FINDING OF NO SIGNIFICANT IMPACT

Project BR 392(6)
S.R. 17 Bridge replacement over Bear Creek
Marion County

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
FOR

Project BR 392(6)
A Proposal to Replace the Bridge over Bear Creek on S.R. 17
Marion County

The FHWA has determined that this project will not have any significant impact on the human environment. This finding of no significant impact is based on the attached environmental assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content for the attached environmental assessment.

2-13-03	Bill Von Tscharner	ENV. Coord.
Date	Responsible Official	Title

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ATTACHMENTS

PROJECT BR 392(6)
S.R. 17 BRIDGE REPLACEMENT OVER BEAR CREEK

FINDING OF NO SIGNIFICANT IMPACT

1. SUMMARY

The proposed project involves the replacement of the bridge on S.R. 17 (U.S. 43) that crosses Bear Creek and the widening of S.R. 17 for approximately 1 mile on each side of the bridge from a two-lane to a divided four-lane. The project begins 1150 feet (350 m) northeast of the city limits of Hackleburg, and continues for 1.95 miles (3.14 km).

The Environmental Assessment (EA) for Project BR 392(6) S.R. 17 Bridge replacement over Bear Creek in Marion County was approved March 16, 2001.

The need for the project is established in Section 1.2 of the attached EA. In summary, the existing bridge has structural deficiencies that do not meet current standards and the vertical alignment of the road on either side of the bridge has deficiencies that do not meet current design standards. Existing traffic volumes for the project are 4,410 vehicles per day and traffic volumes for the year 2022 are 6,760 per day. A review of accident data for the period of January 1, 1995 through July 3, 2000 indicate no accidents for this section of S.R. 17. This project is included in the State Transportation Improvement Plan.

The anticipated benefits derived from the recommended project include improved safety and operation through the addition of truck climbing lanes and a safer more structurally sound bridge.

2. IMPACTS

No adverse impacts to land use, prime farmlands, jurisdictional wetlands, threatened/endangered species, air quality, noise receptors, floodplains, historic structures, archaeological resources, hazardous materials, or Section 4(f) resources are anticipated as a result of this project. Additionally, there will be no relocations. See the attached EA for more information concerning these resources.

2.1 Social Impacts

Adverse social impacts will be minor (see EA, Sections 4.2 and 4.5). Since the proposed project involves replacing a two-lane highway with a four-lane divided highway, only small amounts of additional right-of-way will be required. In areas where strips of right of way are required some residences may lose a narrow strip of their yard. These impacts can be minimized by appropriate grassing and shrub replacement (if necessary). No residences, businesses, or community facilities will be relocated as a result of this project.

There will be temporary adverse impacts during project construction. These temporary impacts include noise and dust from construction machinery operations and less convenient travel in terms of travel time and adjacent property access (although property access will be maintained).

Positive benefits derived from the project include the improved structural sufficiency rating of the bridge and the correction of vertical alignment deficiencies. Also, the project will extend to the Wrangler distribution plant. This could decrease congestion during plant shift changes.

2.2 Economic Impacts

Adverse economic impacts will be minor (see EA, Section 4.3). No businesses will be displaced. The project may require a narrow strip of right-of-way to be purchased from the Wrangler distribution plant, but the loss of property is not expected to have an adverse effect on its operations.

Positive economic impacts include short term benefits to the local and regional economy from construction activities that will require the purchase of local goods and services. Construction jobs for local workers could boost local income, and purchases by construction workers will increase local sales. The purchasing of land for right-of-way will remove that land from the property tax rolls.

2.3 Water Quality Impacts

The new road will cross Bear Creek (the largest stream on the project), Hill Spring Branch, and an unnamed tributary of Nix Branch. The section of Bear Creek that runs through the project area flows into Lower Bear Creek Reservoir, a public water supply.

No long term adverse impacts to water quality are anticipated as a result of this project. During construction there will be some erosion, sedimentation and turbidity increase as a result of land clearing operations and earth moving activities. These effects will be temporary in nature and will be controlled by "best management practices." Best management practices include the use of silt fences, hay bales, grassing, rip rap, sediment basins, etc.. A specific erosion control plan will be developed for each construction segment of this project. See Section 4.8 of the EA for details on water quality impacts and mitigation.

2.4 Permits

A Section 404 Permit will not be required from the U.S. Army Corps of Engineers due to the absence of any wetland areas within the project corridor. Construction of additional lanes across these waterways will require approvals under Section 26(a) of the Tennessee Valley Authority (TVA) Act. A National Pollutant Discharge Elimination System (NPDES) Permit will be obtained from the Alabama Department of Environmental

Management (ADEM) prior to construction in order to assure the proper management of storm water runoff.

2.5 Section 4 (f) Impacts

Although there are no publicly owned parks or recreational areas within the project area, the property at the bridge crossing is subject to a permanent easement for the Bear Creek Floatway, which extends from the tailwaters of Upper Bear Creek Dam to the reservoir influence of Bear Creek Reservoir. This easement was acquired by TVA to provide a scenic, undisturbed canoeing experience. A Programmatic Section 4(f) Evaluation was prepared to address this easement and is attached to this FONSI. The Programmatic Section 4(f) Evaluation concludes that there is no feasible and prudent alternative to the use of land from the TVA floatway easement and the proposed action includes all possible planning to minimize harm to the TVA easement resulting from such use. See the Programmatic Section 4(f) Evaluation attached to this FONSI for more information.

2.6 Construction Impacts

As with any construction project, there will be temporary, unavoidable impacts during construction. These include air and noise pollution, erosion and disruption to traffic.

There will be an increase in suspended particulate during construction activities, as well as an increase in CO and other emissions from construction equipment. Dust control measures will be used to reduce suspended particulate. Open burning of debris will be done in accordance with state and local guidelines and regulations.

Although temporary in nature, construction noise can interfere with nearby activities. All construction equipment will be required to comply with OSHA noise and safety regulations and Alabama DOT Standard Specifications. Also, construction will generally be limited to daylight hours.

Erosion impacts will be minimized by the use of Best Management Practices to prevent and control soil erosion and sedimentation from leaving the construction site. These measures will include the utilization of silt fences, hay bales, sediment basins, etc., as needed. Exposed soils will be re-vegetated with grass or other herbaceous plants. An erosion control plan will be approved prior to construction.

During construction, there will be some temporary inconvenience to traffic operations along the route. Access to properties will be maintained during construction. Signs and flagmen will be used to reduce the possibility of traffic accidents in areas where construction equipment is operating.

3. PUBLIC HEARING

A combined Design/Corridor Hearing was held on January 10, 2002 at the Hackleburg, Alabama City Hall. The meeting was attended by approximately 27 people including ALDOT employees. Of four comment sheets returned, two supported the project, and two were neither for or against the project. One of those for the project and one of those neither for or against the project stated that the project should continue the four-lane to Hackleburg. One of the people who submitted a comment sheet and did not state a preference for or against, had several requests for ALDOT to preserve the usability of his property. These comments included preserving access, limiting the taking of pasture, and avoiding the taking of a watering trough.

A copy of the four comment sheets returned is included in the attached Public Hearing Transcript and Comment Sheets.

4. COORDINATION WITH PUBLIC AGENCIES

Two letters, both from the Tennessee Valley Authority (TVA), were received by ALDOT after the Environmental Assessment was written. One was dated May 14, 2002, and the other was dated December 5, 2002. A copy of these letters can be found in the appendix of the Programmatic Section 4(f) Evaluation which is attached to this FONSI. See Appendix A in the attached EA for more records of coordination with public agencies. Following are the concerns stated by the two TVA letters and a response:

May 14, 2002 letter from TVA in response to the EA:
1) Stream crossings will require approvals under Section 26a of the TVA Act and TVA requests that it be included as a cooperating agency.
Response: Approvals under Section 26a of the TVA Act will be acquired prior to initiation of construction. TVA has been included as a cooperating agency.

2) The EA should evaluate the impacts of the roadway on recreational activities in this vicinity.
Response: A Programmatic Section 4(f) Evaluation has been prepared for the Bear Creek Floatway easement and is attached to this FONSI.

3) Concerning the presence of two caves on the project: The EA should determine if any karst protection measures are needed to avoid impacts to these geologic features.
Response: The two caves are within the construction limits of the project but the highway will not be constructed directly over either cave. Before initiation of construction, a soil profile will be made. If karst areas are detected they will be treated as lime sinks and sealed.

December 5, 2002 letter from TVA in response to the Programmatic Section 4(f) Evaluation:
1) The current owner of the property under the bridge should be verified.

Response: Clyde and Patsy Slatton are the current owners of the property on the north side of the creek. Bascom Guff LLC is the owner of the property on the south side of the creek.

2) TVA requests that access to the steam at the new bridge be restricted by extended guard rails or other types of vehicle barriers.
Response: ALDOT has agreed to the construction of extended guard rails for this purpose.

5. SELECTED ALTERNATE

Originally, three build alternates were considered for this project. Alternate 1 involved replacing the existing road with a five-lane 170 feet north of the existing road. Alternate 2 involved replacing the existing road with a five-lane 170 feet south of the existing road.

Alternate 3 involves replacing the existing road with a four-lane divided highway. A four-lane is inherently safer for motorists than a five-lane and, when replacing a bridge, a four-lane is more practical because traffic can be routed on one bridge while the other is being constructed. Also, the turn lane which would have been built with Alternates 1 or 2 is unnecessary in this rural area. For these reasons, Alternates 1 and 2 were dropped from further consideration. The project will be designed to accommodate projected design year (2022) traffic in accordance with the American Association of State Highway and Transportation Officials (AASHTO) STANDARDS. The No Action alternate would not satisfy the purpose and need for the project, as identified in the EA. Therefore, Alternate 3 was selected for this project.

ENVIRONMENTAL ASSESSMENT

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama

ENVIRONMENTAL ASSESSMENT

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama

Submitted Pursuant to 42 U.S.C. 4332(2)(c)
by the
U.S. Department of Transportation
Federal Highway Administration,
and the
Alabama Department of Transportation

This action complies with
Executive Order 11988, Floodplain Management, and
Executive Order 11990, Protection of Wetlands

This document assesses the impacts of transportation improvements to S.R. 17 (U.S. 43) for approximately 1 mile north and south of the Bridge over Bear Creek in Marion County, Alabama

APPROVAL: 3-16-01 _____
Date Federal Highway Administration

The following persons may be contacted for additional information concerning this document:

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APPENDICES

SECTION 1: PURPOSE AND NEED FOR THE PROPOSED PROJECT

1.1 Description of the Proposed Project

The proposed project involves the replacement of the bridge on S.R. 17 (U.S. 43) that crosses Bear Creek and the widening of S.R. 17 for approximately 1 mile on each side of the bridge from a two-lane to a divided four-lane. The project begins 1150 feet (350 meters) northeast of the city limits of Hackleburg, and continues for 1.95 miles (3.14 km) The location of the project corridor can be seen on the Vicinity Map on Page 2, and on the Ecological Resources Map on Page 3

1.2 Purpose and Need

Existing traffic volumes for the project are 4,410 vehicles per day. Traffic volumes for the design year 2,022 are 6,760. A review of accident data for the period of January 1, 1995 through July 3, 2000 indicate no accidents for this section of S.R. 17. This project is included in the State Transportation Implementation Plan.

The project is being proposed to correct the structural deficiencies of the bridge and the vertical alignment deficiencies of the road on either side of the bridge. It is not feasible to replace the bridge and approaches in their present location without a temporary bridge and an on site detour. An on site detour with a temporary bridge is not feasible because of terrain, safety and cost. The project scope also includes addition of truck climbing lanes. The construction of truck climbing lanes will improve safety and operation. A four-lane divided section is safer and more desirable than a four-lane undivided facility required to add truck climbing lanes at the present location. Also, improvements to SR-17 are anticipated in the future. The extended termini are required to insure there are no environmental considerations and influences to consider in determining the location of the future bridges and roadway.

SECTION 2: ALTERNATIVES

2.1 No-Build Alternate

If the project is not built, the substandard structural sufficiency of the bridge, and the vertical alignment deficiencies of the roadway will not be corrected. Drivers using the unimproved roadway and bridge would not have the benefit of a safer, more efficient facility. For these reasons, the no-build Alternate has been dropped from further consideration.

2.2 Build Alternates

Originally, three alternates were considered for this project. Alternate 1 involved replacing the existing road with a five-lane 170 feet north of the existing road. Alternate 2 involved replacing the existing road with a five-lane 170 feet south of the existing road.

