulted in late deliveries of aggregate. He had mobilized a hot plant to handle the bituminous surfacing when the FHWA called a halt to the project, and claimed \$143,500 in damages as a result. In April 1987, federal counsel determined that the contractor was right and the FHWA settled the claim.

In May 1984, W.R. Skousen contracting of Mesa, Arizona, won a surfacing contract for the bid price of \$1,150,775.00 It called for a 0 '-2" overlay of Asphalt Cement AC-10 and a Type 2 seal coat, 24' wide and 12.62 miles long, from the Entrance Station to a point atop Bright Angel Point a short distance north of Grand canyon Lodge. The NPS, which had not had much luck of late with contractors supplying the required aggregate (another contractor had recently defaulted), furnished Grade D aggregate for the bituminous mix from the House Rock pit and filler material from the Fredonia area free of charge. The contractor started work on 9 May and finished 11 July 1984. Final contract amounts totaled \$1,217,942.24 due to change orders to pave adjacent parking lots and pullouts and to furnish and install grates on down drains.



North Rim Entrance Road construction, circa 1935. (GRCA Museum Collection Catalog #02950).



North Rim Entrance Road construction by CCC workers, July 1937. (GRCA Museum Collection Catalog #02940).



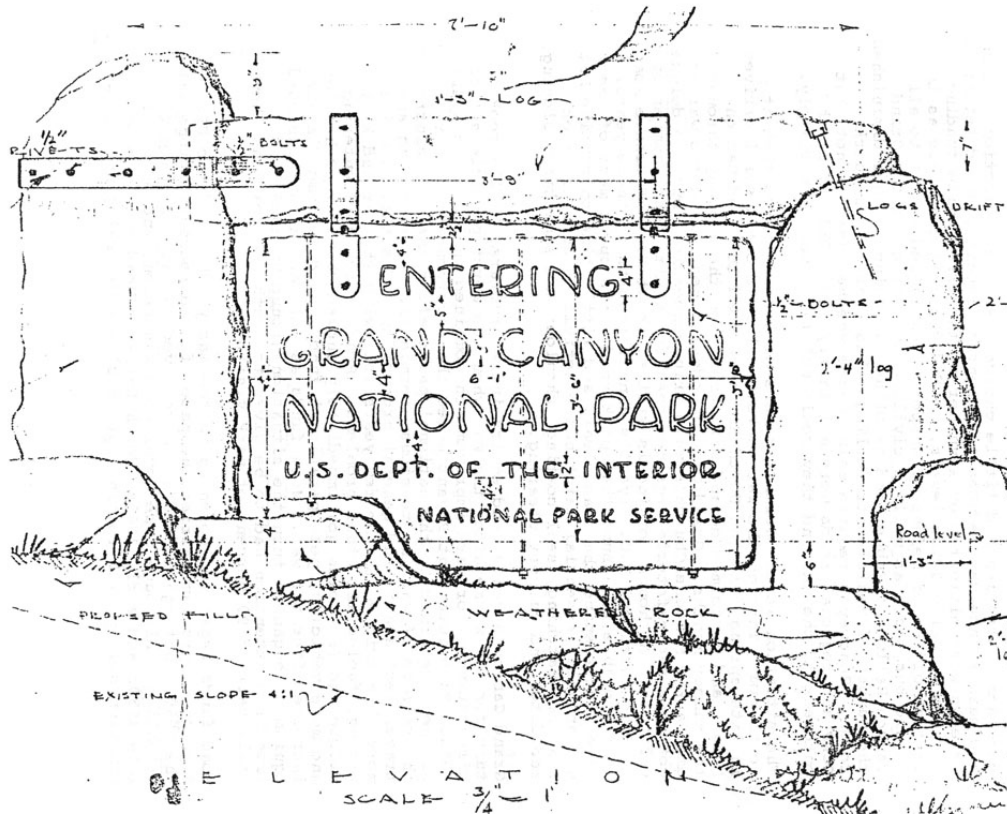
CCC workers clearing brush beside the North Entrance Road corridor. (GRCA Museum Collection Catalog #7986).



Entrance Road from North looking South, 1930. (Source: North Rim Developed Area Cultural Landscape Report, 2004).



Entrance Road from South looking North, 1930. (Source: North Rim Developed Area Cultural Landscape Report, 2004).



Architectural Sketch of Entrance Sign 1938. (Source: HAER Record, HAER No. AZ-43).



Modern day Entrance Sign. (Source: North Rim Developed Area Cultural Landscape Report, 2004).

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

North Rim Entrance Road Corridor Historic District retains high levels of integrity. Perhaps most importantly, the visitor experience of approach and arrival to the North Rim and Bright Angel Peninsula along the Entrance Road remains virtually physically unchanged from the period of significance. The appearance and character of the “scenic Entrance Road” that most visitors have since come to associate, almost unconsciously, with their experience of park scenery, wildlife, and wilderness remains intact from the North Rim Historic Entrance Road’s period of significance (1928 to 1942). Changes and additions to the landscape since the period of significance, such as new surface materials, widening of the travel lanes, alteration of the Entrance Station, and changes to drainage structures, do not diminish the overall historic integrity of the district. The overall historic character remains substantially intact and integrity of the road corridor has been retained.

Location:

The property retains integrity of location, given that many of the landscape features and systems from the period of significance are still extant today. The Entrance Station and associated features remain in their original locations, with the exception of the canopies of the Entrance Station that were removed. However, all other contributing buildings, structures, and sites remain in their original location within the forested natural environment. Additionally the road alignment has been essentially unchanged since its construction in 1928-1931. Overall, the district retains integrity of location.

