Construction of a New Entrance Road to the
Shady Lake Recreation Area
Howard County and Polk County, Arkansas

Amendment to the

Environmental Assessment

August 2011

Federal Highway Administration
Eastern Federal Lands Highway Division
and
U.S.D.A. Forest Service
Ouachita National Forest
1. Introduction to Amendment

This document is an Amendment to the Environmental Assessment (EA) for the Construction of a New Entrance Road to the Shady Lake Recreation Area in the Ouachita National Forest, Howard and Polk Counties, Arkansas. The EA was approved for circulation by the Federal Highway Administration (FHWA) on June 24, 2011. The EA was circulated for public comment in July 2011, including distribution to a number of agencies and entities. An electronic version of the EA and the Amendment to the EA can be downloaded from www.efl.fhwa.dot.gov/projects/environment.aspx.

The EA was prepared to identify and evaluate the potential social, economic, and environmental impacts of the proposed project. The EA was prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) as implemented by the Council on Environmental Quality Regulations, 40 CFR 1500, et seq., and FHWA Procedures, 23 CFR 771 and pursuant to Section 4(f) of the Department of Transportation Act (49 U.S.C. 303 and 23 U.S.C. 138).

Why an Amendment is Necessary

This Amendment has been prepared to disclose minor changes to the project and to address the possible environmental effects of these changes. This document also serves to clarify and/or revise information presented in the Environmental Assessment. The alignment of the Preferred Alternative has not changed.

2. Need and Purpose for the Project

This section was extracted from the EA.

Need

The existing Recreation Area entrance road, FS 38 (also known as Caddo Road, Shady Lake Road, or County Road 64), was constructed by the Civilian Conservation Corps in the 1930’s. FS 38 is entered from State Route 246, and travels through several private properties before entering Forest Service land. Seasonal high use of the entrance road results in high traffic volume that causes conflicts with the private property owners. FS 38 is the most direct route of entrance to the Recreation Area.

FS 38 is a gravel road, and is approximately 18-feet in width with no shoulders. The proximity of private properties at the intersection of FS 38 and State Route 246 does not allow for the placement of adequate signing to guide visitors to the Forest. The presence of private properties and lack of signing creates confusion for visitors.

Purpose

The purpose of the proposed action is to provide safe vehicular access to the Shady Lake Recreation Area, and minimize the potential for conflicts with residents living nearby.
In order for the project to be considered a success the following objectives must be met:

- Improvement of safe vehicular access to the Recreation Area,
- Reduction of conflicts between the Forest visitors and residents outside of the Forest,
- and Minimization of impacts to natural, cultural, and scenic/aesthetic resources.

3. Description of the Proposed Action

This section was extracted from the EA.

**Action Alternative – Preferred Alternative**

A new entrance road would be constructed to provide safe access exclusively to the Recreation Area and the Forest. The new entrance road would follow the existing 12-foot wide Rocky Hunting Club pioneer road for approximately 0.83 miles. The entrance road would then follow a new alignment for approximately 0.49 miles. Approximately 0.73 miles of the existing entrance road would be upgraded, ending at the gated entrance north of the Recreation Area.

The new entrance road would be designed to County road standards and would have two ten-foot lanes and two-foot shoulders, and would be an asphalt paved surface. A paved parking pull-off would be constructed approximately 0.6 miles south of the Recreation area near the existing dam site. The pull-off would accommodate two cars.

The new entrance road would be designed to a 30 mph design speed. The maximum grade of the road would be 12 percent. Cut and fill would be necessary in order to construct the road due to the steep grade of the hillside. Approximately 30,000 cubic yards of excavation and approximately 25,000 cubic yards of fill would be required to construct the road. The excavation material would be stockpiled and used as the fill. Additional material would be disposed of offsite.

The exposed ground would be revegetated with a grass seed mix. In order to upgrade the existing portion of the entrance road, the radii of curves in the road would be widened. The damaged section of the stone CCC bridge would be repaired. Loose stones would be re-mortared into place, and missing stones would be replaced with stones of a similar size and color. Object markers would be placed on anchor posts at the ends of the bridge.

New culverts would be installed across tributaries and drainages to maintain hydrologic connectivity. A new crossing over the Saline River south of the Shady Lake Dam would be constructed. The bridge would be concrete with a steel superstructure. The bridge would be 26 feet wide (curb to curb) and 120 feet long. The bridge would span the River; therefore, no piers would be constructed. The bridge is graded, so any water that collects on the bridge would drain to the western side. The bridge would be two feet higher on the west side, so runoff would drain on eastern approach. Riprap would be placed to protect both of the bridge abutments.