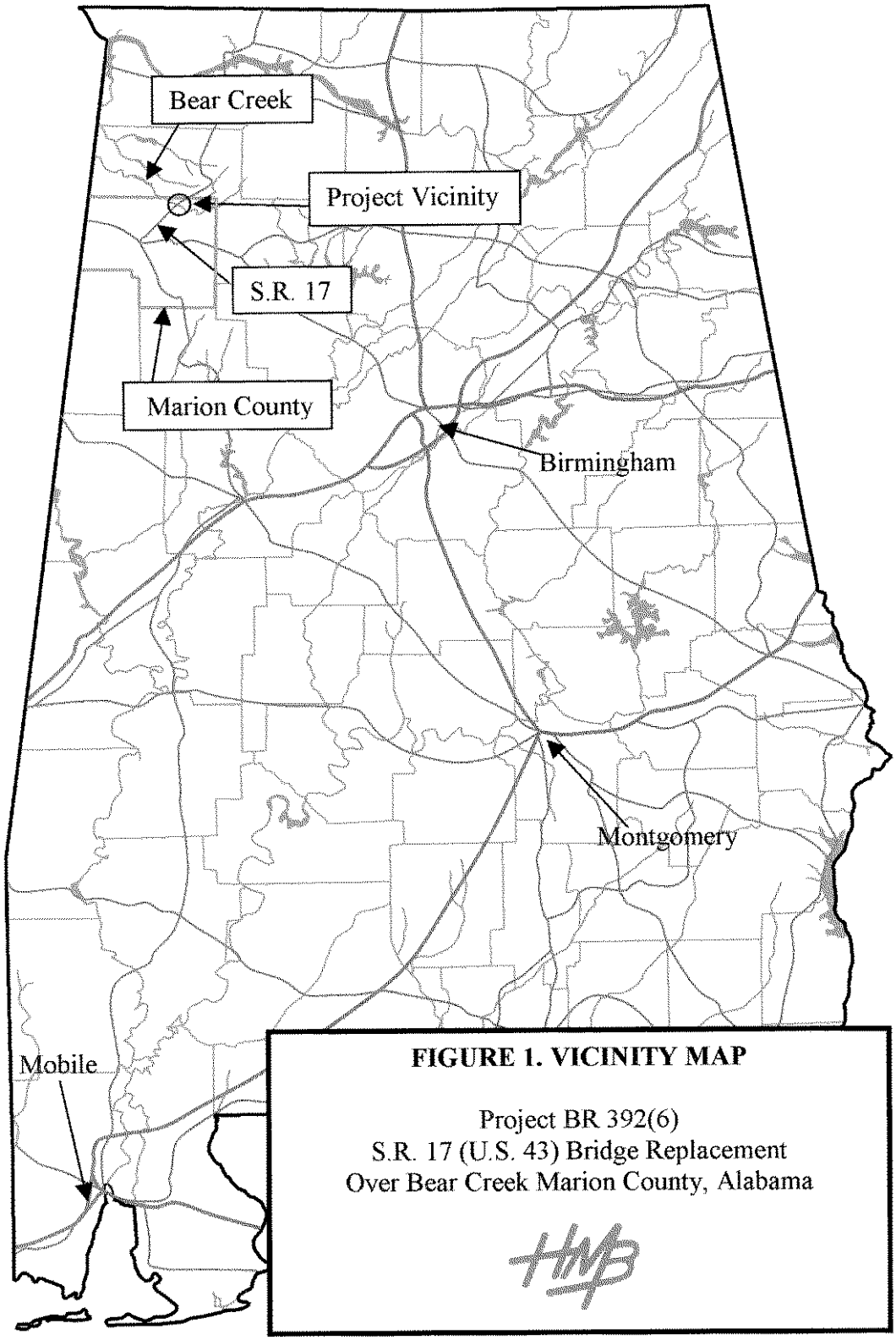


FIGURE 1. VICINITY MAP

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek Marion County, Alabama

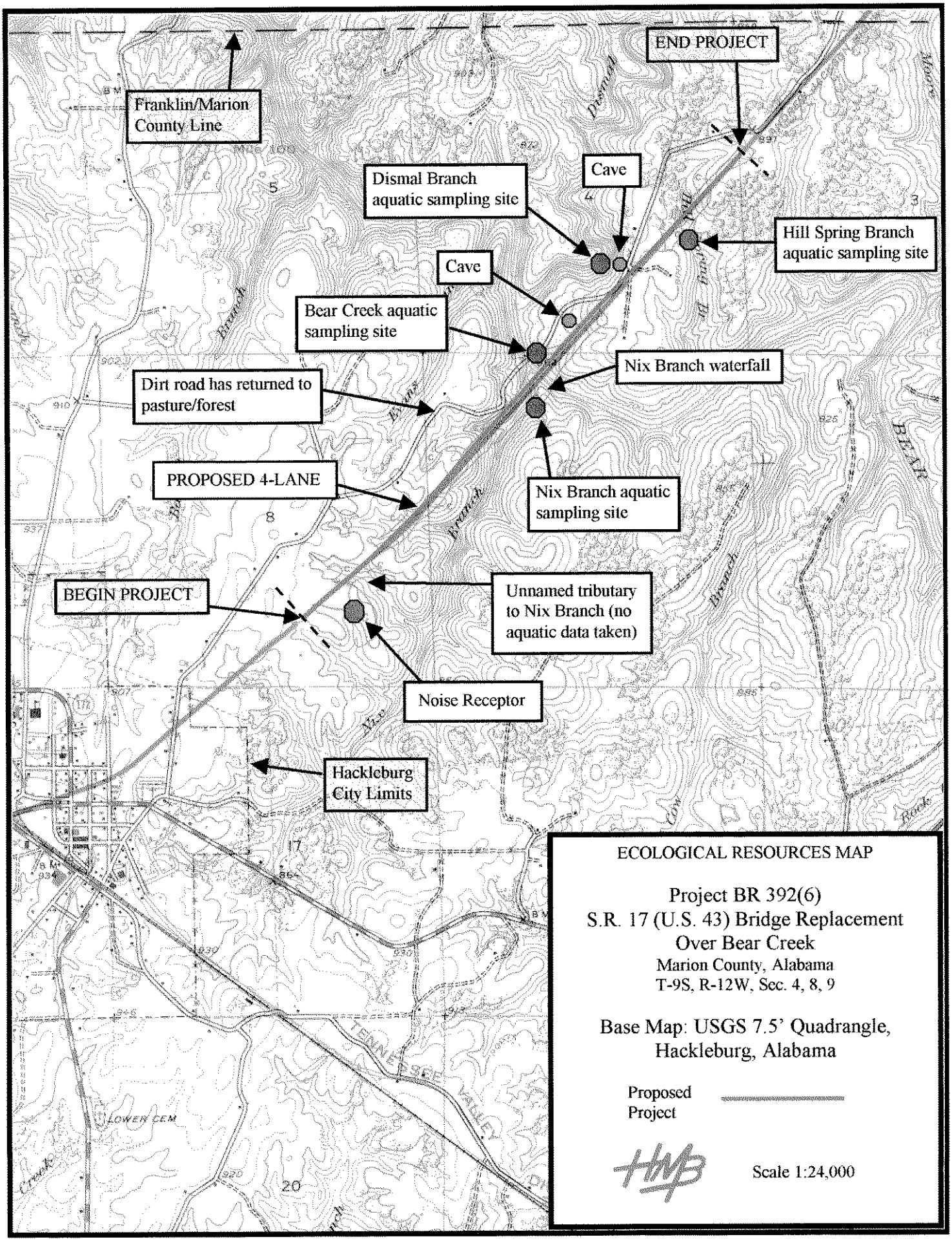
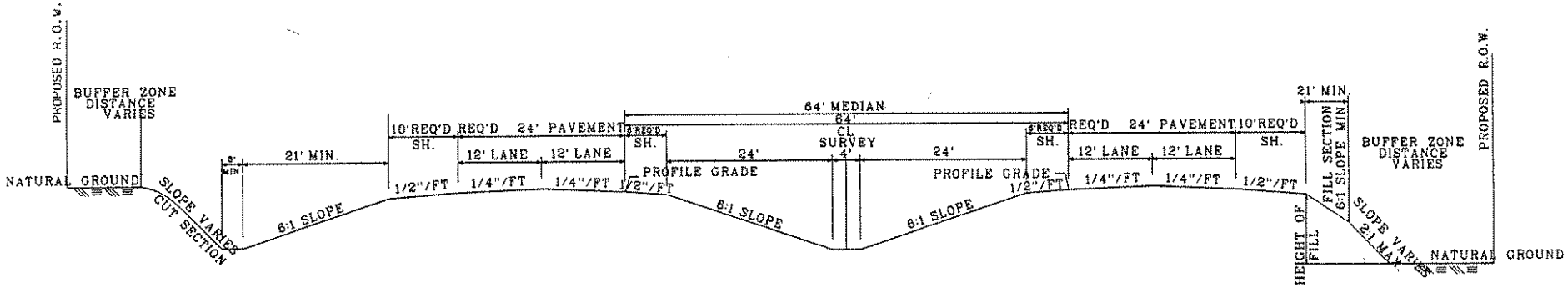

END PROJECT
Franklin/Marion County Line
Dismal Branch aquatic sampling site
Cave
Hill Spring Branch aquatic sampling site
Cave
Bear Creek aquatic sampling site
Nix Branch waterfall
Dirt road has returned to pasture/forest
PROPOSED 4-LANE
Nix Branch aquatic sampling site
BEGIN PROJECT
Unnamed tributary to Nix Branch (no aquatic data taken)
Noise Receptor
Hackleburg City Limits
ECOLOGICAL RESOURCES MAP
Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama
T-9S, R-12W, Sec. 4, 8, 9
Base Map: USGS 7.5' Quadrangle, Hackleburg, Alabama
Proposed Project
Scale 1:24,000

Figure 3
Typical Section
NOT TO SCALE



FOUR-LANES ON NEW LOCATION

Alternate 3 involves replacing the existing road with a four-lane divided highway. A four-lane is inherently safer for motorists than a five-lane and, when replacing a bridge, a four-lane is more practical because traffic can be routed on one bridge while the other is being constructed. Also, the turn lane which would have been built with Alternates 1 or 2 is unnecessary in this rural area. For these reasons, Alternates 1 and 2 have been dropped from further consideration and Alternate 3 is the preferred alternate for the project. The project will be designed to accommodate projected design year (2022) traffic in accordance with the American Association of State Highway and Transportation Officials (AASHTO) STANDARDS. The design speed is 112 km/hr (70 mi/hr). Proposed typical sections are shown on Page 4. The center of the median of the new four-lane will be approximately 107 feet north of the center line of the existing road. The median will be 64 feet wide, the lanes will be 12 feet wide and the shoulders will be 10 feet wide. Alternate 3 will raise the bridge 57 feet above its present position.

SECTION 3: SOCIOECONOMIC CHARACTERISTICS

3.1 Population and Employment

In 1995, the leading industry in Marion County was manufacturing (56%) followed by wholesale and retail trade (13%). The government employed another 11% of the labor force and another 10% were employed in the services industry. In 1996 major manufactured products included western shirts, tapered roller bearings, bulk materials, handling equipment, undercarriage components, manufactured homes, reflective sign material, pavement marking material, and fabrics. (Source: Alabama County Data Book 1997, Alabama Department of Economic and Community Affairs). Table 1 shows population and economic data for Hackleburg, Marion County and Alabama

Table 1. Population and economic data for Hackleburg, Marion County and Alabama.

	Population				Economic	
Unit of Government	1980	1990	Most Recent	Percent Increase 80-90	Latest Unemployment Rate	Latest Per Capita Income
Hackleburg	883	1161	1146 (1998)	31.5	6.4 (1990)	8723 (1989)
Marion County	30,041	29,830	30,718 (1996)	-0.7	6.3 (1995)	13,894 (1993)
Alabama	3,893,888	4,040,587	4,273,084	3.8	6.3 (1995)	17,129 (1993)

Source for county and state information: Alabama County Data Book 1997 Alabama Department of Economic and Community Affairs.

Source for Hackleburg information: Alabama Municipal Data Book 1993 Alabama Department of Economic and Community Affairs. 1998 Hackleburg information: U.S. Census Bureau Compiled by Alabama Department of Economic and Community Affairs.

SECTION 4: IMPACTS

4.1 Land Use Impacts

The proposed project should not alter the rural character of the corridor. Current land use along the route is primarily composed of forested areas. A winding dirt road used to parallel the project. However, it has been allowed to convert to pasture and forest.

4.2 Social Impacts

The proposed project consists of upgrading the existing facility by replacing a two-lane with a four-lane divided highway for approximately 1.95 miles (3.14 km) of the existing road. This will require only minor amounts of right of way and will not cause the displacement of any residence, business, or community facility. In areas where strips of right of way are required some residences may lose some of their yard. These impacts can be minimized by appropriate grassing and shrub replacement (if necessary). The proposed action is expected to have only minor temporary impacts on existing travel patterns during construction.

Positive benefits derived from the project include the improved structural sufficiency rating of the bridge and the correction of vertical alignment deficiencies. Also, the project will extend to the Wrangler distribution plant. This could decrease congestion during plant shift changes.

4.3 Economic Impacts

Economic impacts are expected to be minor, since no businesses will be displaced or substantially impacted. The project may require a narrow strip of right-of-way to be purchased from the Wrangler distribution plant, but the loss of property is not expected to have an adverse effect on its operations. The purchasing of land for right-of-way will remove that land from the property tax rolls.

Positive economic impacts include short term benefits to the local and regional economy from construction activities that will require the purchase of local goods and services. Construction jobs for local workers could boost local income, and purchases by construction workers will increase local sales.

4.4 Farmland Impacts

The project location has been evaluated in accordance with U.S. Department of Agriculture (USDA) Regulation 7 CFR 658.4 (2), which provides for a minimal level of protection, and for no additional sites to be evaluated when sites receive a total score of less than 160 points on USDA Form AD-1006. Additionally, the Natural Resource Conservation Service (NRCS) advises that Form AD-1006 need not be submitted to them in cases where the site assessment criteria (Part IV) score is less than 60 points. The project site has been evaluated and the score for Part IV of Form AD-1006 (see Appendix

A) is less than 60. Therefore, in accordance with the Farmland Protection Policy Act, the proposed project will be advanced without further coordination or evaluation. Impacts to prime and unique farmlands are minimal.

4.5 Relocation Impacts

No residences or businesses will be relocated as a result of this project.

4.6 Air Quality Impacts

The project corridor will accomodate free flowing traffic on a four-lane divided highway with no signalized or unsignalized intersections. Based on projects which are similar in nature, the carbon monoxide emissions created by the proposed project will not exceed the National Ambient Air Quality Standard. Since the project will have carbon monoxide levels below the National Ambient Air Quality Standard and is located in a region of air quality attainment, it has been determined that there will be no substantial impact on the air quality of the area.

4.7 Noise Impacts

4.7.1 Introduction

The highway generated noise impacts of this project were analyzed in accordance with the procedures contained within the Alabama Department of Transportation, "Highway Traffic Noise Analysis & Abatement, Policy and Guidelines," and Federal Register Regulation 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."

These regulations set forth a five-step highway project noise analysis as follows: (1) Identify existing or planned land use activities that may be affected by highway noise; (2) Determine existing noise levels; (3) Predict future highway noise levels; (4) Determine impacts by comparing existing levels with predicted levels and criteria contained in 23 CFR Part 772; and (5) Consider and examine noise abatement measures for those impacts that have been identified. The Noise Evaluation for this project is attached as Appendix B. The results of the evaluation are summarized below.

4.7.2 Identification of Noise Receptor Sites

In selecting the study sites an effort was made to develop an accurate appraisal of the entire project corridor with respect to the noise receptors. Four residences were located on the project which were of similar distance from the highway. All were on the south side of the highway. The receptor closest to the road was chosen as the worst case scenario and was analyzed using existing and projected traffic counts. The location of this receptor can be found on the Ecological Resources map on page 3.

Table 1 of 23 CFR 772 gives design noise level/land use relationships for various types of land uses. Land use category "B" is applicable to all noise sensitive receptors on this project because they represent residences. For category "B", the Design Noise Abatement Criteria (NAC) is 67 dBA Leq and applies to the noise levels on the exterior of the structure.

4.7.3 Existing and Predicted Noise Levels

The ambient noise level of the receptor closest to the highway was measured on March 15, 2000 during meteorologically acceptable periods. Readings were taken for two, ten minute periods. These noise levels were then used as a baseline to compare with future noise levels generated from design year traffic (2022). The Federal Highway Noise Prediction Model (Stamina 2.0/Optima) was used to predict the design year noise level. Refer to Table 2 for results of the measured existing noise level and predicted future noise level.

Table 2. Noise Receptor with Existing and Predicted Noise Levels (dBA). Noise Abatement Criteria is 67 dBA.

Site Number	Number of Receptors Represented	2000 Existing	2020 Predicted, Build	2020 Predicted, No Build	Increase/decrease (2020-2000 build)
1	4	54	64	64	10

4.7.4 Impact and Noise Abatement Analysis

In accordance with 23 CFR Part 772, the Federal Highway Administration (FHWA) Noise Abatement Criteria and the Alabama Department of Transportation Highway Traffic Noise Analysis and Abatement Policy and Guidance manual, the following criteria is utilized in determining the occurrence of traffic noise impacts:

1. When the predicted design year noise levels approach (defined as 66 dBA) or exceed those values shown for the appropriate activity category of the NAC.

2. When the predicted design year noise levels "substantially exceed existing noise levels" (as defined), by 15 dBA or more.

The year 2000 measured noise level for the receptor chosen for noise analysis was 54 dBA. Predicted design year noise level for build and no-build is 64 dBA. Because there are no predicted noise impacts on this project, abatement measures will not be necessary.

4.7.5 Construction Noise

The effects of temporarily increased noise levels during construction were considered as directed by 23 CFR Part 722.19. Noise impacts during project construction are of short duration, the high noise levels of combustion engine powered equipment are expected to be the main contributor to the sound levels from highway construction activity. All construction equipment will be required to comply with OSHA regulations and Alabama DOT Standard Specifications.

At this stage of the project no specific construction noise impacts can be identified. The major construction elements of this project are expected to be earth removal, hauling, grading and paving. General construction noise impacts such as temporary speech interference for passersby and those individuals living and working near the project can be expected; this is particularly true from earth moving equipment noise during grading operations. Overall, construction noise impacts are expected to be minimal since construction noise is relatively short in duration and generally restricted to daytime hours. For those residences closest to the project, transmission loss characteristics over distance, and the temporary nature of construction activity, is believed to be sufficient to moderate the effects of intrusive construction noise.

At the Plans, Specifications, and Estimates (PS&E) inspection, consideration will be given as to whether or not restrictions need to be placed on work hours. If it is determined that restrictions are necessary, appropriate notes will be placed on the plans. These stipulations will be included in the sequence of construction for the project, if needed.

4.7.6 Summary

The year 2000 measured noise level for the receptor chosen for noise analysis was 54 dBA. Predicted design year noise levels are for build or no-build scenarios was 64 dBA. There are no predicted noise impacts on this project, and abatement measures will not be necessary.

4.8 Water Quality Impacts

There are five streams in the project corridor: Dismal Branch, Hill Spring Branch, Nix Branch, an unnamed tributary of Nix Branch, and Bear Creek. The former four flow into Bear Creek. These streams are shown in the Ecological Resources Map on page 3. The new road will cross Bear Creek (the largest stream on the project), Hill Spring Branch, and the unnamed tributary of Nix Branch. Dismal branch flows south through a 300 foot section of the construction limits and joins Bear Creek approximately 1500 feet downstream of its junction with S.R. 17. This 300 feet may require channelization or may be avoidable due to it's being near the outside boundary of the construction limits. Hill Spring Branch flows south under S.R. 17 and into Bear Creek about 3000 feet upstream of its junction with S.R. 17. Nix branch flows north and nearly parallels S.R.

17. It crosses the construction limits of the project approximately 1700 feet from Bear Creek and joins Bear Creek about 100 feet upstream of S.R. 17. The last approximately 100 feet of Nix Branch is a waterfall. This 1700 feet may require channelization. However, the southernmost section of this 1700 feet may be avoided as it is near the proposed right-of-way limits. The waterfall of Nix Branch may require channelization. The unnamed tributary of Nix Branch flows under S.R. 17, 2300 feet from the western end of the project. Bear Creek flows northwest until it joins the Tennessee River.

On February 28 and 29, 2000, HMB personnel visited the project site for the purpose of searching for potential wetlands and collecting water quality data on flowing streams. The unnamed tributary, which flows into Nix Branch, was not sampled because Nix Branch was sampled. Five water quality parameters were measured. Specific conductance (mS/cm), and pH were measured with an Oakton 35630-00 Portable pH/Con 10 meter (serial number 56169). Dissolved oxygen (mg/L) and temperature (^{o}C) were measured with an Oakton 35640 Portable DO 100 Meter (serial number 52381). Turbidity (NTU) was measured with an Orbeco-Hellige Model 966 Portable Turbidimeter (serial number 2199). The meters were calibrated according to the manufacturer's recommendations. Water quality results are shown on Table 1 of the Ecological Report in Appendix C and water quality sites are shown on the Ecological Resources Map on page 3.

Chapter 335-6-11 (Water Use Classification for Interstate and Intrastate Waters) of the Water Quality Program of the Alabama Department of Environmental Management designates this section of Bear Creek (between S.R. 187 and the Upper Bear Creek Reservoir Dam) as being fit for fish and wildlife. Waters designated for fish and wildlife usage are best used "for fishing, propagation of fish, aquatic life, and wildlife, and any other usage except for swimming and water-contact sports or as a source of water supply for drinking or food-processing purposes." This section of Bear Creek is also designated as being fit for swimming and other whole body water-contact sports (McIndoe, 1975). The section of Bear Creek that runs through the project area flows into Lower Bear Creek Reservoir, a public water supply. At the time of sampling, pH and dissolved oxygen levels were within the parameters mandated by Chapter 335-6-11 for waters designated for fish and wildlife and waters designated as being fit for swimming and other whole body water-contact sports.

No long term adverse impacts to water quality are anticipated as a result of this project. During construction there will be some erosion, sedimentation and turbidity increase as a result of land clearing operations and earth moving activities. These effects will be temporary in nature (during the period of construction) and will be controlled by "best management practices." Best management practices include the use of silt fences, hay bales, grassing, rip rap, sediment basins, etc.. A specific erosion control plan will be developed for each construction segment of this project. Special consideration will be given to the following items:

1. Identification of variations in the erosive characteristics of the soils in the area so that proper protective measures can be taken.

2. Provision for the preservation of roadside vegetation beyond the limits of construction.

3. Designing slopes as flat as is reasonable with slope rounding and benching to minimize erosion and to promote plant growth.

4. Provision for seeding and planting of fill slopes. Consideration of the advisability of specifying completion of planting on exposed slopes by certain date to winterize the project, temporary planting with quick growing cover, or tying planting time to completion of slopes.

5. For cases where planting must be delayed, incorporation of temporary erosion protection will be considered as necessary.