Design:

Design elements of the Entrance Road such as curvilinear alignments, looped configurations, and scenic views and vistas contribute to the experiential road qualities of the North Rim at Grand Canyon National Park. The

road was aligned to follow natural contours, provide panoramic views, and minimize road construction impacts through the retention of native vegetation. Panoramic views resulted from deliberate engineering decisions to incorporate scenery as an element of the overall design, which was reflected in the road alignments. All of these characteristics typify NPS road designs of the 1920s and 1930s.

The design of the district also relied on NPS Rustic aesthetic preferences that advocate use of native materials, horizontal design, and subordination to the natural setting. These characteristics are also evident in the road, buildings and structures associated with the North Rim Entrance Road Corridor. Additionally, the simplicity of building forms, appropriate architectural scale and hand-hewn construction techniques reconfirm stylistic ideals that date from the period of significance. Because much of the overall corridor spatial organization, land cover, and road alignment of the early 1930s survive, the district retains integrity of design.

Setting:

The setting of the North Rim Entrance Road Corridor consists of a variety of natural features which guided the positioning of the road within the park. Natural features, in addition to other features continue to provide visual interest and allow travelers to experience the physiographic character of the North Rim. Despite some changed in vegetative cover from fire, the naturalistic design ideas of the 1930s continue to be expressed through the retention and dominance of native flora. Mature trees and shrubs continue to screen certain areas and focus visitor views along the road corridor. Overall, the general character of the surrounding forest areas, meadows, and the Entrance Station and road's relationship to topography remain essentially unchanged from the period of significance. The property retains integrity of setting for the period of significance.

Materials/Workmanship:

The road system does not retain integrity of materials and workmanship. Much of the overall character of the road surface materials, pavement width, and drainage structures established during the 1930s do not survive. However, the existing road materials and workmanship are not vastly different from those qualities employed during its construction from 1928 to 1931. Integrity of materials and workmanship is not retained for the road.

Conversely, the buildings and structures of the district do exhibit integrity of materials and workmanship. The application of native materials, such as the use of stone and wood, remain as character-defining features of the buildings and are an identifiable design element endorsed by NPS Rustic designers. Such materials reflect a conscious effort to design with locally available supplies that fit with the indigenous landscape. Skilled, hand-worked materials, a design attribute that is generally associated with 1920s and 1930s-era national park construction, is also apparent in the Entrance Station, Employee Residence and Garage and Woodshed. Overall, the buildings and structures retain integrity of materials and workmanship.

Feeling:

The configuration and design details of the Entrance Road and Entrance Station impart a feeling that is identifiable with national parks constructed during the 1930s. Views and vistas are a fundamental and noteworthy element of the feeling of the district. By default, the curvilinear nature of the roadway reveals only a portion of paved surface within the immediate viewshed, thus providing for scenic variety and retention of feeling. Adjacent vegetation along the roadways also aids in the feeling of the landscape. Although some areas along the Entrance Road have burned in recent years, the design of the roadways promotes views that vary from long-range meadows to close-range forested vistas. The district, as a whole, retains many of the primary components and characteristics of the period of significance and therefore retains integrity of feeling. The physical features that exist at present continue to convey the corridor's historic, 1930s character.

Association:

A direct link between those who influenced the North Rim Entrance Road's landscape during the period of significance, including the CCC and the collaborative team of BPR and NPS designers, remains evident in the surviving road alignment, rounded and cleared slopes, and other features that remain intact from the period of significance. Similarly, physical qualities of the Employee Residence and Entrance Station have also retained association with early NPS designers and the Rustic style. Additionally, the site's association retains integrity as an example of park planning ideals of the 1920s and 1930s era that advocated established transportation routes throughout the park. Therefore, the overall district retains integrity of association.

Landscape Characteristic:

Buildings and Structures

BUILDINGS

North Rim Entrance Road Corridor

The only building located within the North Rim Entrance Road Corridor Historic District, is a fire cache trailer at Lindberg Hill. The fire cache trailer is a converted, aluminum sided mobile home resting on jack stands at the edge of the clearing. It is non-contributing.

Entrance Station Sub Area

The Entrance Station Sub Area is composed of the checking/registration station at the park entrance and the nearby Employee Residence and access roads. The Entrance Station Sub Area contains four buildings: the Entrance Station (Bldg. #121), an Employee Residence (Bldg. #122), a Garage and Woodshed (Bldg. #122A), and a smaller shed (no Bldg number). Each building is discussed in further detail below.

North Rim Entrance Station:

The 1928 Entrance Station (Bldg. #121) is a Rustic chinked log building measuring eighteen feet by thirteen feet. The gabled roof is sheathed in corrugated metal. Bays of windows are located on the north and south elevations, while smaller windows and entrances are located on the east and west elevations. The Entrance Station remains in its original 1928 location, surrounded by entrance and exit lanes. This location is important because the Entrance Station sits on a rise of land permitting long views to the north and south. These views are not only aesthetically appealing but help park rangers see vehicles coming from a distance. At the time of its construction, the Entrance Station was located on a grassy median surrounded by rutted, unpaved entrance and exit lanes. Prior to paving the Entrance Road, these lanes consisted of oil mixed gravel and were depressed slightly below grade.

The Entrance Station has undergone a number of changes. Between 1954 and 1964, the two canopies, or wings, were removed to allow larger vehicles to pass through. The building interior has also been greatly altered, according to a Historic Structures Report completed in 2000. As a result, the building does not retain integrity and is not contributing to the district. Nevertheless, the building is an important feature and serves an important function within the district.

Employee Residence:

The Employee Residence (Bldg. #122) was built in 1931 and is of Rustic log construction resting on a stone foundation. The gabled, multi level roof is sheathed in corrugated metal with exposed rafter tails. A stone chimney rises from the center of the roof. The main entrance is located on the southern elevation beneath a gabled porch. Wood trimmed, multiple light windows are located on all elevations. The residence is most likely in its original location, thus retaining its spatial relationship to the Entrance Station. Hidden from view of the Entrance Station, the location affords residents privacy and maintains the corridor's natural character. The residence (Bldg. #122) once housed the ranger assigned to Entrance Station duty. Currently, the building serves as temporary housing for NPS employees.