No utilities would need to be relocated. Staging would take place in a previously disturbed area, most likely along the proposed road alignment as it is constructed.
4. **Changes to the Action Alternative**

The EA stated that the Action Alternative would be constructed in three phases, and that “The new entrance road would not be opened to public traffic until the third stage of the project was completed.” During a meeting between the FHWA and the FS, it was determined that it would be in the best interest of the FS, visitors to the Shady Lake Recreation Area, and the nearby residences to open the new entrance road to public traffic after the first phase of the project was completed. The first phase of the project would be the construction of the southern portion of the project from State Route 246 to near the Shady Lake Dam overlook. Construction activities would include clearing, grading, construction of the road base, drainage work, and bridge construction. The road base would be constructed with approximately eight inches of an aggregate, or gravel, material. A surface treatment would be used on the gravel road base to provide a more durable driving surface and to eliminate the generation of dust. The surface treatment would be decided upon during final design, but would likely be a chip seal. Also included would be the installation of the gate to restrict access from the existing entrance road, and the installation of signs to direct traffic to the new entrance road.

The second phase of the project would include clearing, grading, construction of the road base, drainage work, and other miscellaneous work in the northern portion of the study area from near the Shady Lake Dam overlook to the north entrance of the Recreation Area. The third phase would pave the entire road length with asphalt. The three phases would be completed as funding is available. The earliest that the third phase could be completed would be 2016, assuming on phase is constructed each year.

5. **Changes to the Affected Environment and Environmental Impacts**

In this Amendment to the EA, the anticipated impacts of opening the new entrance road to vehicular traffic as a gravel road that were not disclosed in the EA are described below. The sections are number as they were presented in the EA in Chapter 3.

### 3.7 Wetlands and Waters

The EA stated that only one wetland was identified in the study area, a seepage slope wetland, but that the seepage slope wetland would not be impacted. However, the Environmental Consequences of the Action Alternative stated that “Approximately 700 square feet of wetlands would be impacted by the placement of fill material. Approximately 5,800 cubic feet of material would be placed into wetlands as fill material. Approximately 250 square feet of wetlands would be impacted by the excavation of material.” The Environmental Consequences incorrectly stated that the impacts would be to wetlands. The Action Alternative would impact several streams, not wetlands, as shown in Figure 14 of the EA. An unnamed perennial stream would be impacted by the installation of a culvert. Three intermittent streams would be impacted by the replacement of culverts. The South Fork Perennial Stream may be impacted by the rehabilitation of CCC Stone Bridge #1.
Phase I of the project would open the southern portion of the entrance road to vehicular traffic as a gravel road. The gravel would be stabilized by the use of a surface treatment, minimizing the effects of sedimentation to adjacent wetlands and waters.

3.8 Water Quality

Approximately 1.32 miles of the new entrance road would be open to the public as a gravel road. The gravel road would be stabilized by the use of a surface treatment. Coating the gravel with a surface treatment would capture the fine dust particles that would otherwise erode when it rains. There would be no increase in the sediment generated by not immediately paving the new entrance road with asphalt.

3.10 Historic Structure

The Shady Lake Dam is located along the existing Shady Lake Entrance Road. Shady Lake Dam (PL 0103) was built by the CCC enrollees from Camp F-4 (Camp Shady) between 1935 and 1937. The dam helped create the 25-acre lake around which the Shady Lake Recreation Area was built. Like all other remaining CCC structures within the Recreation Area, the Dam is on the National Register of Historic Places. The existing entrance road would be reconstructed in close proximity to the Shady Lake Dam.

Measures to minimize the potential for adverse impacts to the Shady Lake Dam would be incorporated into the project. The construction contractor would be educated about the Dam, and the importance of avoiding impacts to this resource during the pre-construction meeting. A note would be included in the project plans indicating areas that the contractor is not allowed to disturb.

3.13 Air Quality

The first phase of the road would be opened to public traffic as a gravel road until funding is available to pave the road with asphalt. There would be no change in the amount of dust generated on the new entrance road because the gravel would be coated with a binder or surface treatment. Coating the gravel with a surface treatment would capture the fine dust particles that cloud the air when disturbed by vehicles. The amount of dust currently generated by vehicles traveling on the existing entrance road would be reduced when those vehicles transition to the new entrance road. Approximately 2.9 miles of gravel road would no longer be traveled by Recreation Area traffic.

3.15 Recreational Use

Opening of the new entrance road after the first construction phase would allow visitors of to the Shady Lake Recreation Area and Ouachita National Forest to use the road at an earlier point in time. Transitioning Forest-related traffic to the new entrance road as soon as feasible would benefit Forest visitors because they would not have to wait until funding is available and the project is completed to use the new road. In addition, opening the new entrance road earlier would benefit the residences along the existing entrance road because they would benefit from the reduction in traffic at an earlier point in time.
6. Project Coordination and Comments

A legal notice was placed in the Arkansas Democrat Gazette. This Amendment to the EA will be available for public review along with the EA from September 1, 2011 through September 30, 2011. During this 30-day period, hardcopies of the Amendment to the EA and the EA will be available for review at the Mena-Oden Ranger District at 1603 Highway 71 North, Mena, Arkansas 71953, and the Polk County Library at 410 Eighth Street, Mena, Arkansas 71953. An electronic version of this document can be found on the FHWA, Eastern Federal Lands Highway Division’s website at http://efl.fhwa.dot.gov/projects/environment.aspx. Copies of the Amendment to the EA have been mailed to those previously in receipt of the EA.