6. Design of the side drains, surface, subsurface and cross drains so that they will discharge in locations and in such manner that surface and subsurface water quality will not be affected. The outlets may require aprons, bank protection, silting basins or energy dissipaters.

7. Provide bank protection where the highway is adjacent to rivers or streams if their velocities are erosive.

8. Slope protection or channel lining will be included for channel changes, where required. Also, provide slope protection at bridge abutments.

9. Where the state has made arrangements for materials, borrow, or disposal sites, grading plans should be provided and reseeding required where necessary. Special provisions could be inserted requiring the contractor to furnish plans for grading and reseeding of sites obtained by him.

10. Establish right-of-way widths of adequate space for rounding at tops of cuts and bottoms of fills and for adequate slope protection ditches.

11. Lining of all ditches subject to erosion.

12. Temporary construction features for the control of erosion and water pollution that can be predicted should be made a part of the plans and specifications - berms, dikes, ditches, pipes, dams, settling basins, stream diversion channels, slope drains, and crossings over live streams should be considered.

13. Mandatory contract orders of work should be considered when their use would eliminate the expense of temporary construction or where they will result in earlier protection of erodible areas.

In addition to the design criteria listed above, the Alabama Department of Transportation's Standard Specifications include the following measures:

1 . Where working areas encroach on live streams, barriers adequate to prevent the flow of muddy water into streams shall be constructed and maintained between working areas and streams; and during construction of such barrier, muddying of streams shall be held to a minimum.

2. Should the contractors operations require transportation of materials across live streams, such operation shall be conducted without muddying the stream. Mechanized equipment shall not be operated in the stream channels of such live streams except as may be necessary to construct crossings or barriers and fills at channel changes.

3. Oily or greasy substances originating from the contractor's operations shall not be allowed to enter or be placed where they will later enter a live stream.

4. Material derived from roadway work shall not be deposited in a live stream channel where it could be washed away by high stream flows.

5. Sanitary facilities shall be provided at the job site which will not contaminate the ground or surface water as required by the Federal Occupational Safety and Health Act.

4.9 Wetland Impacts

Wetlands were investigated using the criteria outlined in the 1987 Army Corps of Engineers Wetland Delineation Manual. These criteria include the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. National Wetland Inventory (NWI) maps and Natural Resource Conservation Service (NRCS) soil maps were also reviewed and compared with field testing.

The project corridor was visited on February 28 and 29, 2000 in order to investigate the presence and/or absence of wetland areas. There were no areas within the project corridor which met the three wetland criteria of hydric soils, hydrophytic vegetation and hydrology as outlined in the 1987 Army Corps of Engineers Wetland Delineation Manual. This finding was coordinated with the Nashville District of the U.S. Army Corps of Engineers. In a letter dated August 7, 2000, the Corps of Engineers agreed with this finding. The letter from the Corps of Engineers is attached in Appendix A.

4.10 Permits

A Section 404 Permit will not be required from the U.S. Army Corps of Engineers due to the absence of any wetland areas within the project corridor. A National Pollutant Discharge Elimination System (NPDES) Permit will be obtained from the Alabama Department of Environmental Management (ADEM) prior to construction in order to assure the proper management of storm water runoff.

4.11 Floodplain Impacts

Floodplain impacts were analyzed using Flood Insurance rate Maps (FIRM), and field reviews. A location risk assessment has been prepared for this project and is included in Appendix D. The project affects two streams which are large enough to have their 100 year floodplains delineated in FIRM maps. These are Bear Creek and Dismal Branch. While there will be construction activities within the 100 year floodplains of these streams, there will be no significant encroachments. No regulatory floodway will be impacted. The location of the floodplain areas in relation to the project can be seen on the Floodplain Map on page 13.

The project has not been developed to the stage of final drainage structure design; however, the proposed structures crossing Bear Creek will have an effective waterway opening equal to or greater than the existing structures. Drainage structures for Dismal branch will be designed to adequately accommodate the 100 year flood runoff.

Therefore, backwater surface elevations are not expected to increase. All drainage structure designs will be in accordance with ALDOT's Hydraulic Manual.

Based on the location hydraulic studies summarized above, the following determinations have been made for this project:

1. There is minimal potential for the interruption of any roadway which is needed for emergency vehicles, or that provides an evacuation route.

2. There is minimal potential for adverse effect on the natural and beneficial flood plain values.

3. There is minimal associated increased flood risk.

4. There is avoidance of any significant or longitudinal encroachments.

4.12 Threatened and Endangered Species Impacts

The project has been coordinated with the U.S. Fish & Wildlife Service for Threatened or Endangered Species that could potentially occur within the project area. Their response (included in Appendix A) indicates that no Threatened or Endangered Species exist within the project area, therefore the project will have no effect on any Threatened or Endangered Species.

4.13 Archaeological, and Historic Structures Impacts

A Phase I Archaeological survey and historic structure survey of the proposed bridge replacement was conducted from February 23 to February 25, 2000. The results of these surveys can be found in the Cultural Resources Survey attached as Appendix E. For the archeological field reconnaissance, visual inspection and shovel testing were conducted,

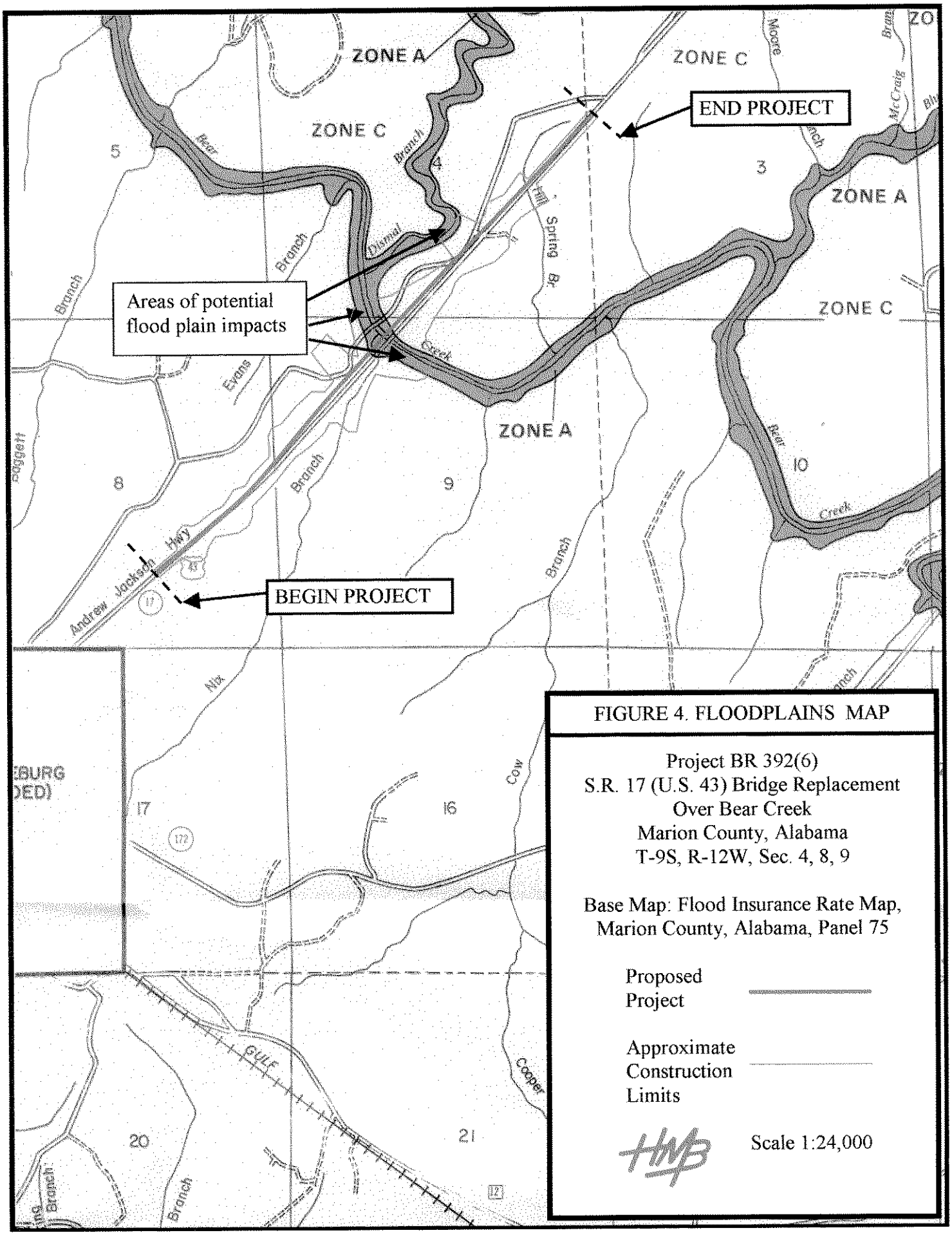


FIGURE 4. FLOODPLAINS MAP

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek
Marion County, Alabama
T-9S, R-12W, Sec. 4, 8, 9

Base Map: Flood Insurance Rate Map,
Marion County, Alabama, Panel 75

Proposed Project _____

Approximate Construction Limits _____

Scale 1:24,000

where appropriate. No archaeological sites were located during the survey. The bridge to be replaced is the only structure which could be impacted by the project and has a construction date of 1964. Because of this modern age, the bridge was not eligible for nomination to the National Register of Historic Places.

The Cultural Resources Survey concluded that there are no findings of cultural resources (archeological or historical) in the project area. The Cultural Resources Survey was coordinated with the Alabama Historical Commission through the Alabama Department of Transportation. The Alabama Historical Commission's response dated April 21, 2000, agreed with the determinations made in The Cultural Resources Survey. A copy of this letter is included in Appendix A.

4.14 Hazardous Materials

One site was identified as a potentially contaminated site. The site is a Wrangler Distribution Center located near the south end of the proposed project. This site appears on the Alabama Department of Environmental Managements (ADEM) Underground Storage Tank (UST) list. The UST list shows this site as having one underground storage tank. Based on the project construction limits, it appears that these tanks will not be impacted by the proposed construction.

In addition, The site does not appear on ADEM's Leaking Underground Storage Tank list (LUST). Therefore, it is anticipated that there is no contamination associated with this site due to leaking or faulty underground storage tanks.

4.15 Section 4(f) Impacts

There are no publicly owned parks, recreational areas, wildlife or waterfowl refuges, historic structures, or archaeological sites within the project limits. This project will have no Section 4(f) impacts

4.16 Construction Impacts

As with any construction project, there will be temporary, unavoidable impacts during construction. These include air and noise pollution, erosion and disruption to traffic.

There will be an increase in suspended particulate during construction activities, as well as an increase in CO and other emissions from construction equipment. Dust control measures will be used to reduce suspended particulate. Open burning of land debris will be done in accordance with state and local guidelines and regulations.

Although temporary in nature, construction noise can interfere with nearby activities. Most construction noise is caused by diesel or gasoline engines that power construction equipment. All construction equipment will be required to comply with OSHA noise and safety regulations and Alabama DOT Standard Specifications. Also, construction will generally be limited to daylight hours.

Erosion impacts will be minimized by the use of Best Management Practices to prevent and control soil erosion and sedimentation from leaving the construction site. These measures will include the utilization of silt fences, hay bales, sediment basins, etc., as needed. Exposed soils will be re-vegetated with grass or other herbaceous plants. An erosion control plan will be approved prior to construction.

During construction, there will be some temporary inconvenience to traffic operations along the route. Access to properties will be maintained during construction. Signs and flagmen will be used to reduce the possibility of traffic accidents in areas where construction equipment is operating.

SECTION 5: COMMENTS AND COORDINATION

5.1 Early Coordination Letters

Early coordination letters were distributed by the Alabama Department of Transportation on August 25, 2000 to appropriate federal, state and local agencies and officials, notifying them of the proposed project and requesting their views and comments. Five responses were received generally supporting the project and/or offering information. No objections to the proposed action were stated. Concerns stated have been addressed in the EA. A copy of the responses is attached in Appendix A.

5.2 Coordination with Environmental Agencies

In addition to the early coordination letters and responses, specific coordination was conducted with agencies having jurisdiction over protected resources. The project was coordinated with the U. S. Fish and Wildlife Service for a listing of threatened or endangered species that may occur in the project area. Their response, indicating that no protected species will be impacted by the project, is attached in Appendix A. The wetlands determination was coordinated with the U. S. Army Corps of Engineers. Their response, included in Appendix A, concluded that the proposed project will not impact any wetland resources. The Archaeological Report and Historic Structures Report have been coordinated with the State Historic Preservation Officer, and her concurrences are also attached in Appendix A.

5.3 Public Involvement

Due to the rural nature of the project, there have been no public involvement efforts to date. An opportunity for a public hearing will be offered following approval of the EA.

APPENDIX A

CORRESPONDENCE AND COORDINATION

TABLE OF CONTENTS

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request	
Name Of Project	BR 392(6)	Federal Agency Involved	FHWA
Proposed Land Use	Four-lane divided highway	Marion County, Alabama	
PART II *(To be completed by SCS)*		Date Request Received By SCS	
Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply – do not complete additional parts of this form)*		Yes ☐ No ☐	Acres Irrigated / Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction: Acres: %		Amount Of Farmland As Defined in FPPA: Acres: %
Name Of Land Evaluation System Used	Name Of Local Site Assessment System		Date Land Evaluation Returned By SCS

PART III *(To be completed by Federal Agency)*	Alternative Site Rating: Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by SCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by SCS)* Land Evaluation Criterion. Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use	15	15			
2. Perimeter In Nonurban Use	10	10			
3. Percent Of Site Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	0			
5. Distance From Urban Builtup Area	----	----			
6. Distance To Urban Support Services	----	----			
7. Size Of Present Farm Unit Compared To Average	10	0			
8. Creation Of Nonfarmable Farmland	25	0			
9. Availability Of Farm Support Services	5	5			
10. On-Farm Investments	20	0			
11. Effects Of Conversion On Farm Support Services	25	0			
12. Compatibility With Existing Agricultural Use	10	0			
TOTAL SITE ASSESSMENT POINTS	160	25			
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or a local site assessment)*	160	25			
TOTAL POINTS *(Total of above 2 lines)*	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

The NRCS regulation (7 CFR 658.4 (c)(2)) provides for a minimal level of consideration for protection & no additional sites be evaluated when sites receive a total score of less than 160 points on USDA Form AD-1006. Additionally, the SCS advises that FORM AD-1006 need not be submitted to them in cases where the site assessment criteria is less than 60 points for each project alternative. This site has been evaluated & Form AD-1006 indicates that the values for the above referenced project are less than 60. Therefore, in accordance with the Farmland Protection Policy Act, this project will be advanced without further coordination or evaluation. Futhermore, impacts to prime and unique farmlands will be minimal.

NOTE: Site A = Alternate 2; Site B = Alternate 4

(See Instructions on reverse side)

Form AD-1006 (10-83)

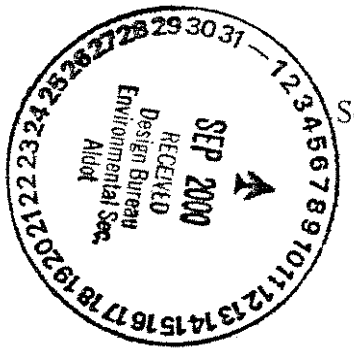
USDA NRCS
Natural Resources Conservation Service

United States
Department of
Agriculture

Natural
Resources
Conservation
Service

4511 US Hwy 31S
Decatur AL
35603

Phone:
1-256-353-6632
Fax:
1-256-355-8285



September 5, 2000

Alfedo Acuff, Coordinator
Environmental Technical Section
Alabama Department of Transportation
1409 Coliseum Blvd
Montgomery, AL 36130-3050

RE: Project: BR-392 (6) Add lanes and bridge
Bear Creek Bridge Replacement on SR-17
Marion County, AL

Dear Sir:

Enclosed is the information you requested on the above project.

Our main concerns on this project are the possible loss of wetlands, conversion of prime farmland, and possible presence of threatened or endangered species. Also, erosion and sediment control measures should be implemented and maintained during the construction phase to protect land, water, and related resources. Plans for construction should include sediment basins or traps and other erosion control practices, including coverage of bare soil as soon as possible by temporary and permanent vegetation and structures.

If we can be of further assistance on this project, please feel free to contact, Lawayne Robinson, District Conservationist, Hamilton, AL 921-3103 extension 3, or me at 256-353-6146.

Sincerely,

Bobby Fox
Bobby Fox
Resource Soil Scientist

Copy to: 2nd Div. Eng.
✓ Location
Utilities
✓ HMB
✓ ETS

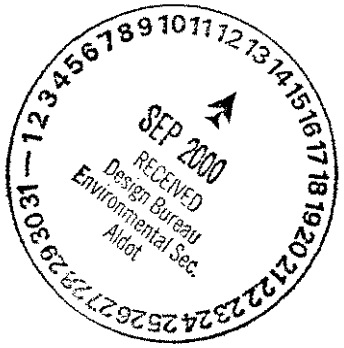
STATE OF ALABAMA
ALABAMA HISTORICAL COMMISSION
468 SOUTH PERRY STREET
MONTGOMERY, ALABAMA 36130-0900

LEE H. WARNER
EXECUTIVE DIRECTOR

TEL: 334-242-3184
FAX: 334-240-3477

September 7, 2000

Ms. Alfedo Acoff
DOT
1409 Coliseum Blvd.
Montgomery, AL 36130-3050



Re: AHC 00-2049
BR-392(6)
Add Lanes & Bridge Replacement over Bear Creek
Marion County, AL

Dear Ms. Acoff:

Upon review of the proposed project, the Alabama Historical Commission has determined the following. Should the proposed project be given favorable consideration our office would request that a cultural resource assessment be conducted for all previously undisturbed areas to be impacted by the proposed activities.

Should you have any questions, please contact Greg Rhinehart of this office.