Garage and Woodshed:

The Garage and Woodshed (Bldg. #122A) behind the residence, also built in 1931, is of Rustic log construction with two sets of wood plank double doors, and no noticeable paint. The gable roof is covered in corrugated metal. The Garage is most likely in its original location and retains its special relationship to the Entrance Station and Employee Residence.

Small Shed:

A smaller detached shed with vertical board siding and a shake roof was also noted in the vicinity of the Employee Residence. Located within the wooded area near the Garage and Woodshed, the small shed is severely deteriorating. Its origin is unknown.

STRUCTURES

North Rim Entrance Road Corridor

Overall, there are a number of structures within the district that contribute to the significance and integrity of the road corridor. These include both the current and original alignment of the North Rim Entrance Road (including drainage features), the trace road south of the Entrance Station, access road to Harvey Meadow/Widforss Trail. These are addressed in detail in the Circulation section of this document.

Additionally, there are a few non-contributing structures, including a tree tower at Lindberg Hill. The tree tower consists of a dead Douglas Fir tree, approximately seventy-five feet tall. The tree tower, known as TT 7: Lindbergh Hill Tree, was originally created in 1936 by the CCC by affixing a ladder to the trunk that extended to the highest branches. The ladder consisted of 5 sections with a total of 60 rungs; the tree was also grounded against lightning. The ladder was moved from its original tree to the current tree in 1967. The tree tower is one of approximately 13 on the North Rim and 8 on the South Rim that were built and installed by ECW/CCC between 1934 and 1937. In 2010, the tree was determined ineligible for listing on the National Register, and it will likely be removed in the near future as it poses a safety hazard to fire crews using Lindberg Hill.

Entrance Station Sub Area

Similar to the road corridor, the Entrance Station Sub-Unit contains a number of structures related to circulation features. These are addressed in the Circulation section.

CONTRIBUTING FEATURES:

- Employee Residence (LCS-009444; NRQ0122; Bldg #122)
- Garage and Woodshed (LCS-009445; NRB0122A; Bldg #122A)

NON CONTRIBUTING FEATURES:

- Fire Cache Trailer – Lindberg Hill
- North Rim Entrance Station (LCS-009443; NRB0121; Bldg #121), lacks integrity
- Tree Tower at Lindberg Hill

UNDETERMINED FEATURES:

- Small Shed at Employee Residence

Landscape Characteristic Graphics:



View of the Entrance Station from the north. Photograph by Meaghan Heisinger, August 2010.



Entrance Station. Photograph by Meaghan Heisinger, August 2010.



*Entrance station showing views to south along the Entrance Road as one enters from the north.
Photograph by Meaghan Heisinger, August 2010.*



Employee Residence. Photograph by Meaghan Heisinger, August 2010.



View from the Employee Residence west toward the Entrance Road, showing seclusion of the area from the adjacent Entrance Road and Entrance Station. Photograph by Meaghan Heisinger, August 2010.



Garage and Woodshed at the Employees Residence. Photo by Meaghan Heisinger, August 2010.



Small Shed near Employee's Residence. Photograph by Meaghan Heisinger, August 2010.

Landscape Characteristic: Circulation

North Rim Entrance Road Corridor

Overall, there are a number of circulation features that contribute to the significance and integrity of the road corridor. These include both the current and original alignment of the North Rim Entrance Road (including drainage features), the trace road south of the Entrance Station, access road to Harvey Meadow/Widforss Trail. Additionally, there are a few non-contributing structures, including the parking lot and access roads to the picnic area near Lindberg Hill, and two access roads to Lindberg Hill. Each of these is described below in more detail.

The primary circulation feature is the North Rim Entrance Road and its associated drainage features (headwalls, culverts, gutters, curbs, drop inlets). The roadway is a curving, graded two lane parkway with a 25 foot wide asphalt surface and shoulders that vary from grass to gravel. Several gravel or asphalt pull offs exist along the road corridor. The pull offs are widened road shoulders, approximately 45 to 50 feet in length and semicircular in form, that sometimes include interpretive signs and/or log edging. The majority of the road features contemporary corrugated metal, flared end culverts that channel water beneath the road grade. The 13 mile (10.6 of which is included in this district), paved North Rim Entrance Road was built between 1930 and 1931, as a joint NPS and BPR project, to replace the original alignment.

Overall, the road remains relatively intact from the period of significance. In 1984, the road was re surfaced and widened from its original 20 feet to 25 feet with 2 foot wide shoulders. The road improvement project did not alter the character or alignment of the 1930s road, but did alter road materials. At some point in time, the road drainage system was upgraded to modern materials. However, at least one culvert with a stone headwall, which, according to a 1994 Historic American Engineering Record report, might survive from the initial 1930 construction project. Historically, the road had no curbs and few features to distract from the surrounding scenery. Today, some asphalt curbs have been added to direct drainage into drop inlets and gutters. Pull offs have also been

added for interpretive purposes; some along the road feature log edging. Although parking pull offs, interpretive signage, and traffic signs were added since the period of significance, the road continues to be a subtle imposition on the landscape, and subjugated to the surrounding environment.

In contrast to the current alignment, the original, pre 1930 North Rim Entrance Road “passed from V.T. Park directly into Little Park Meadow along the current alignment. It then followed along today’s alignment as far as Lindberg Hill where it veered to the west along a ridge west of Thompson Canyon before joining today’s line in the vicinity of Bright Angel Spring” (HAER, “North Rim Entrance Road,” 10). At present, this original alignment can be seen as it veers west near Lindberg Hill and is used as a fire road, known as Road #W1a, “Range Road.” The original alignment can also be seen along the Access Road to Harvey Meadow and the Widforss Trail.