Sincerely,

Thomas O. Maher, Ph.D.
State Archaeologist

FLO/GCR/gtj

Copy to: 2nd Div. Eng.
✓ Location
Utilities
✓ HMB
✓ ETS

Miccosukee Tribe of Indians of Florida

September 14, 2000

Mr. Don T. Arkle, Chief
Design Bureau
Alabama Department of Transportation
1409 Coliseum Blvd.
Montgomery, AL 36130-3050

RE: Project: BR-392 (6)

Dear Mr. Arkle:

The Miccosukee Tribe received your letter concerning this project. I am the Native American Graves and Repatriation Representative for the Miccosukee Tribe. All future correspondence should be directed to me at the below address.

The Tribe's comments on the above referenced projects are as follows. We will defer to the comments made by those Tribes who are more culturally affiliated to this area.

Thank you for including us in your review process. Please contact me at the below number if you require further information.

Sincerely,

Steve Terry
NAGPRA Representative
Miccosukee Tribe of Indians of Florida

Copy to: 2nd Div. Eng.
✓ Location
Utilities
✓ HNB
✓ FTS

P.O. Box 440021, Tamiami Station, Miami, Florida 33144, (305) 223-8380, fax (305) 223-1011
Constitution Approved by the Secretary of the Interior, January 11, 1962

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, Florida 33702

September 14, 2000

Mr. Don T. Arkle, Chief
Design Bureau
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Dear Mr. Arkle:

SUBJECT: Project: BR-392(6)
Add lanes and bridge replacement over Bear Creek on SR-17
Marion County
Dated: August 22, 2000

The National Marine Fisheries Service has reviewed the information contained in the above referenced subject. Based upon our review of the available information, we anticipate that any adverse impacts on marine and anadromous fishery resources, for which we are responsible, would be minimal.

If you have any questions, please contact Ms. Jennifer Robinson of our Panama City, Florida Office at 850/234-5061.

Sincerely,

W. Mark Thompson for
Andreas Mager, Jr.
Assistant Regional Administrator
Habitat Conservation Division

Copy to: 2nd Div. Eng.
✓ Location
Utilities
✓ HMB
✓ ETS

ALABAMA STATE SENATE
ALABAMA STATE HOUSE
MONTGOMERY, ALABAMA 36130-4600

ALABAMA

ROGER BEDFORD
STATE SENATOR 6TH DISTRICT
P.O. BOX 370
RUSSELLVILLE, ALABAMA
35653
RUSSELLVILLE (256) 332-2880
MONTGOMERY (334) 242-7862

COMMITTEES:
CHAIRMAN, FINANCE & TAXATION GENERAL FUND
BANKING & INSURANCE
CHILDREN, YOUTH AFFAIRS & HUMAN RESOURCES
COMMERCE, TRANSPORTATION & UTILITIES
CONSERVATION, ENVIRONMENT & NATURAL RESOURCES
EDUCATION
HEALTH
JUDICIARY
VETERANS & MILITARY AFFAIRS

CHAIRMAN, LEGISLATIVE COUNCIL
CHAIRMAN, MEDICAID OVERSIGHT COMMITTEE

August 30, 2000

Honorable Don T. Arkle, Chief
Design Bureau
Alabama Department of Transportation
1409 Coliseum Blvd.
Montgomery, AL 36130-3050

Dear Don:

Thank you for your recent letter of August 25 informing me about the bridge replacement over Bear Creek on SR-17 in Marion County. This is a very dangerous bridge that is in a state of disrepair. I am glad to see that we will replace this bridge with a multi-lane facility.

I would hope that the extension of the four-lane, which you have indicated, would run up the hill toward Hackleburg in a Southeasterly direction to tie in to were the four laning stops there in Hackleburg. This would greatly enhance the transportation safety in this area.

As you know, Hackleburg has numerous Alabama manufactured housing plants as well as two lumber yards which utilize this bridge in approach to the City. This would help with economic development and improve the overall safety of school buses traveling this area as well.

As it relates to the end of the project, in a northeasterly direction, it would be my hope that the four lane project could extend onto the Franklin-Marion County line. I am not sure of that of the exact length of the distance, but, I believe it would greatly enhance the safety and approach on SR-17/US 43 bridge replacement over Bear Creek. I believe that this can be done at minimum costs and would greatly improve the quality of this project.

Copy to: 2nd Div. Eng.
✓ Location
Utilities
✓ HMB
✓ ETS

In closing, let me say that I travel that road and cross that bridge three or four times a week. It definitely needs replacing and the approaches being four laned from both the northern and southern directions.

Sincerely yours,

Roger H. Bedford, Jr.
Alabama State Senate
District Six

RHB/agm

cc: Honorable James Brown, 2nd Division, Tuscumbia,
Dept. of Transportation

Haworth, P.E. - Retired
Meyer, P.E., L.A.
Boleyn, P.E., L.A.
Blankenship, P.E.

Haworth, Meyer & Boleyn, Inc.

James H. Smith, P.E., L.S.
Bradley M. Meyer, P.E., L.S.
Joseph C. Pyles, P.E.
Karen Wood

PROFESSIONAL CONSULTING ENGINEERS

2500 Fairlane Drive
Building 1, Suite 170
Montgomery, AL 36116

Office: (334) 277-1002
Fax: (334) 277-1984

October 11, 1999

BP
9
00-0039

Mr. Larry Goldman, Field Supervisor
U.S. Fish and Wildlife Service
P.O. Box 1190
Daphne, Alabama 36256

ATTENTION: Mr. Patric Harper

RE: BRF-398 (52), Bridge Replacement over Big Nance Creek on SR-157
BR-392 (6), Bridge Replacement over Bear Creek on SR-17

Dear Mr. Harper:

Our firm has been notified that we have been selected to perform the environmental studies and prepare the environmental documents for the above referenced bridge replacement projects. It would be appreciated if you would provide us with a list of threatened and endangered species that may occur within these project areas. I have attached copies of two quadrangle maps depicting the project areas.

I appreciate your assistance. If you have any questions or need additional information, do not hesitate to call.

Sincerely,
HAWORTH, MEYER & BOLEYN, INC.

Bill Carwile, P.E.
Region Manager

[redacted]
X No listed, proposed or candidate species present

Acting U.S. Fish & Wildlife Service Field Supervisor

11/12/99
Date

3 HMB Circle
US 460
Frankfort, KY 40601
(502) 695-3800

440 Metroplex
Suite 105
Nashville, TN 37211
(615) 834-4335

325 Sixth Avenue
South Charleston, WV 25303
(304) 744-5200

320 East Elm St
New Albany, IN 47150
(812) 944-9672

Lee 80
2
Bear A

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

September 22, 2000

Regulatory Branch
Operations Division

Subject: Department of the Army File Number AL00-02927-L, Alabama Department of Transportation

Alabama Department of Transportation
Attention: Ms. Alfedo Acoff
Environmental Technical Section
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Dear Ms. Acoff:

This is in reply to your letter dated August 25, 2000, requesting our review and comments to your Department's proposal BR-392(6) to replace the bridge on State Road 17 over Bear Creek and widen the existing two-lane road to a multi-lane highway for approximately one mile on each side of the bridge, in Marion County, Alabama.

If "waters of the United States", including wetlands, are filled or mechanically cleared for this project, a Department of the Army (DOA) permit, pursuant to Section 404 of the Clean Water Act, will be required prior to construction.

We look forward to working with your Department on this project should a DOA permit be required.

Sincerely,

Chuck Sumner

Chuck Sumner
Project Manager
Regulatory Branch

Copy to: 2nd
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Location
Utilities
✓ HMB
✓ ETS

SEP 2000
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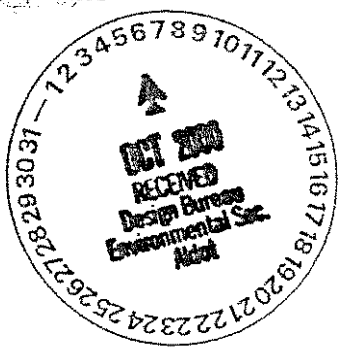
Design Bureau
Environmental Sec.
Aldot



Creek Nation of Oklahoma

Cultural and Historic Preservation

September 2, 2000

Mr. Don T. Arkle
Alabama Dept. of Transportation
1409 Coliseum Blvd.
Montgomery, ALA. 36130-3050

RE:Project No. BR-392(6), Add lanes and Bridge Replacement over Bear Creek on SR-17, Marion Co., Alabama

Dear Mr. Arkle,

Thank you for notifying the Muscogee (Creek) Nation of Oklahoma. In looking at the site location and treaty boundaries, we do not forsee any cultural impact by the undertaking of this project. We are only interested in notification for the areas within the boundaries as shown on the maps we sent previously.

However, we expect to be notified in case of inadvertent discoveries within a project acreage that are pertinent to the Muscogee (Creek) Nation as required by the Cultural and Historic Preservation Laws that are applicable.

Sincerely,

Tim Thompson

Tim Thompson
Cultural Research Specialist
(918) 756-8700 x604

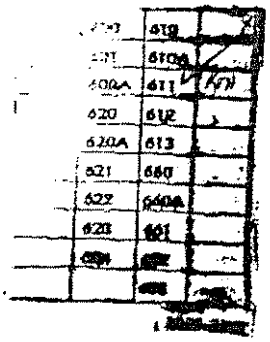
Copy to: 2nd Div. Eng.
✓ Location
___ Utilities
✓ HMB
✓ ETS
___ ___

Creek Nation Tribal Complex · Highway 75 & Loop 56 · P.O. Box 580 · Okmulgee, Oklahoma 74447 · 918/756-8700 · Fax 918/756-2077

ALABAMA DEPARTMENT OF TRANSPORTATION
1409 Coliseum Boulevard, Montgomery, Alabama 36130-3050

Don Siegelman
Governor

G. M. Roberts
Transportation Director



August 22, 2000

Project Manager
Airports District Office
FAA
Jackson, MS 39208-2306

NO OBJECTION
FAA - JAN-ADO
10/6/00

RE: Project: BR-392 (6), Add lanes and bridge
Replacement over Bear Creek on SR-17
Marion County, Alabama

Dear Sir:

The Alabama Department of Transportation is studying a proposal to replace the bridge on SR-17 over Bear Creek and widen the existing two-lane roadway to a muti-lane facility for approximately one-mile on each side of the bridge. Additional rights-of-way will be required to implement the project. The project study area is shown on the attached map.

The purpose of the proposed project is to replace a structurally deficient bridge and to provide additional travel lanes along this segment of SR-17. Traffic is projected to increase substantially and additional lanes will provide a facility that will handle the increased traffic in a safer and more efficient manner.

The Alabama Department of Transportation is investigating all aspects of this proposal in order to determine its feasibility. We are very much interested in the views of public officials and agencies concerning this proposed highway facility. The early identification of effects a highway project may have on an area is needed to assure proper planning.

Also, we are interested in your review of this proposal so that we may satisfy the intent of certain Federal Status (Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and Section 401 of the Intergovernmental Review Act of 1968). Although Federal - Aid Highway Planning, Research, and Construction projects have not been selected for review under Alabama's "Intergovernmental Review of Federal Programs" (Executive Order 12372) process, we must still meet these other requirements. Therefore, your review is requested.

Copy - 2nd
Dev. Eng.
✓ Location
Utilities
✓ HMB
✓ ETS

RECEIVED
FAA
AUG 28 2000
Airports Dist. Office
JACKSON, MS

OCT 2000
RECEIVED
Design Bureau
Environmental Sec.
Addt

It would be appreciated if you would inform us of any comments or useful information that you might have regarding the feasibility of this proposal and identify a social, economic or environmental effects relative to the proposal. The comments will be taken under consideration in the development of this project and the appropriate environmental document.

Sincerely,

Don T. Arkle, Chief
Design Bureau

By: _____
Alfedo Acoff, Coordinator
Environmental Technical Section

AA/JB/jn

pc: ETS File

STATE OF ALABAMA
ALABAMA HISTORICAL COMMISSION
468 SOUTH PERRY STREET
MONTGOMERY, ALABAMA 36130-0900

LEE H. WARNER
EXECUTIVE DIRECTOR

TEL: 334-242-3184
FAX: 334-240-3477

April 21, 2000

Ms. Alfedo Acoff
DOT
1409 Coliseum Blvd.
Montgomery, AL 36130-3050

Re: AHC 00-0947
Cultural Resource Assessment
BR-392(6)
Bridge Replacement over Bear Creek
Marion County, AL

Dear Ms. Acoff:

Upon review of the cultural resource assessment conducted by New South Associates, the Alabama Historical Commission has determined the following. The results of the assessment indicate that there are no cultural resources listed on or eligible for the National Register of Historic Places within the project boundaries. Therefore, our office can concur with the proposed project.

We appreciate your efforts in helping us preserve Alabama's non-renewable cultural resources. Should you have any questions or comments or if we may be of further service, please contact Stacye Hathorn or Greg Rhinehart of this office and **include the project number referenced above**.

Sincerely,

for: Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/GCR/gtj

212.08

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1070
NASHVILLE, TENNESSEE 37202-1070

IN REPLY REFER TO

August 7, 2000

Regulatory Branch

SUBJECT: File No. 200001531: Wetland Determination for the Bridge Replacement and Widening of State Route 17 (U.S. 43) in Marion County, Alabama

Mr. Bill C. Carwile
Region Manager
Haworth, Meyer and Boleyn, Inc.
7009 Brockport Court
Montgomery, AL 36117

Dear Mr. Carwile:

This is in reference to the wetland determination for the bridge replacement and widening of State Route 17 (U.S. 43) in Marion County, Alabama. The referenced site is noted on the enclosed map.

Based upon our review of USGS topographical maps, Marion County soil map and the information you provided, I have determination that the site is not considered a wetland subject to our federal permitting authority pursuant to section 404 of the Clean Water Act (CWA) (33 USC 1334).

However, since the proposed widening does involve the replacement of the existing bridge, a Department of the Army (DA) permit pursuant to Section 404 of the CWA may be required for the new bridge crossing Bear Creek.

The U.S. Army Corps of Engineers exercises regulatory jurisdiction pursuant to Section 404 of the CWA, which prohibits filling activities in "waters of the U.S.", including wetlands, unless the work has been authorized by a Department of the Army permit. The placement of fill material, the deposition of fill material inherent with mechanized land clearing, excavation, and similar activities in streams and wetlands are subject to this authority.

This letter does not obviate any responsibility to obtain other federal, state, and local approvals which may be required.

We appreciate your awareness of our regulatory program and thank you for coordinating this matter with us. Any questions or comments may be directed to me at the above address or phone (615) 736-2711.

Sincerely,

Floyd M. Carnes

Floyd M. Carnes
Regulatory Specialist
Construction-Operation Division

Enclosure

APPENDIX B

NOISE ANALYSIS

NOISE EVALUATION

for

S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama
BR 392(6)

Submitted To:
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Prepared by:
Haworth, Meyer & Boleyn, Inc.
7009 Brockport Ct.
Montgomery, AL 36117

October, 2000

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I. Introduction

The highway generated noise impacts of this project have been analyzed in accordance with the procedures contained within the Alabama Department of Transportation, "Highway Traffic Noise Analysis & Abatement, Policy and Guidelines," and Federal Register Regulation 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."

These regulations set forth a five-step highway project noise analysis as follows: (1) Identify existing or planned land use activities that may be affected by highway noise; (2) Determine existing noise levels; (3) Predict future highway noise levels; (4) Determine impacts by comparing existing levels with predicted levels and criteria contained in 23 CFR Part 772; and (5) Consider and examine noise abatement measures for those impacts that have been identified. The results of the analysis are summarized below.

II. Project Description

The proposed project involves the replacement of the bridge on S.R. 17 (U.S. 43) that crosses Bear Creek and the widening of S.R. 17 for approximately 1 mile on each side of the bridge from a two-lane to a divided four-lane. The project begins 350 meters (1150 feet) northeast of the city limits of Hackleburg, and continues for 3.14 km (1.95 miles). The project's location is shown on the Noise Receptor Map on page 2.