Other contributing circulation features include a trace road south of the Entrance Station and the Access Road to Harvey Meadow/ Widforss Trail. In Upper Little Park Meadow, less than one mile south of the Entrance Station, the grass surfaced trace road leads from the North Rim Entrance Road to the west. The road, upon where it intersects the North Rim Entrance Road, is paved in asphalt, but the unpaved road bed is blocked from vehicular access by a sign. Near the intersection of Cape Royal Road and the Entrance Road, an unpaved access road leads to the Widforss Trailhead parking lot through Harvey Meadow. From here, visitors can reach a “cave,” located north of Harvey Meadow, by following a narrow footpath leading from the access road to the rocky outcrops.

Non-contributing circulation features within the district serve a variety of purposes. North of Lindberg Hill, two paved drives provide access to a formalized parking lot and picnic area—the only formal parking lot along the North Rim Entrance Road. This asphalt lot with concrete curbing can accommodate 24 cars. It was built after the period of significance and is non-contributing.

Adjacent to the parking area and picnic area, a 30 foot wide road provides access to Lindberg Hill. The road is broad enough to accommodate large vehicles, relating to the site’s role as a fire camp and dry dump. An additional gated access road, narrower than the main access drive, leads from the fire camp area to the dump. It is unknown exactly when the roads at Lindberg Hill were constructed, although they likely post date the period of significance and are non-contributing.

Entrance Station Sub Area

Similar to the road corridor, the Entrance Station Sub-Unit contains a number circulation features. Upon entering the area from the north, the asphalt Entrance Road divides into curbed entrance and exit lanes with a central median where the Entrance Station is located. Historically the median was edged with log curbing in a slightly different configuration. However, as the road was improved in the 1980s, the original curbs were replaced with concrete curbs. Nevertheless, the divided lanes with central curbed median are contributing.

To the east of the divided lanes and central curbed median is another larger traffic island that separates a small curbed asphalt paved parking lot from the exit lane of the Entrance Road. The construction of the parking pull off east of the Entrance Station has slightly altered the original spatial organization. Historic photographs show, however, that the pull off location was used for parking during the period of significance, although it was not formally paved until the 1980s. As a result, the spatial configuration of the parking area is contributing.

From the east parking lot, an access road leads east to the Employee Residence. The narrow gravel road forms two connected loops at the Employee Residence; a smaller loop terminating in front of the residence and a larger loop encircling the building. A gated, unpaved road continues on to the northeast. This road leads past the garage and then several miles to the 1928 Fire Tower, relocated from Bright Angel Point to this location in 1933. This unpaved service road leading to the residence was built in the 1930s, coinciding with the residence’s construction. However, it is not known if the service loops that encircle the residence date from the period of significance.

Other circulation features in the area include a unpaved contemporary footpath leading from the parking area to a portable toilet. This path is non-contributing.

CONTRIBUTING FEATURES

- North Rim Entrance Road, 1928-1931
- North Rim Entrance Road, pre-1930
- Trace Road south of Entrance Station
- Access Road to Harvey Meadow/Widforss Trail
- Entrance and Exit lanes at Entrance Station
- Traffic Islands at Entrance Station
- Parking Area East of Entrance Station
- Access Road from Parking Lot to Employee Residence

NON CONTRIBUTING FEATURES

- Pull offs along North Rim Entrance Road
- Parking Lot and Access Roads to Picnic Area near Lindberg Hill
- Access Roads to Lindberg Hill (2)
- Tree Tower at Lindberg Hill
- Unpaved footpath leading from the Parking Area to Portable Toilet

UNDETERMINED FEATURES

- Unpaved Footpath to "cave"
- Loop Roads at the Employee Residence

Landscape Characteristic Graphics:



View of the intersection between the post-1930 Entrance Road with the pre-1930 alignment of the Entrance Road (dirt road leading up the hillside). Photograph by Meaghan Heisinger, August 2010.



The original pre-1930 Entrance Road now called the W1a, or Range Road. Photograph by Meaghan Heisinger, August 2010.



Entrance Station, displaying the curbed asphalt-paved parking lot to the left and the cattle guard in the forefront. Photograph by Meaghan Heisinger, August 2010

**Landscape Characteristic:
Natural Systems and Features**

North Rim Entrance Road Corridor

Natural systems and features in the North Rim Historic Entrance Road Corridor remain essentially unchanged from the period of significance. Major impacts resulted from fires, such as the Outlet Fire, and brush clearing for fire prevention. These disturbances have changed both the ecosystem and appearance of short sections of the road corridor, although generally the character of the corridor remains intact.

Natural systems and features in the North Rim Historic Entrance Road Corridor are associated with those typical of the Kaibab Plateau and larger North Rim region. Meadows and forested areas are dominant features along the road corridor. Steep slopes rise at the edges of the meadows and along portions of the road. These slopes are predominantly covered with boreal forest including Douglas fir, aspen, and spruce. Limestone outcrops are visible on these slopes. Meadows are composed of open, very gently rolling land that is covered in grasses and forbs. Major meadow areas within the North Rim Historic Entrance Road Corridor include DeMotte Park (outside of the district boundary), Little Park Meadow, and Harvey Meadow, all of which contribute to the district. Harvey Meadow additionally contains a "cave," which is not a natural cave so much as a structure constructed into the face of the limestone along an edge of the Harvey Meadow by "Uncle" James Owens (also known as Jimmy or Jim), an early inhabitant of the North Rim and a prominent historical figure. In addition to the larger meadows of the North Rim, the road corridor also encompasses numerous small, unnamed meadows along its length.

Little Park Lake, more accurately described as a grassy depression formed in a collapsed sinkhole, is a rare area of standing surface water on the otherwise well drained Kaibab Plateau. Little Park Lake is a rich habitat for birds and other wildlife.

Springs adjacent to the North Rim Entrance Road include Upper Thompson Spring, Lower Thompson Spring, and Bright Angel Spring, in addition to other unnamed streams and creeks. The North Rim Entrance Road runs along the bottom of Thompson Canyon, following the canyon drainage. Fuller Canyon is located to the east of the North Rim Entrance Road and is a tributary of Thompson Canyon, joining it at the intersection of the North Rim Entrance Road and road to Cape Royal.

Entrance Station Sub Area

The natural systems and features visible at the Entrance Station Sub Area are typical of the Kaibab Plateau, as described above. The sub area sits on a low, forested ridge located between two large meadows—Upper Little Park to the south and DeMotte Park to the north (outside of the district).

CONTRIBUTING FEATURES

- Boreal Forest
- Little Park Meadow
- Harvey Meadow and "cave"
- Little Park Lake
- Upper Thompson Spring
- Lower Thompson Spring
- Bright Angel Spring
- Thomson Canyon
- Fuller Canyon

Landscape Characteristic Graphics:



A meadow along the Entrance Road. Photograph by Meaghan Heisinger, August 2010.

**Landscape Characteristic:
Small Scale Features**

North Rim Entrance Road Corridor

Very few small scale features remain from the period of significance in the Entrance Road Corridor. Historically, the corridor contained very few small scale features that distracted from the natural character. The number of features has likely increased since the period of significance due to safety considerations and interpretive functions. New features include traffic signage, interpretive waysides, mile markers, an information board, trash receptacles, and picnic tables. While these features do not contribute to the character of the corridor, they are not highly intrusive. Other contemporary features include trailer hook ups, a metal water standpipe, and a grey painted metal electrical box at Lindberg Hill. These features are located around the north and west edge of the fire camp clearing.

Remaining features that date to the period of significance include the 1939 park entrance sign and possibly an existing metal culvert with rubble headwalls, as noted in the HAER documentation (Anderson, 1994). The main park entrance sign is located north of the Entrance Station and just outside of the park boundary, but is included in this district. The entrance sign was built in 1939, and features massive peeled whole log posts, a horizontal beam, heavy metal straps, and a masonry base of weathered stone (now buried slightly), displayed in the 1938 design. A third, vertical, log adjacent to the west post, featured in the original design is missing.

Other historic features have been removed over time, such as aspen log fencing which once marked the park boundary on the forested slopes. Log guardrails and curbs built by the CCC have also been removed.

Entrance Station Sub Area

Small-scale features were not a key element within the Entrance Station Sub Area, as the main purpose was vehicular transportation and visitor services. The Entrance Station retains almost no historic small-scale features. At one time, the Entrance Station median was edged by peeled log curbs. Currently, the island has concrete curbing. Historic signage, although serving similar purposes, has been updated to the existing metal traffic signage. At the park boundary, metal fencing and a cattle guard keep out cattle grazing on adjacent U.S. Forest Service land. A brown painted, metal, swinging entrance gate is located on the eastern edge of the pavement, just north of the cattle guard. A portable toilet is located just east of the Entrance Station, within the forest and at the edge of the parking lot. A metal flagpole is located just to the north of the Entrance Station, within the median. The Entrance Station Sub Area includes a number of traffic signs, as well as a visitor information sign to the west of the Entrance Station which is visible to arriving traffic. The latter is a large, brown painted wooden signboard that informs visitors about fees, camping availability, fire danger, and other pertinent information. A picnic table is located in the Employee Residence clearing. Of these, only the flagpole is a contributing feature to the district.

CONTRIBUTING FEATURES

- Park Entrance Sign
- Flagpole at Entrance Station

NON CONTRIBUTING FEATURES

- Traffic signs
- Interpretive wayside signs
- Picnic tables
- Trailer hook ups – Lindberg Hill
- Metal water standpipe – Lindberg Hill
- Metal electrical box – Lindberg Hill
- Cattle guard
- Portable toilet
- Visitor Information signs
- Entrance gate
- Mile markers
- Trash receptacles

Landscape Characteristic Graphics:



Mile marker sign along the Entrance Road. Photograph by Meaghan Heisinger, August 2010.



Interpretive sign in the picnic area/parking lot located near Lindberg Hill. Photograph by Meaghan Heisinger, August 2010.



*View to the north from the Entrance Station displaying the cattle guard and iron gate.
Photograph by Meaghan Heisinger, August 2010*



Entrance with Flagpole. Photograph by Meaghan Heisinger, August 2010.

**Landscape Characteristic:
Spatial Organization**

North Rim Entrance Road Corridor

The North Rim Entrance Road was constructed as part of an NPS effort to make the North Rim of the Grand Canyon accessible to visitors. Between 1927 and 1929, a road was constructed from Bright Angel Point to Cape Royal. Between 1930 and 1931, the North Rim Entrance Road was built, which ran from the Entrance Station to the Bright Angel Peninsula by connecting to the original Cape Royal Road. As with many other facilities on the North Rim, the historic Entrance Road Corridor owes its form to NPS park planning principles and design aesthetics developed during the 1920s and 1930s. Along the course of the road, landscape architects and planners created formal and informal overlooks and viewpoints. Typical of NPS roads of the era, the 1930-1931 North Rim Entrance Road follows an undulating and curvilinear alignment. Smooth curves and grades wind through meadows and around slopes.