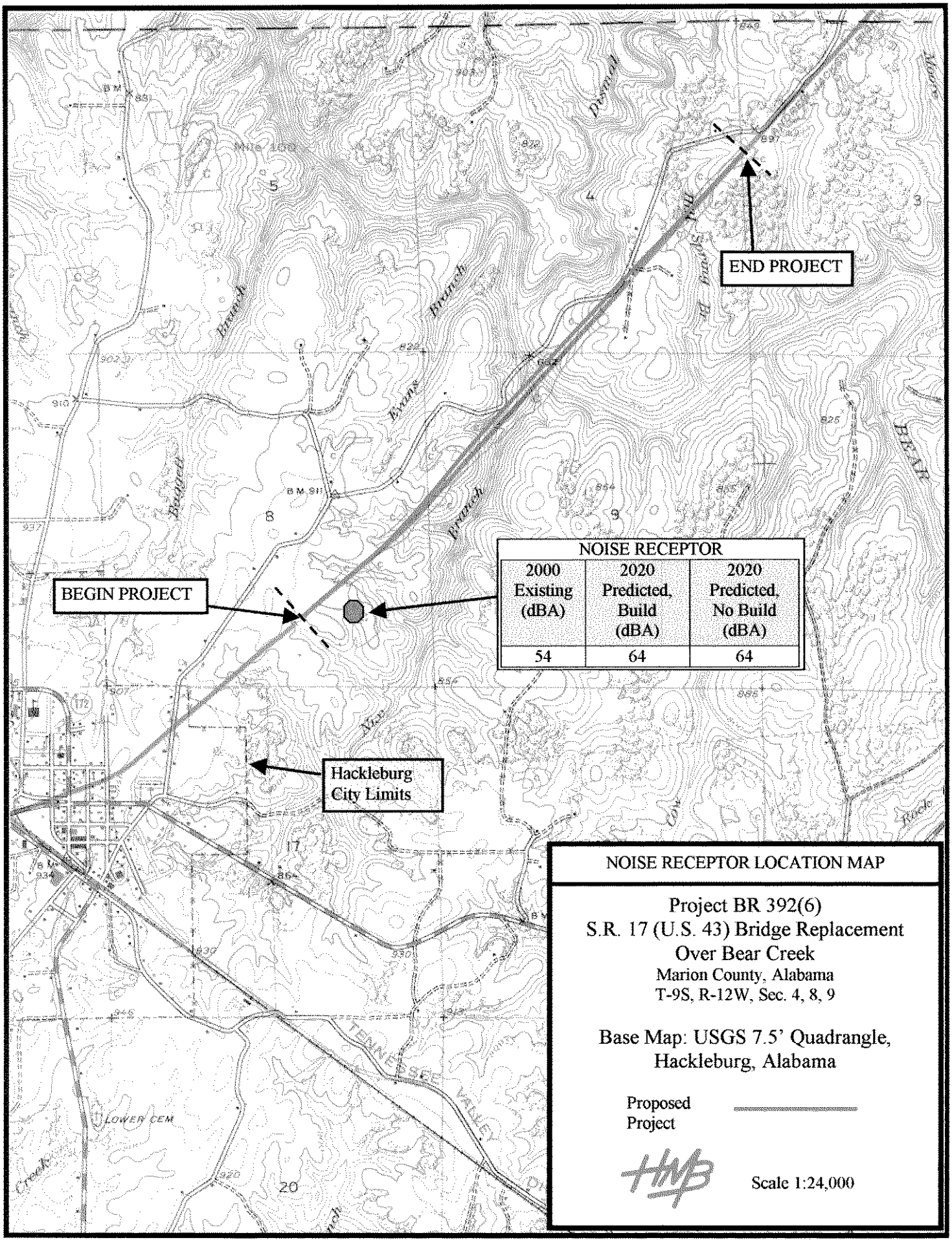
III. Identification of Noise Receptor Sites

In selecting the study site an effort was made to develop an accurate appraisal of the entire project corridor with respect to the noise receptors. Four residences were located on the project which were of similar distance from the highway. All were on the south side of the highway. The receptor closest to the road was chosen as the worst case scenario and was analyzed using existing and projected traffic counts. The location of this noise receptor is illustrated on the Noise Receptor Location Map on page 2.

Table 1 of 23 CFR 772 gives design noise level/land use relationships for various types of land uses. Land use category "B" is applicable to all noise sensitive receptors on this project because they represent residences. For category "B", the Design Noise Abatement Criteria (NAC) is 67 dBA Leq and applies to the noise levels on the exterior of the structure.

IV. Existing and Predicted Noise Levels

Ambient noise levels were measured on March 15, 2000 during meteorologically acceptable periods at the receptor considered to be most sensitive. Measurements were conducted utilizing a Bruel & Kjaer Model 2236 Type I sound level meter, which was set to update dBA Leq ten times per second. Readings were taken for two, ten minute periods. These noise levels were then used as a baseline to compare with future noise levels generated from design year traffic (2022). The Federal Highway Noise Prediction


END PROJECT
BEGIN PROJECT
Hackleburg
City Limits
NOISE RECEPTOR
2000 Existing (dBA)
2020 Predicted, Build (dBA)
2020 Predicted, No Build (dBA)
54
64
64
NOISE RECEPTOR LOCATION MAP
Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek
Marion County, Alabama
T-9S, R-12W, Sec. 4, 8, 9
Base Map: USGS 7.5' Quadrangle,
Hackleburg, Alabama
Proposed
Project
Scale 1:24,000

Model (Stamina 2.0/Optima) was used to predict design year noise levels. Refer to Table 1 for results of measured existing noise levels and predicted future noise levels.

V. Impact and Noise Abatement Analysis

In accordance with 23 CFR Part 772, the Federal Highway Administration (FHWA) Noise Abatement Criteria and the Alabama Department of Transportation Highway Traffic Noise Analysis and Abatement Policy and Guidance manual, the following criteria is utilized in determining the occurrence of traffic noise impacts:

1. When the predicted design year noise levels approach (defined as 66 dBA) or exceed those values shown for the appropriate activity category of the NAC.

2. When the predicted design year noise levels "substantially exceed existing noise levels" (as defined), by 15 dBA or more.

The year 2000 measured noise level for the receptor chosen for noise analysis was 54 dBA. Predicted design year noise level for build and no-build is 64 dBA. Because there are no predicted noise impacts on this project, abatement measures will not be necessary.

Table 1. Noise Receptor with Existing and Predicted Noise Levels (dBA). Noise Abatement Criteria is 67 dBA.

Site Number	Number of Representative Receptors	2000 Existing	2020 Predicted, Build	2020 Predicted, No Build	Increase/decrease (2020-2000 build)
1	4	54	64	64	10

VI. Construction Noise

The effects of temporarily increased noise levels during construction were considered as directed by 23 CFR Part 722.19. Noise impacts during project construction are of short duration. The high noise levels of combustion engine powered equipment are expected to be the main contributor to the sound levels from highway construction activity. All construction equipment will be required to comply with OSHA regulations and Alabama DOT Standard Specifications.

At this stage of the project no specific construction noise impacts can be identified. The major construction elements of this project are expected to be earth removal, hauling, grading and paving. General construction noise impacts such as temporary speech interference for passersby and those individuals living and working near the project can

be expected; this is particularly true from earth moving equipment noise during grading operations. Overall, construction noise impacts are expected to be minimal since construction noise is relatively short in duration and generally restricted to daytime hours. For those residences closest to the project, transmission loss characteristics over distance, and the temporary nature of construction activity, is believed to be sufficient to moderate the effects of intrusive construction noise.

At the Plans, Specifications, and Estimates (PS&E) inspection, consideration will be given as to whether or not restrictions need to be placed on work hours. If it is determined that restrictions are necessary, appropriate notes will be placed on the plans. These stipulations will be included in the sequence of construction for the project, if needed.

VII. Summary

The year 2000 measured noise level for the receptor chosen for noise analysis was 54 dBA. Predicted design year noise levels for build and no-build scenarios was 64 dBA. There are no predicted noise impacts on this project, and abatement measures will not be necessary.

APPENDIX C

ECOLOGICAL REPORT

ECOLOGICAL BASELINE REPORT

for

S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama
BRF - 392(6)

Submitted To:
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Prepared By:
Haworth, Meyer & Boleyn, Inc.
7009 Brockport Ct.
Montgomery, AL 36116

October, 2000

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Executive Summary

Field work was performed by HMB personnel in February 2000. No wetlands or threatened or endangered species were identified on the project. A letter from the U.S. Fish & Wildlife Service indicated that no threatened or endangered species exist within the project area.

There will be impacts to five flowing streams. These are Bear Creek, Dismal Branch, Hill Spring Branch, Nix Branch, and an unnamed tributary of Nix Branch. Dismal Branch flows through the project construction limits for approximately 300 feet. This 300 foot section may require channelization. Nix Branch flows through approximately 1700 feet of the proposed construction area and may require channelization. There is a waterfall on the last 100 feet of Nix Branch that may require channelization. Two caves on the project would be impacted.

The proposed project area is mostly forested. There are five homes, a canoe rental, and a clothing distribution center with driveways entering S.R. 17. Approximately 47.52 acres (19.23 hectares) will be impacted by the construction of the proposed project.

Project Description

The proposed project involves the replacement of the bridge on S.R. 17 (U.S. 43) that crosses Bear Creek and the widening of S.R. 17 for approximately 1 mile on each side of the bridge from a two-lane to a divided four-lane. The project begins 1150 feet (350 meters) northeast of the city limits of Hackleburg, and continues for 1.95 miles (3.14 km). The project's location is shown on the Vicinity Map on Page 2, and on the Ecological Resources Map on Page 3.

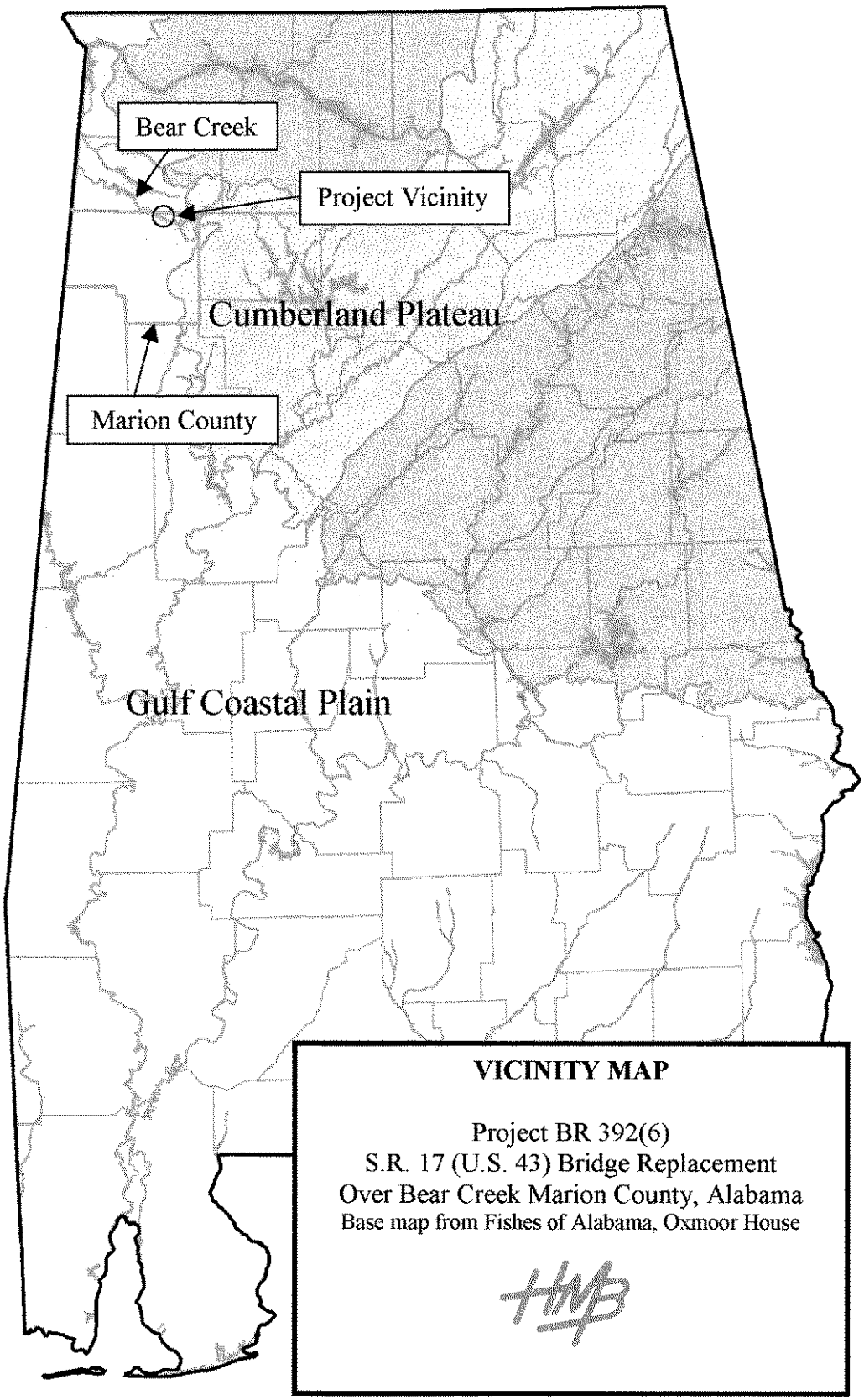
Coordination

The U.S. Fish and Wildlife Service was consulted for information on federally protected endangered and threatened species that might be affected by the project. The U.S. Army Corps of Engineers was consulted on the potential for wetland impacts. Soils and climatological information were obtained from the Natural Resources Conservation Service. Topographic maps were obtained from the U.S. Geological Survey. National Wetlands Inventory maps were obtained from the U.S. Fish and Wildlife Service.

Environmental Setting of the Project

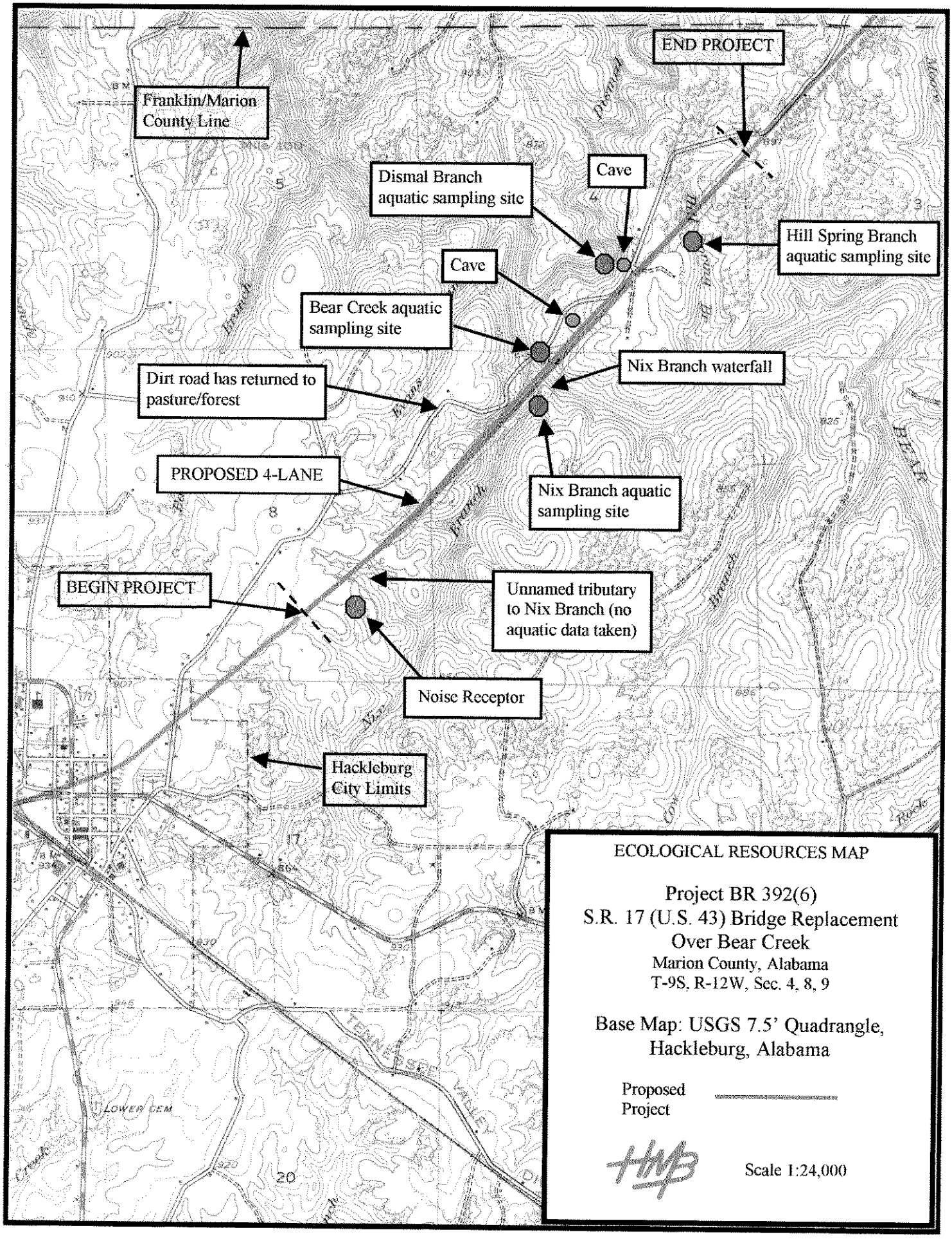
A. Climate

The climate in the vicinity of the project area consists of hot summers and cool winters. Average temperature in the winter is 40° F and in the summer is 76° F. Average annual precipitation is 29 inches, the majority of which usually falls between April and September. The average growing season is 217 days.



VICINITY MAP

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek Marion County, Alabama
Base map from Fishes of Alabama, Oxmoor House


Franklin/Marion County Line
END PROJECT
Dismal Branch aquatic sampling site
Cave
Hill Spring Branch aquatic sampling site
Cave
Bear Creek aquatic sampling site
Nix Branch waterfall
Dirt road has returned to pasture/forest
PROPOSED 4-LANE
Nix Branch aquatic sampling site
BEGIN PROJECT
Unnamed tributary to Nix Branch (no aquatic data taken)
Noise Receptor
Hackleburg City Limits
ECOLOGICAL RESOURCES MAP
Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek
Marion County, Alabama
T-9S, R-12W, Sec. 4, 8, 9
Base Map: USGS 7.5' Quadrangle,
Hackleburg, Alabama
Proposed Project
Scale 1:24,000

B. Physiographic and Geologic Setting

The project is located in the Warrior Basin district of the Cumberland Plateau Physiographic Section. It is located in the northernmost end of Marion County near the boarder of the Cumberland Plateau and the Gulf Coastal Plain. Here the topography is not as rugged as it is deeper in the Cumberland Plateau. However, the project area is deeply cut by Bear Creek and the project area is, therefore, characterized by gently rolling to steep hills with some vertical cliffs.

C. Soils

Three general soil map units occur on the project area. The western third consists of Townley-Nauvoo-Hector which is described as, "Shallow and deep, gently rolling to steep, well drained soils that have a loamy or clayey subsoil; formed in material weathered from shale, sandstone, or interbedded sandstone and shale." (Cotton, 1979). The middle third (including the soil immediately on either side of Bear Creek) of the project consists of Hector-Rock outcrop-Pikeville which is described as, "Shallow and deep, steep, well drained soils that have a loamy subsoil; formed in material weathered from sand-stone that is interbedded with shale in places and in unconsolidated, gravelly marine sediment." (Cotton, 1979). The remainder of the project consists of Savannah which is described as, "Deep, nearly level and gently sloping, moderately well drained soils that are loamy in the upper part of the subsoil and have a fragipan in the lower part; formed in unconsolidated beds of marine and fluvial sediment that consists of sand, silt, and clay." (Cotton, 1979).

D. Groundwater

The project area is located over the far western portion of the Pottsville Aquifer, which is described by Cotton (1979) as a good aquifer for both dug and drilled wells.

E. Surface Hydrology

There are five streams in the project corridor: Dismal Branch, Hill Spring Branch, Nix Branch, an unnamed tributary of Nix Branch, and Bear Creek. The former four flow into Bear Creek. All streams were flowing at the time of the site visit. These streams are shown in the Ecological Resources Map on page 3. The proposed new road crosses Bear Creek (the largest stream on the project), Hill Spring Branch, and the unnamed tributary of Nix Branch. Dismal branch flows south through a 300 foot section of the project and flows downstream to join Bear Creek. This 300 feet may require channelization or may be avoidable due to it's being near the outside boundary of the construction limits. Hill Spring Branch flows south under S.R. 17 and into Bear Creek about 3000 feet upstream of its junction with S.R. 17. Nix branch flows north and nearly parallels S.R. 17. It enters the project approximately 1700 feet from Bear Creek and joins Bear Creek approximately 100 feet south of S.R. 17. The last approximately 100 feet of Nix Branch is a waterfall. The unnamed tributary of Nix Branch flows under S.R. 17, 2300 feet from

the western end of the project. Bear Creek flows northwest until it joins the Tennessee River.

Chapter 335-6-11 (Water Use Classification for Interstate and Intrastate Waters) of the Water Quality Program of the Alabama Department of Environmental Management designates this section of Bear Creek (between S.R. 187 and the Upper Bear Creek Reservoir Dam) as being for Fish and Wildlife. Waters designated for Fish and Wildlife usage are best used "for fishing, propagation of fish, aquatic life, and wildlife, and any other usage except for swimming and water-contact sports or as a source of water supply for drinking or food-processing purposes". This section of Bear Creek is also designated as being fit for swimming and other whole body water-contact sports (McIndoe, 1975). The section of Bear Creek that runs through the project area flows into Lower Bear Creek Reservoir, a public water supply.

F. Land Use

The proposed project area is mostly forested. There are also five homes, a canoe rental, and a clothing distribution center with driveways entering S.R. 17.

G. Terrestrial Habitats

Ninety percent of the project is forested, the remaining area being pasture or lawn frontage. In the non-riparian areas, the forest consists primarily of short leaf pine (*Pinus echinata*). Also included are scattered individuals of the following: loblolly pine (*Pinus taeda*), northern red oak (*Quercus rubra)*, white oak (*Quercus alba*), southern red oak (*Quercus falcata*), eastern hemlock (*Tsuga canadensis*), yellow poplar (*Liriodendron tulipifera*), big leaf magnolia (*Magnolia macrophylla*), sourwood (*Oxydendrum arboreum*), sweetgum (*Liquidambar styraciflua*), mockernut hickory (*Carya tomentosa*), shagbark hickory (*Carya ovata*), dogwood (*Cornus florida*), box elder (*Acer nugundo*), elderberry (*Sambucus canadensis*), and Chinese privet (*Ligustrum sinense*).

H. Bottomlands and Wetlands

Along the banks of the creeks the forests consist mainly of river birch (*Betula nigra*), yellow poplar, and Chinese privet with scattered individuals of those species found on higher ground. There were no jurisdictional wetlands found on the project.

Assessment Methods

Field work was performed by HMB personnel on February 28 and 29, 2000. The majority of the field sampling was toward searching for wetlands that would be impacted by the project and collecting water quality data on flowing streams crossed by the project. Five water quality parameters were measured. Specific conductance (mS/cm), and pH were measured with an Oakton 35630-00 Portable pH/Con 10 meter (serial number 56169). Dissolved oxygen (mg/L) and temperature (°C) were measured with an Oakton 35640 Portable DO 100 Meter (serial number 52381). Turbidity (NTU) was measured

with an Orbeco-Hellige Model 966 Portable Turbidimeter (serial number 2199). The meters were calibrated according to the manufacturer's recommendations. Water quality results are shown on Table 1 and water quality sites are shown on the Ecological Resources Map on page 3.

Table 1. Water Quality Parameters for Aquatic Sites.

Steam, Alternate	Alternate	Temperature (°C)	Dissolved Oxygen (mg/L)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)
Nix Branch,	1	11.1	9.9	6.9	48.2	1.6
Hill Spring Branch,	1 and 2	10.7	7.9	7.6	28.7	3.1
Dismal Branch,	2	8.6	14.7	7.1	43.7	1.3
Bear Creek,	1 and 2	12.6	10.2	7.0	78.4	6.5

Potential wetland areas were investigated using the criteria outlined in the 1987 Army Corps of Engineers Wetland Delineation Manual. These criteria included the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. A routine wetland determination data point was taken near Bear Creek, the area determined to be the area of lowest elevation on the project. National Wetland Inventory (NWI) maps and Natural Resource Conservation Service (NRCS) soil maps were also reviewed and compared with field testing. Terrestrial habitat types and major plant communities were identified using topographic maps and field surveys.

Probable Impacts of the Project

A. Area Impacted

Construction of the proposed project through undeveloped land will initially eliminate all flora and fauna in the selected project path. Right-of-way widths range from 100 to 500 (30 to 152 meters) feet. It is estimated that 47.52 acres (19.23 hectares) will be impacted through construction of the proposed project. Habitat type and area impacted are presented in Table 2.

Table 2. Habitat Types in Acres (Hectares)

Habitat Type	Area Impacted
Lawn Frontage	6.2 (2.5)
Pasture	1.4 (0.6)
Forest	39.9 (16.2)
Total	47.5 (19.2)

B. Streams and Water Quality

There will be 3 crossings of flowing (at the time of the site visit) streams by the project. The Ecological Resources Map on page 3 shows all streams that might be impacted by the project. The project crosses Bear Creek (the largest stream on the project), Hill Spring Branch, and an unnamed tributary of Nix Branch. Dismal Branch flows through the project for approximately 300 feet. This 300 feet may require channelization or may be avoidable due to it's being near the outside boundary of the construction limits. Nix Branch flows through the construction limits for approximately 1700 feet but is not crossed by the new road. This 1700 feet may require channelization. However, the southernmost section of this 1700 feet may be avoided as it is near the proposed right-of-way limits. The waterfall on the last 100 feet of Nix Branch would require channelization.

Minor and short-term increases in turbidity and suspended dissolved solids can be expected but will be controlled through the use of erosion/sediment control measures and best management practices. Construction of the project should not affect the use classification of any of the streams.

C. Terrestrial Habitats

The new right-of-way, within two to five years, will, if maintained, become revegetated and similar in most respects to the pastures in the area. Fauna dependent upon mast crops, cavity trees, the litter layer and other aspects of woodlands will not utilize the converted area. No unique or unusual habitat will be eliminated by construction of the project.

D. Wetlands

There were no jurisdictional wetlands within the project corridor as defined by the 1987 Army Corps of Engineers Wetland Delineation Manual.

E. Threatened and Endangered Species Impacts

The project has been coordinated with the U.S. Fish & Wildlife Service for threatened or endangered species that could occur within the project area. Their response indicates that no threatened or endangered species exist within the project area, therefore the project will have no effect on any threatened or endangered species.

F. Groundwater

The proposed project is not expected to have an adverse impact upon quantity or quality of groundwater of the area.

G. Renewable resources

Few impacts to agricultural, silvicultural or other renewable resource activities are expected. The proposed project will have a negligible impact upon the hunting, fishing and trapping resources in the area.

H. Other Natural Resources

There are two caves and a waterfall on this project. One cave is approximately 1000 feet east of Bear Creek on the north side of the highway. It is eight feet high at the entrance and one foot high at 35 feet deep. The other cave is between the highway and the section of Dismal Branch that enters the project. There are numerous cliffs in the area of this cave. This cave is five feet high at the entrance and one foot high at 50 feet deep. No signs of wildlife other than raccoon and mouse tracks were observed in either cave. There are 2 other areas with abundant cliffs. One is along the old Nix Branch stream bed next to Bear Creek on the north side of S.R. 17 (Nix Branch is not currently flowing in its original stream bed). The other is about 800 feet west of the bridge on the north side of the highway.

The waterfall is the last approximately 100 feet of Nix Branch before it joins Bear Creek. This waterfall is scenic and appears to be a local attraction.

I. Impact Summary

Approximately 47.52 acres (19.23 hectares) will be impacted through construction of the project. The project will impact 5 flowing streams. Dismal Branch flows through the project parallel to S.R. 17 for approximately 300 feet. Nix Branch flows through approximately 1700 feet of the project parallel to S.R. 17. Two caves and one waterfall would be impacted. No wetlands or threatened or endangered species were identified on this project.

The greatest environmental impacts on the proposed project will be to water quality mostly due to the length of impact to Nix Branch and Dismal Branch.

Proposed Mitigation of Adverse Impacts

A. Streams and Water Quality

Minor and short-term increases in turbidity and suspended and dissolved solids will be controlled through the use of sediment basins, sod strips, silt fences, seeding and other erosion/sediment control measures and best management practices. These features will be included in the plans and specifications along with schedules and guidance for installation, maintenance, and removal of them.

B. Wetlands and Threatened and Endangered Species

No wetlands or threatened or endangered species were identified on this project. Therefore, no mitigation for these resources will be necessary.

References

Cotton, J. A., 1979 Soil Survey of Marion County, Alabama. USDA, Soil Conservation Service. 100 pp. + maps.

McIndoe, J. E. 1975 Chapter 335-6-11 (Water Use Classification for Interstate and Intrastate Waters) of the Code of Alabama

APPENDIX D

LOCATION RISK ASSESSMENT

LOCATION RISK ASSESSMENT RECORD
FOR
LOCATION OF FLOODPLAIN ENCROACHMENT

Date: September 20, 2000

PROJECT NO. BR 392(6)

PROJECT DESCRIPTION: Bridge replacement over Bear Creek

PREPARED BY: Haworth Meyer and Boleyn Inc.

NFIP PARTICIPATION
(Fill In)

County Marion PARTICIPATING X
NON-PARTICIPATING
City PARTICIPATING
NON-PARTICIPATING

ENCROACHMENT DETERMINATION:
(Date of Map)

FHBM FBFM
FIRM X HUD STUDY
Marion County Panel 75
Maps effective December 4, 1979

OTHER SOURCES:

U.S.G.S. TOPO MAPPING FLOOD PRONE AREA MAP

PLAN-PROFILE SHEET

EXISTING STRUCTURE(S): (FILL IN)

LENGTH:
P.G.:
SKEW:
CENTERLINE ELEV.:

PROJECT SITE EVALUATION	ALTERNATIVE NO. 1 and 2	YES or NO
LONGITUDINAL ENCROACHMENT?		Yes
SIGNIFICANT ENCROACHMENT?		No
ALTERNATIVES TO SIGNIFICANT ENCROACHMENT?		N/A
ONLY PRACTICABLE ALTERNATIVE (ONLY IF SIGNIFICANT ENCR.)?		N/A
SIGNIFICANT RISK?		No
MEASURES TO MINIMIZE FLOOD PLAIN IMPACTS?		Yes
DIRECT OR INDIRECT SUPPORT TO BASE FLOOD PLAIN DEVELOPMENT?		No
POTENTIAL FOR INTERRUPTION OF EVACUATION ROUTE?		No

YES OR NO

IMPACT ON BENEFICIAL FLOOD PLAIN VALUES? YES

IF YES EXPLAIN Placement of approach roadway fill and bridge piers

MEASURES TO RESTORE AND PRESERVE BENEFICIAL VALUES? YES

IF YES EXPLAIN

Bridges in the floodplain will be designed in accordance with FEMA regulations and the ALDOT hydraulic manual and policies.

TYPE AND DEGREE OF DEVELOPMENT ON THE FLOOD PLAIN Minimal.

Bridge structures and approach roadway fills.

PROPOSAL AFFECTING A REGULATORY FLOODWAY? NO

PROJECT COORDINATION WITH FEMA REQUIRED? NO

IF YES WHEN?

OTHER COMMENTS

CONCLUSION:

Under the guidelines provided in the Alabama Highway Department's "Screening Process for the Design of Flood plains and Federal Aid Projects", this project qualifies for the level of analysis under Category 4.

Category 4: The proposed structure will have an effective waterway opening equal to or greater than the existing structure and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial flood plain values; there will be no significant change in flood risks; and there will be no significant increase in potential for interruption or termination of emergency service or emergency evacuation rates; therefore, it has been determined that this encroachment is not significant.

APPENDIX E

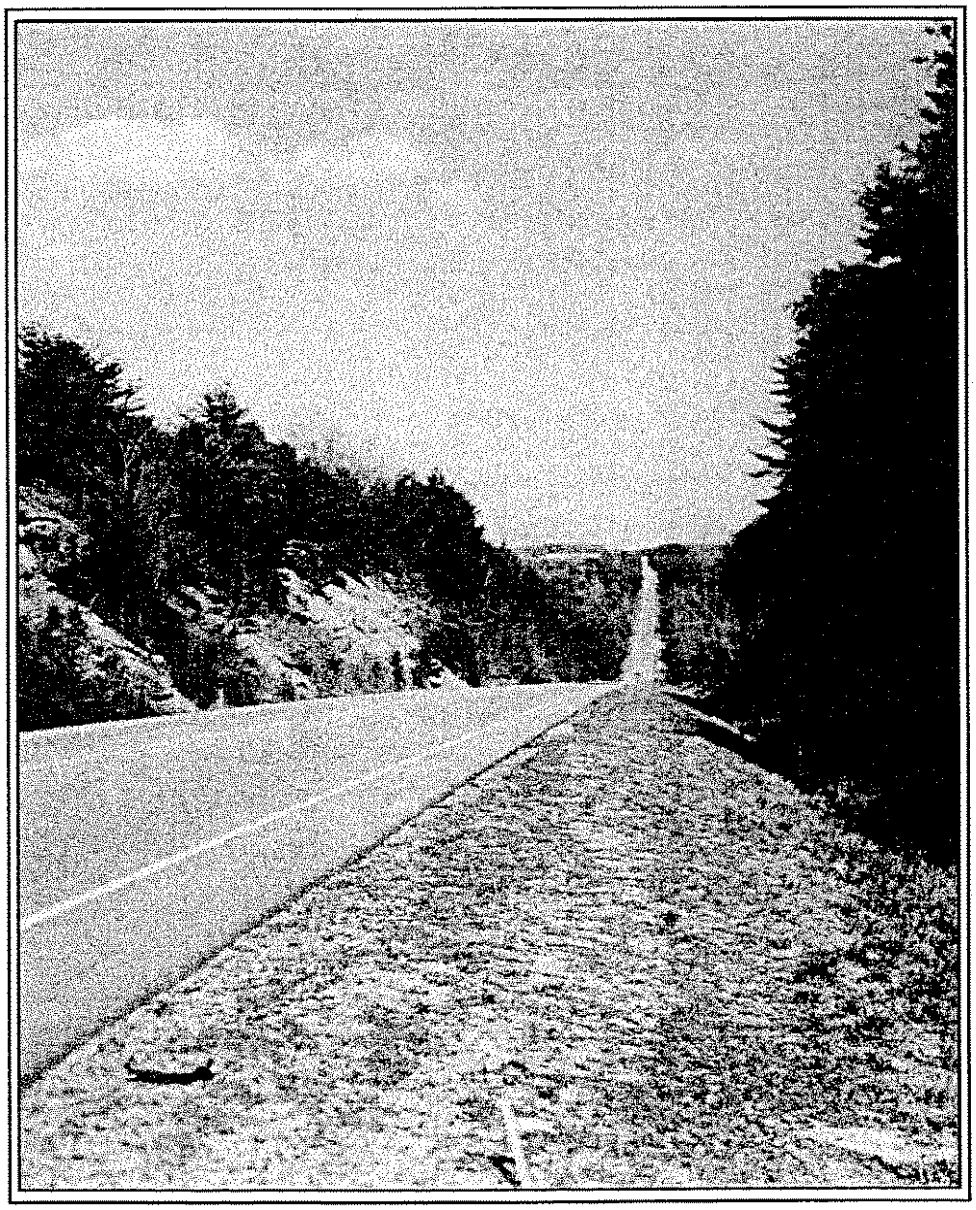
CULTURAL RESOURCES REPORT

(Excluding Resume of Principal Investigator)

A Cultural Resources Reconnaissance Survey of the

Proposed S.R.17 Bear Creek Bridge Replacement and Lane Addition

Marion County, Alabama



New South Associates
6150 East Ponce de Leon Avenue
Stone Mountain, Georgia 30083

A CULTURAL RESOURCES RECONNAISSANCE SURVEY OF THE PROPOSED S.R. 17 BEAR CREEK BRIDGE REPLACEMENT AND LANE ADDITION IN MARION COUNTY, ALABAMA

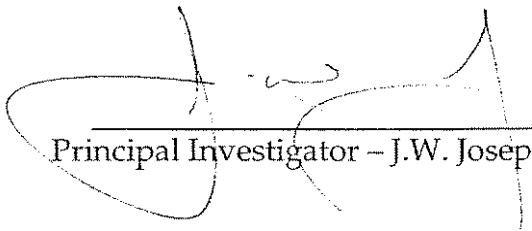
ALABAMA DEPARTMENT OF TRANSPORTATION

Report submitted to:

Haworth, Meyer & Boleyn Inc.
Executive Park, Building 1
2500 Fairlane Dr. Suite 170
Montgomery, Alabama 36116

Report submitted by:

New South Associates
6150 East Ponce de Leon Avenue
Stone Mountain, Georgia 30083



Principal Investigator – J.W. Joseph, Ph.D.