Today the road continues to meander through the landscape in a series of broad curves, giving it the feel of a scenic parkway typical of the period. The road corridor narrows and widens depending on adjacent topography and vegetation. Along some sections, the road is edged by steep slopes and dense forest on both sides. In other locations, gentle meadows create an open, park-like character on one or both sides of the road. The road corridor includes several nodes or groups of features including a parking lot/picnic area, Lindberg Hill, and Harvey Meadow.

Prior to entering Grand Canyon National Park, the Entrance Road winds its way southward through the North Kaibab Ranger District of the Kaibab National Forest from Jacobs Lake. As it cuts through DeMotte Meadow, the road then passes the Entrance Sign for Grand Canyon National Park and enters the park. Shortly thereafter, the road divides at the Entrance Station and continues south. From the Entrance Station, the road leads south through Upper Little Park Meadow and past Little Park Lake edged with boreal forest. The road then approaches Lindberg Hill, approximately 3.8 miles south of the Entrance Station, where a parking area on the east side is separated from the roadway by a landscaped island—the only such pullout along the Entrance Road. The area is devoid of structures other than curbing and an interpretive sign. Maintenance and emergency uses are located at Lindberg Hill, to the southeast of the parking area, where an access road leads to a park-operated dry dump and fire camp.

Just two-tenths of a mile beyond the crest of Lindberg Hill, a dirt road leads off to the west and travels south, following the pre-1930 alignment of the road. This old alignment, designated the W1a or Range Road, is used as a utility corridor and fire road today. It can easily be followed by its treeless line through the forest. The treeless line does not seem consistent with pioneer roads which typically wound their way around trees rather than cutting a swath through the forest, but use as an auto road for about six years and later use as a utility corridor and fire road explain the anomaly. From its intersection with the North Rim Entrance Road, the W1a or Range Road leads southwest and intersects with road W1, which travels northwest and west past Harvey Meadow, the Widforss trailhead, and beyond.

After topping Lindberg Hill, the Entrance Road descends in a series of curves to Thompson Canyon, remaining generally on the east side of the small canyon just above the drainage bottoms. Paved gutters are seen on both sides of the roadway through this segment. Once at the bottom of Thompson Canyon, the road passes through several narrow ribbons of beautiful meadow lands then approaches the intersection with Cape Royal Road, about 9.9 miles south of the Entrance Station. This intersection, where Fuller and Thompson Canyons meet, used to be a “Y” rather than today’s “T,” and represented the end of the Entrance Road as completed in 1931. During the 1970s, it was debated whether the main road should proceed up Fuller Canyon and on to Cape Royal—in other words, whether a right turn from the main roadway should be required to reach Grand Canyon Lodge. The suggestion was not followed and the intersection was reconfigured such that visitors continue straight to reach the lodge area and a left turn is required to take the Cape Royal Road.

Three-tenths of a mile beyond the Cape Royal Road intersection, the Entrance Road begins its long and twisting climb out of Thompson Canyon toward Bright Angel Peninsula. Just as the road heads out of the canyon, a road to the right (west) continues down the canyon then to Harvey Meadow and on to the Widforss Point trailhead. Just a few hundred feet down this graded gravel road, one intersects the pre-1930 entrance alignment which is readily seen on the left, blocked by an earthen

beam, as today's gravel road swings sharply to the right. After the trailhead is reached, this same gravel road quickly narrows and deteriorates into a fire road which can be followed to Point Sublime, to points west, or to the dirt road which follows the pre-1930 alignment back toward Lindberg Hill. This is not the original route to Point Sublime, which once left the Entrance Road at Little Park, and it is closed to all motor vehicle access.

Farther south, the North Rim Entrance Road winds up a steep incline to CC Hill, where trailhead parking and mule corrals are located (outside of the district). From there, the road continues south to the Bright Angel Peninsula and the Grand Canyon Lodge (outside of the district).

Overall, the North Rim Entrance Road Corridor Historic District retains spatial characteristics similar to those that existed during the period of significance—a long, linear corridor of space bounded by forested slopes.

Entrance Station Sub Area

The Entrance Station Sub-Area, as a whole, serves as the beginning of the North Rim Entrance Road Corridor Historic District. Two primary spaces exist within the sub area: (1) the public Entrance Station and parking lot node and (2) the private residential clearing. These two spaces are defined by the boreal forest edge which surrounds them. The Entrance Station consists of a central traffic island with Entrance Station that divides the entering and existing park traffic. To the east, a larger traffic island divides the roadway from an adjacent parking area. The private residence area is located farther east within a network of gravel roads surrounded by dense forest.

CONTRIBUTING FEATURES

- Linear road corridor
- Little Park Meadow
- Harvey Meadow
- Entrance Station/Parking lot node
- Residential cabin clearing

NON-CONTRIBUTING FEATURES

- Picnic area parking node
- Lindberg Hill

Landscape Characteristic: Views and Vistas

North Rim Entrance Road Corridor

Views within the North Rim Entrance Road Corridor Historic District are dependent upon the proximity of the forested slopes to the pavement edge. Views of meadows bounded by forested slopes lengthen and shorten along the road corridor. The depth of a view is increased wherever the slopes are farthest away from the road, especially when the low lying meadows are found between the two. The longest views are found in Little Park Meadow where the grassy meadow is widest within the corridor.

Views have changed very little along the North Rim Entrance Road, most likely because the alignment has not been excessively altered since the 1930s. In addition, many of the natural features, such as topography, meadows, and forested slopes, remain intact. Views of these natural features, and lack of development within the corridor, are key characteristics that define the corridor as a special place and differentiate it from Bright Angel Peninsula.

Entrance Station Sub Area

Because the sub area is sited on a rise of land between to lower lying meadows, sweeping views are available both to and from the Entrance Station. Views to the Entrance Station are enhanced by the forest edge which encloses the building and pavement to further demarcate their location. From the Entrance Station, one is afforded long views to the north and south, across the adjacent meadow. Views from the Entrance Station remain essentially intact from the period of significance. Views to the building have changed slightly with the removal of the adjacent canopies. The building is now less of a focal point than it was during the period of significance.

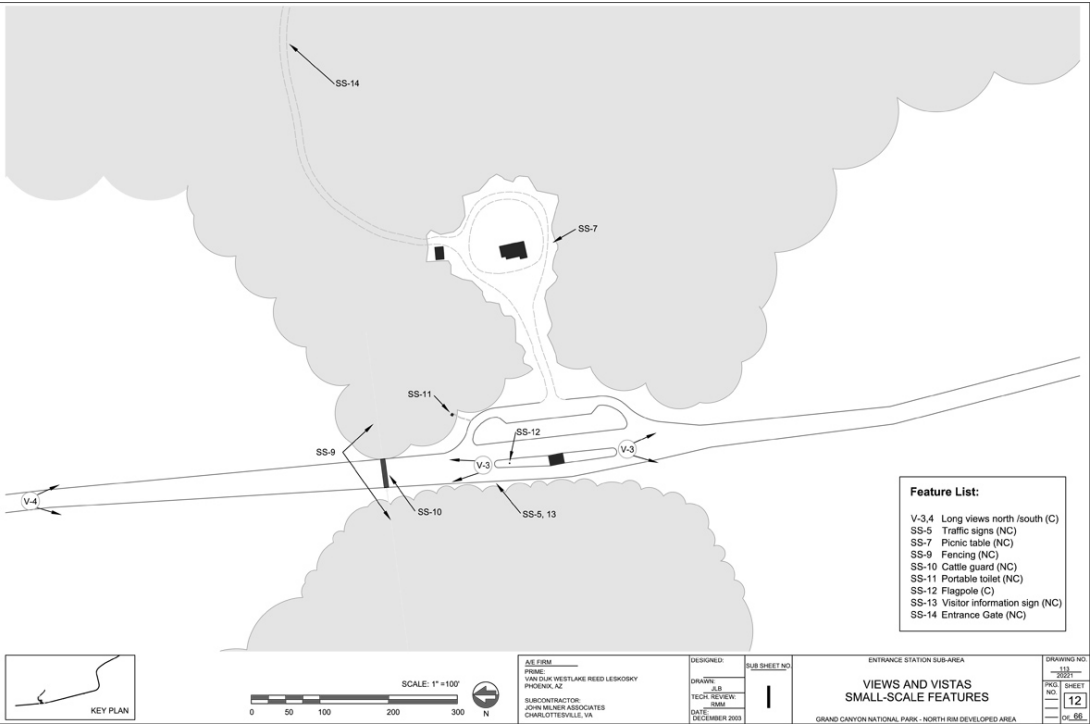
CONTRIBUTING FEATURES

- Long views within Little Park Meadow
- Views of meadows bounded by forested slopes
- Long views to the north and south along road corridor
- Views to Entrance Station

Landscape Characteristic Graphics:



View of Little Park Meadow from a road pull-off. Photograph by Meaghan Heisinger, August 2010.



Site plan showing key views at the Entrance Station sub-area. (Source: North Rim Bright Angel Peninsula Developed Area CLR)



Entrance Road from South looking North, 1930. (Source: North Rim Developed Area Cultural Landscape Report, 2004).



Entrance Road from South looking North, 2010. Photograph by Carrie Mardorf, October 2009.

Landscape Characteristic:
Land Use

As the sole public access to the North Rim Developed Area, the North Rim Entrance Road fulfills an important transportation function within the park. The picnic area near Lindberg Hill provides minimal recreation use . Maintenance and emergency uses are located at Lindberg Hill where the park operates a dry dump and fire camp.

Entrance Station Sub-Area

Land uses in the Entrance Station Sub-Area consist primarily of transportation and visitor services. Residential use stems from park staff using the Employee Residence as park housing.

CONTRIBUTING USES

- Transportation
- Recreation
- Visitor Services (entry orientation)
- Residential

Landscape Characteristic:
Vegetation

North Rim Entrance Road Corridor

Vegetation within the North Rim Historic Entrance Road Corridor is consistent with typical Kaibab Plateau vegetation, including boreal forest associations and meadows, as described above. Wetland vegetation is located in and along the edges of Little Park Lake. Along the roadway, invasive brome grass is of particular concern (Eisenberg 2002). This non-native grass is noticeable along road shoulders and can be seen spreading into meadows and displacing native vegetation.

The general vegetative character of boreal forest transitioning into ponderosa pine forest remains intact from the period of significance. Historically, the road was surrounded by meadows and forested slopes. Within the Outlet Fire area, which swept across the North Rim in 2000, much of the vegetation was lost to fire damage. Currently, only burnt tree trunks are present on the slopes. During the period of significance, Lindberg Hill was likely covered in forest vegetation. At present, trees have been removed to form a clearing used for temporary camp site during fire emergencies. It is likely that Harvey Meadow vegetation is similar to its composition during the period of significance.

Entrance Station Sub Area

Vegetation in the Entrance Station area is part of the larger Kaibab Plateau's boreal forest. The forest edge enhances the feeling of the sub area as a gateway into the park by encroaching along the entrance and exit lanes yet quickly receding into open meadows to the north and south. A grassy median is located on the north and south sides of the Entrance Station.

Historically, pine seedlings were planted around the Entrance Station in the traffic island by the CCC in the mid 1930s. By 1949, the pines had grown to the height of the roof eaves, obscuring the building. At some point in time, the pines were removed, as no trees exist in the island today.

CONTRIBUTING FEATURES

- Wetland vegetation at Little Park Lake
- Pattern of forest and meadow areas along entire road
- Pattern of forest edge in relation to road
- Boreal Forest
- Grass median

NON-CONTRIBUTING FEATURES

- Invasive brome grass

MISSING FEATURES

- Pines at Entrance Station

Landscape Characteristic Graphics:



Forest view along the Entrance Road. Photograph by Meaghan Heisinger, August 2010.