J. Faith Meader - Architectural Historian and Co-Author
Brody Fredericksen - Archeologist and Co-Author

New South Associates Technical Report #720

March 6, 2000

ABSTRACT

New South Associates conducted a Phase I archaeological survey and historic structure evaluation of the proposed bridge replacement in Marion County from February 23rd to February 25th, 2000. For the archeological field reconnaissance, a visual inspection and shovel testing were conducted, where appropriate, of all areas to be impacted by construction. The project area for the bridge and lane addition consisted of a delineated, variable width right of way that extended approximately 5200 feet on either side of the Bear Creek bridge, for a total of approximately 10,500 feet. Two alternates have been proposed, and each alternate was surveyed during the fieldwork phase of this project. No archaeological sites were located during the survey. The bridge along S.R. 17 at the Bear Creek crossing has a construction date of 1964. Because of its modern age, the bridge was not photographed and recorded using an Alabama's State Historic Preservation Office's (SHPO) architectural survey form, and it is not eligible for nomination to the National Register of Historic Places. Therefore, this bridge survey yielded no findings of cultural resources in the project area.

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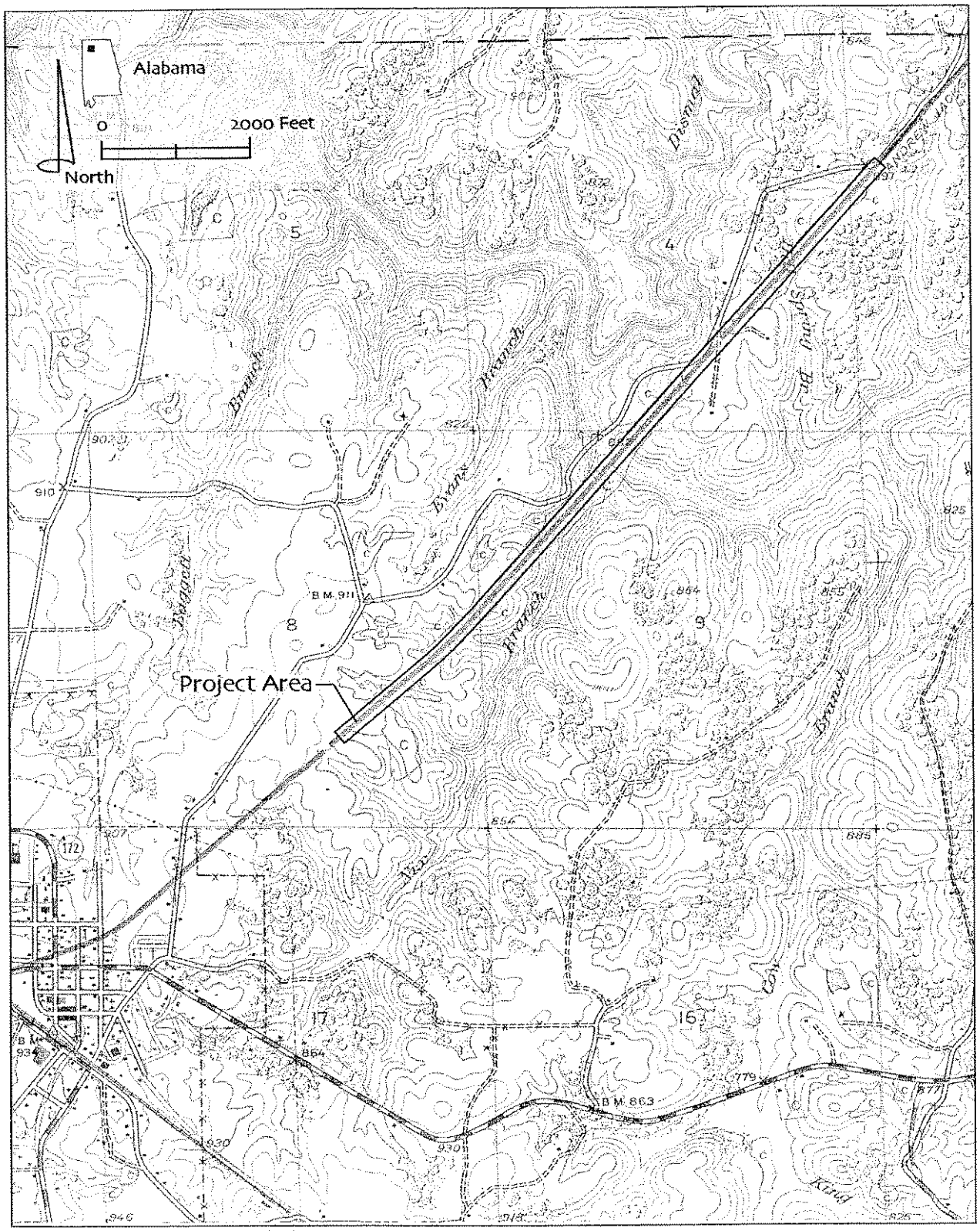
I. INTRODUCTION

This report presents the results of a cultural resources reconnaissance conducted by New South Associates for Haworth, Meyer & Boleyn. Fieldwork for the project began on February 23rd and was completed on February 25th, 2000. The reconnaissance was conducted on the S.R. 17 Bear Creek proposed bridge replacement and two 10,500 foot lane addition alternates in Marion County, Alabama (Figure 1-1). The bridge lies in a rural area, approximately one mile north of the town of Hackleburg. Areas on all four sides of the bridge as well as both proposed lane addition corridors were surveyed for archaeological resources.

The project includes an archaeological field reconnaissance as well as the recording and evaluation of the bridge. The archeological portion recorded no new sites. A search for additional architectural resources within the project area was also conducted, but no structures were identified. The objective of this project was to evaluate new sites and the bridge for National Register eligibility. However, the construction date of the bridge in Marion County is 1964, which renders it a modern bridge not yet 50 years in age. Recording this bridge due to historic status and architectural significance was therefore not necessary.

J.W. Joseph, PhD., serves as Principal Investigator for this project. The field crew consisted of J. Faith Meader, project historian/architectural historian and co-author, and Brody Fredericksen, project archaeologist and co-author. Tracey Fedor and Anthony G. Greiner of New South Associates produced the graphics for this report.

Figure 1
Project Area [BR-75(6)], Hackleburg Quad Map



Source: USGS Quadrangle; Hackleburg, ALA., 1946.

II. METHODS

PREVIOUS ARCHAEOLOGICAL AND ARCHITECTURAL RESEARCH

Site forms for sites located within a one to two mile range of the S.R. 17 Bear Creek Bridge were reviewed from the site files in Moundville before conducting the fieldwork. However, this literature search resulted in the finding of no previously recorded archaeological sites.

Through background research with the SHPO office in Montgomery, and Special Collections at the University of Alabama at Tuscaloosa, it was ascertained that no architectural resources within the project area have been previously recorded. This information was largely interpreted by close examination of historic highway maps of Marion County. At Alabama's Department of Transportation, a bridge inventory of the S.R. 17 Bear Creek Bridge was accessed. This inventory revealed the bridge's modern date of construction in 1964.

FIELD METHODS

The fieldwork for the bridge replacement cultural reconnaissance consisted of an archeological field reconnaissance. It was conducted by a two-person crew who visually inspected the entire project with a pedestrian walkover and conducted sub-surface shovel testing where possible. For the proposed lane additions, shovel tests were placed at 30 meter intervals on each side of the road. The road right-of-way was bounded on all sides by private property, but these areas were investigated as well in order to guarantee as complete a reconnaissance as possible.

A total of 126 shovel test locations were investigated on the S.R. 17 Bear Creek bridge and lane addition project. All shovel tests were approximately 30 cm in diameter, and were excavated to sterile subsoil or bedrock. The soils removed from the tests were screened through one-quarter inch hardware cloth for artifact recovery. An archeological site was defined as the presence of five or more pre-1940s non-co-joinable cultural artifacts. On the basis of this definition, no sites were discovered.

III. RESULTS

ARCHAEOLOGICAL RECONNAISSANCE

Project # BR-392(6) (S.R. 17 Bear Creek Bridge)

At Bear Creek in Marion County, the S.R. 17 Bear Creek Bridge (project # BR-392(6)) crosses Bear Creek on State Route 17. The survey area for this bridge consisted of the areas immediately surrounding the bridge as well as two proposed corridors delineated for the addition of two travel lanes (Figure 3-1). The project area for the bridge and lane addition consisted of a delineated, variable width right of way that extended approximately 5200 feet on either side of the Bear Creek bridge, for a total of approximately 10,500 feet. A total of 126 shovel test locations were investigated. Of these, an overwhelming number of these had clay subsoil at the surface. Additionally, a bedrock foundation was located less than 15 centimeters below the surface. This area has been severely eroded by washout and logging activities, leaving almost no topsoil intact. No cultural artifacts or features were recovered.

The Phase I archaeological portion of this cultural resources investigation yielded no archaeological sites, features, or isolated artifacts. Therefore, no further archaeological work is recommended.

ARCHITECTURAL SURVEY

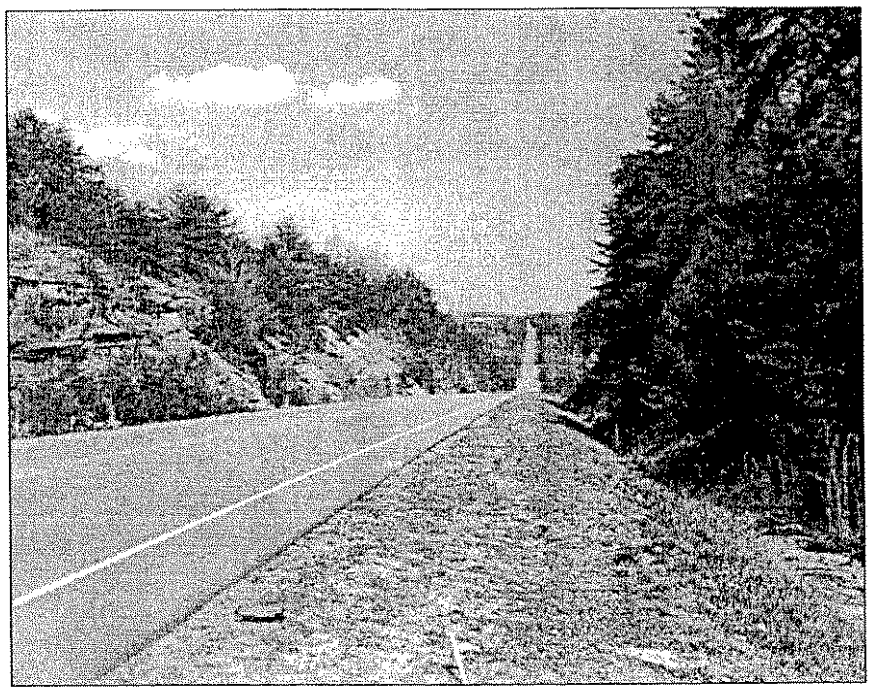
The S.R. 17 Bear Creek bridge in Marion County was not photographed and recorded onto state architectural survey forms due to its modern status as a bridge less than 50 years in age. This concrete bridge, built in 1964, is therefore not discussed in detail in this report. However, the information on the bridge, obtained from the Alabama Department of Transportation, is included in Table 3-1. No additional architectural resources within the project area were identified.

Table 1. Architectural Resources Identified in the Study

Name/Location	Project No.	BIN #	Date	Deck Type	Approach Struct.	NR
S.R. 17 Bear Creek Bridge, Marion County	BR-392(6)	008283	1964	Concrete Tee Beam	Prestressed Concrete, Stringer/Multi-beam	NE

Key: NR= National Register Eligible, PE= Potentially Eligible, NE= Not Eligible

Figure 2
Photograph of Project Area [BR-392(6)], Looking Northeast



IV. RECOMMENDATIONS

As a modern concrete, steel girder bridge from 1964, the S.R. 17 Bear Creek Bridge does not qualify for consideration under the National Register of Historic Places Criteria A-D. Without achieving significance within the past 50 years due to association with an exceptional historical event, person, engineer, or information potential, the bridge does not meet Criterion Consideration G either. No additional architectural or historical research on the bridge is recommended.

The absence of artifacts and features recovered from shovel tests and the project area walkover also indicates that area requires no further archaeological research. It is therefore the opinion of New South Associates that proposed bridge construction and lane addition corridors for the S.R. 17 Bear Creek Bridge in Marion County will have no adverse effect on any cultural resources.

PUBLIC HEARING TRANSCRIPT

Project BR 392(6)
S.R. 17 Bridge replacement over Bear Creek
Marion County

February 08, 2002

To: Heyworth, Meyer & Boleyn, Inc. (Attn. Bill Carwile)

Re: Project #BRF-392(6)

Dear Sir:

On January 10, 2002 a "Combined Design/Corrider Hearing" for Proj.#BRF 392(6) was held from 5:00 P.M. to 7:00 P.M. at the Hackleburb, AL. City Hall. This Project includes additional lanes and new bridges over Big Bear Creek, north of Hackleburg, on Al #17/ U.S. #43.

A total of 27 people, including ALDOT representatives, signed the registration sheets. The atmosphere was cordial and friendly.

Questions asked were concerned with the following:

A-- How much R.O.W. will be required in addition to the present existing R.O.W.?

B-- How will the new slopes effect the present, private property?

C-- Will fences along the present R.O.W. have to be removed?

D-- Can the proposed R.O.W. acquisition be altered or adjusted in order to allow a cattle watering spring location to remain on private land. (This is approx. 120' west of the present R.O.W. near Sta. 139 + 50 L)(SEE MR. RAPER'S COMMENT SHEET)

E-- Why did this project stop short of tying into the present 4-lane in Hackleburg?

F-- When R.O.W. acquisition begin?

G-- When will the project begin?

Sincerely,

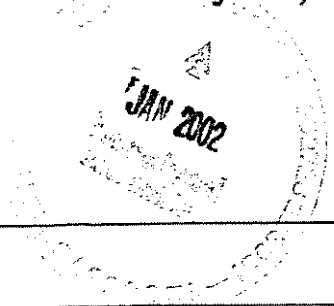
Freed Baker

Freed Baker
Div. R.O.W. Engr.

ALABAMA DEPARTMENT OF TRANSPORTATION
DESIGN/CORRIDOR HEARING

Project Number: BRF-392(6) **January 10, 2002**

Location: Hackleburg City Hall



NAME: FODIE RAPER

ADDRESS: 367 2nd STREET

HACKLEBURG AL 35564

TELEPHONE NUMBER: 205-935-5159

INTEREST IN PROJECT:

Area Resident	✓
Property Owner	✓
Local Businessman	
Other	

COMMENTS See ATTACHED SHEETS

PLEASE RETURN WITHIN 10 DAYS TO:

Mr. James D. Brown, Division Engineer
Alabama Department of Transportation
P.O. Box 495
Tuscumbia, Alabama 35674

copy to Steve Graben 01-24-02

Clifford Wise ETAL "ESTATE"

① Near The West Line of property Concrete Slab on MAP is A WATER Trough For CATTLE, This is only WATER AVAILABLE IN This Section of PASTURE, LANDOWNERS Request R.O.W. Line be ADJUSTED TO TAKE This SLAB OUT of proposed R.O.W.

Near STA. 139

② Property HAS 3 current ACCESS FARM ROADS From present 43 highway, LANDOWNER-operator Request These ROAD'S be ACCESSIBLE FROM Hwy 43 AFTER COMPLETION OF Project.

③ LANDOWNER's Request THAT Crossover's be Figured AS Close AS possible To FARM ACCESS "WOODS ROADS".

④ Property is AND has MAINTAINED BMP Best MANAGEMENT PRACTICE For LAST 9 yrs We Request where CONSTRUCTION Zone TAKES IN WOOD'S ROAD NEAR EAST END OF Property THAT A LANE AT LEAST 10' WIDE be PLACED ON North edge OF CONSTRUCTION AREA AND CONNECTED

Near STA. 164

To The existing Farm Road
This is both an Access Road
and used as a Fire lane Also
Due To The "Rough Terrain" of property
it is important To landowners and
Farm oper, The item's listed here
and in item #(2).

(5) Landowner Request proposed R.O.W,
be closer To Const, zone Through
property Currently used for Cattle
oper. Roughly A Point where proposed
R.O.W, narrows on South and west
End of property To "woods line" North
shown on proposal ~~0.75~~ 1/8 Mile ±
involved or affected

Eddie Rayer
367 2nd ~~Street~~
Hackleburg Al. 35564
205-935-5159

7:00Am - 2:00pm
Phone

ALABAMA DEPARTMENT OF TRANSPORTATION
DESIGN/CORRIDOR HEARING

Project Number: BRF-392(6) **January 10, 2002**

Location: Hackleburg City Hall

NAME: Donna McKinney + Donald

ADDRESS: 7710 Hwy 172
Hackleburg, Al 35564

TELEPHONE NUMBER: 205 935-3176

INTEREST IN PROJECT:

Area Resident	✓
Property Owner	✓
Local Businessman	✓
Other	

COMMENTS A very needful project for Hackleburg area. Thank You

JAN 2002

PLEASE RETURN WITHIN 10 DAYS TO:

Mr. James D. Brown, Division Engineer
Alabama Department of Transportation
P.O. Box 495
Tuscumbia, Alabama 35674

ALABAMA DEPARTMENT OF TRANSPORTATION
DESIGN/CORRIDOR HEARING

Project Number: BRF-392(6) **January 10, 2002**

Location: Hackleburg City Hall

NAME: Ronnie Anglin

ADDRESS: Box 131

Hackleburg, AL 35564

TELEPHONE NUMBER:

INTEREST IN PROJECT:

Area Resident	X
Property Owner	
Local Businessman	
Other	

COMMENTS This programme is a great idea and so greatly needed. Just wished it was 4 lane completely through Hackleburg.