**Landscape Characteristic:
Archeological Sites**

Not used.

**Landscape Characteristic:
Cluster Arrangement**

Not used; See Spatial Organization.

**Landscape Characteristic:
Constructed Water Features**

Not used.

**Landscape Characteristic:
Cultural Traditions**

Not used.

Landscape Characteristic:
Topography

Not used.

Condition

Assessment Interval (Years): 8

Next Assessment Due Date: 09/22/2029

Condition Assessment and Impacts

Condition Assessment: Good

Assessment Date: 11/14/2006

Condition Assessment Explanatory Narrative:

The road corridor is in good condition. Superintendent concurred in Decemeber 2006.

Condition Assessment: Good

Assessment Date: 09/26/2011

Condition Assessment Explanatory Narrative:

Historical and natural features and values are preserved.

Condition Assessment: Good

Assessment Date: 09/22/2021

Condition Assessment Explanatory Narrative:

The corridor remains in good condition, showing minimal changes since the 2011 condition assessment.

A Federal Highways 3R (pavement resurfacing, restoration, and rehabilitation) project is scheduled to take place over the next few years as is a project to rehabilitate the North Rim Entrance Station. Both projects are in the initial phase of planning and will be sent to the State Historic Preservation Officer for review and comment as these projects move forward.

In 2010 the North Rim Entrance sign was rehabilitated (PEPC 32749). The project returned the entrance sign to its historic design (three massive, vertical wooden posts). The original sign and metal straps were preserved and reused. All other wood members had to be replaced due to rot. Stones were added at the base of the sign as they were when the sign was originally installed (see page 50 of the CLI document). Additional stones had to be added as vehicle pull off barriers. These unfortunately make the area appear a bit clutter.

Some superficial changes have occurred at the entrance station. A few stones have been removed from the grass area immediately in front of the north elevation. What appears to have been a bulletin board has been removed from the north elevation, the roof has been replaced in-kind and the building painted.

A series if stones are arranged in a small circle immediately in front of the Entrance Station flagpole. These stones may be associated with the 2018 replacement and removal of a non-functional light at the base of the pole with a night sky compliant light located at the top of the pole.

As one leaves Little Park Meadow headed south, an old road has been reopened (authorized work) to allow access to Lower Little Park where the wildlife program has established a corral for live capture of bison. Bison have caused some disturbance to Little Park Meadow (and other areas outside the district) through grazing pressure and creation of wallows. As the bison population continues to be decreased, such effects to the meadow are expected to be reduced. At some future date, the hope is to rehabilitate the road and return this part of Little Park Meadow and Lower Little Park Meadow to their original conditions.

No contributing features have been lost since the 2011 condition assessment.

Impacts include:

soil compaction caused by bison (wallows), temperature/warmer averages, drought, and vegetation/invasive plants. These agents are currently at low-low moderate levels and are not currently having significant effects to the district.

Historical and natural features and values are preserved.

Additional photographs were captured of features contributing and non-contributing to the corridor. (E.B.)

Stabilization Measures:

Impacts

Type of Impact:	Structural Deterioration
Other Impact:	
External or Internal:	Internal
Impact Description:	Buildings and structures are exposed to natural elements that cause weathering.
Type of Impact:	Improper Drainage
Other Impact:	
External or Internal:	Internal
Impact Description:	Erosion of gravel surfaces and drainage ways has caused rutting in some areas and may cause similar problems in others.
Type of Impact:	Vegetation/Invasive Plants
Other Impact:	
External or Internal:	Internal
Impact Description:	Surrounding forest vegetation is encroaching upon the edges of certain meadows, somewhat altering the character of the road corridor.

Stabilization Costs

Treatment

Treatment

Approved Treatment: Rehabilitation
Approved Treatment Document: Cultural Landscape Report
Document Date: 2003-12-31
Approved Treatment Document Explanatory Narrative:

A Cultural Landscape Report was completed in December 2003-Janurary 2004.

Approved Treatment Completed: No

Approved Treatment Costs

Landscape Approved Treatment Cost Explanatory Description:

A Cultural Landscape Report was completed in December 2003-Janurary 2004.

Bibliography and Supplemental Information

Bibliography

Citation Author:	John Milner Associates, Inc.; History Matters; Rivanna Archaeology; van Dijk Westlake Reed Leskosky Architects.
Citation Title:	North Rim Bright Angel Peninsula Developed Area Cultural Landscape Report.
Year of Publication:	2003
Citation Publisher:	National Park Service
Citation Type:	Both Graphic And Narrative
Citation Location:	NPS IMR Cultural Landscapes Program Files
Citation Author:	Anderson, Michael F.
Citation Title:	Historic American Engineering Record (HAER) North Entrance Road (Grand Canyon Route #4) HAER No. AZ-43. September 1994.
Year of Publication:	1994
Citation Publisher:	NPS
Citation Type:	Narrative
Citation Author:	Good, Albert H.
Citation Title:	Park and Recreational Structures.
Year of Publication:	1999
Citation Publisher:	Princeton Architectural Press
Citation Type:	Narrative
Citation Author:	McClelland, Linda Flint.
Citation Title:	"Historic Park Landscapes in National and State Parks." National Register of Historic Places Multiple Property Documentation Form. August 1995.
Year of Publication:	1995
Citation Type:	Narrative

Citation Author:	McClelland, Linda Flint.
Citation Title:	Presenting Nature: The Historic Landscape Design of the NPS, 1916 to 1942.
Year of Publication:	1993
Citation Publisher:	National Park Service
Citation Type:	Narrative