PLEASE RETURN WITHIN 10 DAYS TO:

Mr. James D. Brown, Division Engineer
Alabama Department of Transportation
P.O. Box 495
Tuscumbia, Alabama 35674

Received 1/10/2002

ALABAMA DEPARTMENT OF TRANSPORTATION
DESIGN/CORRIDOR HEARING

Project Number: BRF-392(6) **January 10, 2002**

Location: Hackleburg City Hall

NAME: Johnnie Barnwell

ADDRESS:

TELEPHONE NUMBER:

INTEREST IN PROJECT:

Area Resident	
Property Owner	X
Local Businessman	
Other	

COMMENTS

The 4-lane needs to be all the way through Hackleburg. This project will leave a short strip of 2-lane.

PLEASE RETURN WITHIN 10 DAYS TO:

Mr. James D. Brown, Division Engineer
Alabama Department of Transportation
P.O. Box 495
Tuscumbia, Alabama 35674

Received Jan 10, 2002

PROGRAMMATIC SECTION 4(F) EVALUATION

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement Over Bear Creek
Marion County, Alabama

This action complies with the Federal Highway Administration's "Final Nationwide Section 4(f) Evaluation and Approval for Federally-aided Highway Projects with Minor Improvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges"

This document assesses the impacts of transportation improvements to S.R. 17 (U.S. 43) on the Tennessee Valley Authority's floatway easement on Bear Creek in Marion County, Alabama

APPROVAL: 2-13-03 _____
Date Federal Highway Administration

1. Description of the Proposed Project

The proposed project involves the replacement of the bridge on S.R. 17 (U.S. 43) that crosses Bear Creek and the widening of S.R. 17 for approximately 1 mile on each side of the bridge from a two-lane to a divided four-lane. The location of the project corridor can be seen on the Vicinity Map below, and on the Location Map on Page 2.

The center of the median of the new four-lane will be approximately 107 feet north of the center line of the existing road. The median will be 64 feet wide, the lanes will be 12 feet wide, and the shoulders will be 10 feet wide. The new bridge will be 57 feet higher than the existing bridge.

2. Purpose and Need

The project is being proposed to correct the structural deficiencies of the bridge and the vertical alignment deficiencies of the road on either side of the bridge.

3. Description of Property

The 4(f) property on the north side of Bear Creek affected by the proposed project is currently owned by Clyde and Patsy Slatton. Bascom Guff LLC is the owner of the property on the south side of the creek. The property was previously owned by Champion International Corporation which, in 1981, sold an easement on this property to the Tennessee Valley Authority (TVA) for the purpose of providing a scenic, undisturbed canoeing experience for the public. TVA still owns the easement. The easement includes the portion of land lying in, on, along, or under Bear Creek or within 50 feet of the ordinary high watermark on either side of the creek. Due to the TVA's ownership of this easement, and it's use for public recreation,

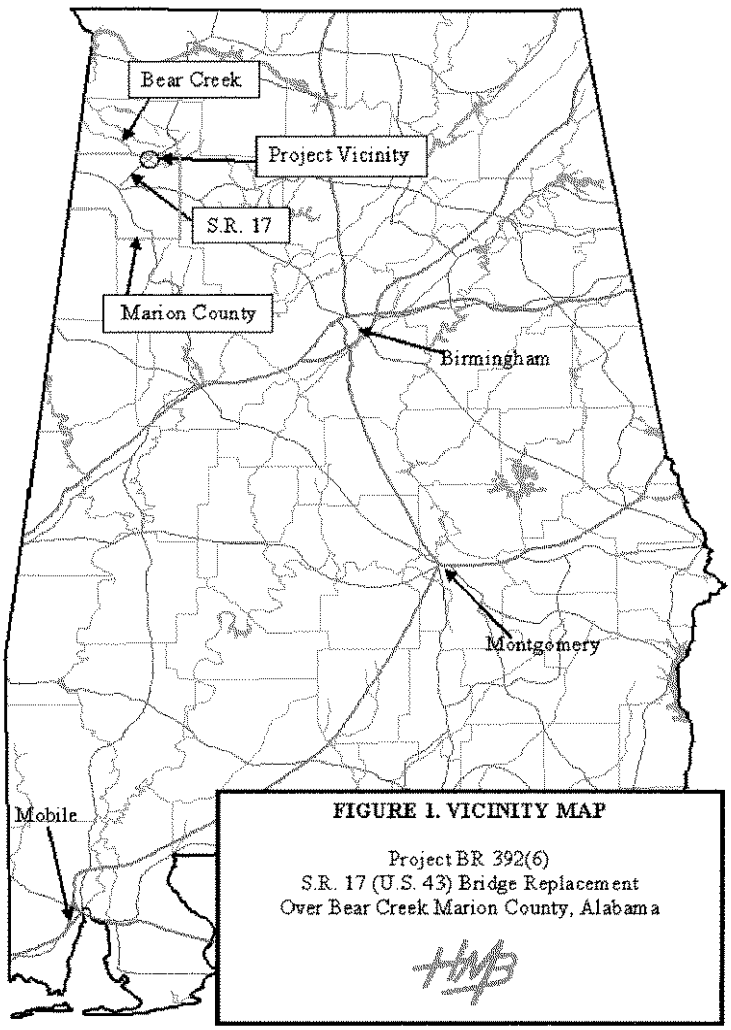
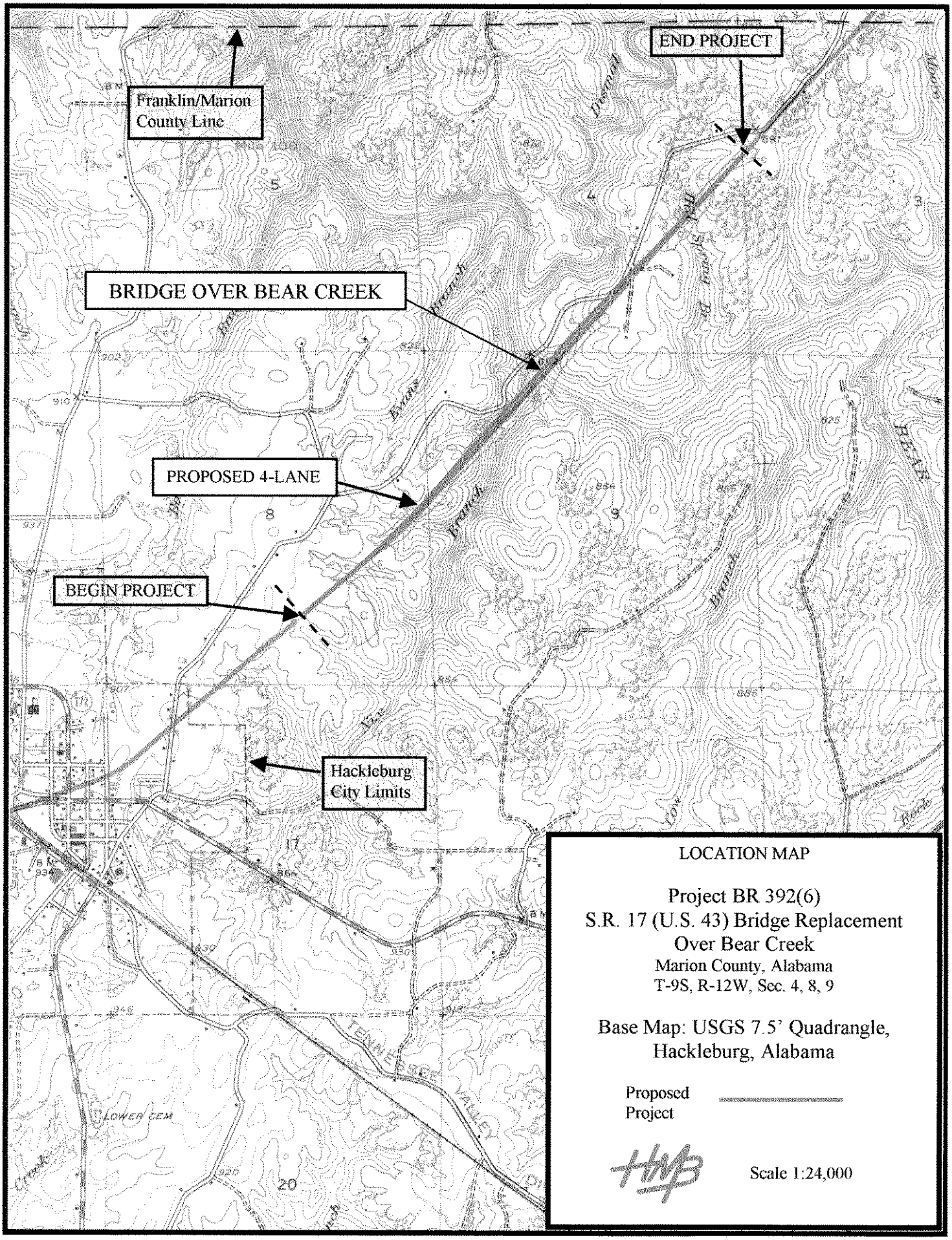


FIGURE 1. VICINITY MAP

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek Marion County, Alabama



LOCATION MAP

Project BR 392(6)
S.R. 17 (U.S. 43) Bridge Replacement
Over Bear Creek
Marion County, Alabama
T-9S, R-12W, Sec. 4, 8, 9

Base Map: USGS 7.5' Quadrangle,
Hackleburg, Alabama

Proposed
Project

Scale 1:24,000

this property is classified as 4(f). The primary function of the property is canoeing and the landing of canoes and other boats. Camping is not allowed on the property as per the Grant of Floatway Easement. Land outside of the easement is forested. The entire easement is 63 acres approximately nine acres of which falls within the proposed construction limits. All of this area will be spanned by the bridges. The easement property is shown on the project profile on page 4 and on the TVA map in the appendix.

4. Impacts to Property

During construction there will be some erosion, sedimentation and turbidity increase as a result of pier drilling, land clearing operations, and earth moving activities. As with any construction project, there will be temporary air and noise pollution impacts during construction.

Permanent impacts to the property will be limited to the construction of piers within the easement (see plan profile on page 4) and the visual impacts of the additional bridge to canoeists. Land use on the TVA easement will not change with purchase of new right-of-way as the easement is permanent.

5. Avoidance Alternatives

5.1 Do Nothing Alternative

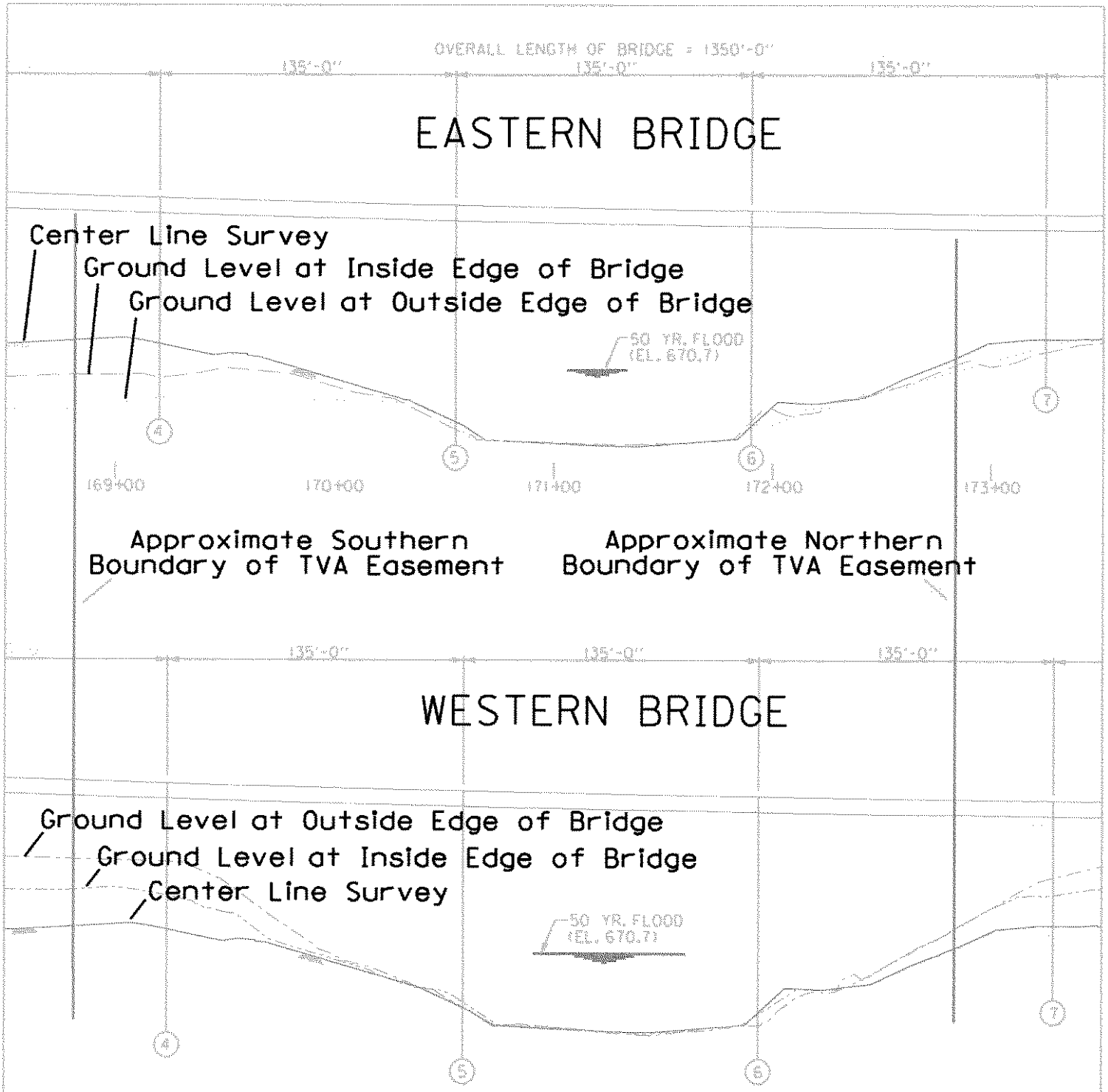
The Do Nothing Alternative is not feasible and prudent because it will not correct existing deteriorated conditions. Specifically, it will not correct the substandard structural sufficiency of the bridge and the vertical alignment deficiencies of the roadway.

5.2 Improvement Without Using the Adjacent section 4(f) Lands

The TVA easement extends from the tailwaters of Upper Bear Creek Dam to the reservoir influence of Bear Creek Reservoir – a distance of at least nine miles on either side of the proposed project. S.R. 17 runs perpendicular to Bear Creek and the TVA easement. Therefore, shifting the alignment or changing the geometric design standards would not reduce impacts to the property.

5.3 Alternatives on New Location

As stated above, The TVA easement extends a distance of at least nine miles on either side of the proposed project and S.R. 17 runs perpendicular to Bear Creek and the TVA easement. It is not feasible and prudent to avoid the Section 4(f) lands by constructing on new alignment far enough from the existing crossing to avoid the easement because the new location would substantially increase costs and engineering difficulties and the costs



PROFILE VIEW OF PROPOSED BRIDGE

PROJECT NO. BR-392(6) BRIDGE REPLACEMENT OVER BEAR CREEK
S.R. 17 (U.S. 43) MARION COUNTY

④ ⑤ ⑥ ⑦ Piers

would be of extraordinary magnitude when compared with the proposed use of the Section 4(f) land.

6. Measures to Minimize Harm

The new bridges will be built adjacent to the existing bridge (the north and south bound bridges will be built 40 and 120 feet respectively from the existing bridge). This will minimize impacts to the easement property because the new bridges will impact an area adjacent to the area that is already impacted.

Erosion, sedimentation and turbidity increases as a result of land clearing operations and earth moving activities will be temporary in nature (during construction) and will be controlled by "best management practices." Best management practices include the use of silt fences, hay bales, grassing, rip rap, sediment basins, etc. A specific erosion control plan will be developed for each construction segment of this project. To prevent access to the shore by vehicles and campers, access to the steam at the new bridge be restricted by extended guard rails or some other type of vehicle barrier. Because no property other than in the footprint of the bridge supporting piers will be taken, no additional mitigation is necessary. No long term adverse impacts to water quality are anticipated as a result of this project.

Originally, three alternates were considered for this project. Alternate 1 involved replacing the existing road with a five-lane, 170 feet north of the existing road. Alternate 2 involved replacing the existing road with a five-lane, 170 feet south of the existing road. Alternate 3 involves replacing the existing road with a four-lane divided highway.

A four-lane is inherently safer for motorists than a five-lane and, when replacing a bridge, a four-lane is more practical because traffic can be routed on one bridge while the other is being constructed. Also, the turn lane which would have been built with Alternates 1 or 2 is unnecessary in this rural area. For these reasons, Alternates 1 and 2 were dropped from further consideration and Alternate 3 is the preferred alternate. Alternates 1 and 2 would have impacted the TVA easement to approximately the same extent as Alternate 3.

7. Coordination

In a letter dated May 14, 2002, and addressed to Alfedo Acoff of the Environmental Technical Section of ALDOT, Jon Loney of the TVA made note of the existence of the permanent easement. On May 20, 2002 TVA faxed HMB ALABAMA LLC a map showing the limits of the easement. In a letter dated December 5, 2002, addressed to HMB ALABAMA LLC, TVA commented on a draft of this Programmatic Section 4(f) Evaluation. Copies of these letters are found in the appendix.

8. Applicability of Programmatic Section 4(f)

A programmatic Section 4(f) evaluation is applicable to this project because it meets the following criteria as set forth in the Federal Highway Administration's "Final Nationwide Section 4(f) Evaluation and Approval for Federally-aided Highway Projects with Minor Improvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges":

1. The bridge replacement is proposed on essentially the same alignment.
2. The easement is publicly owned.
3. The amount and location of the land to be taken does not impair the use of the remaining Section 4(f) land in whole or in part and the amount of land to be taken is less than one acre (the footprint of the piers) and less than 1 percent of the site.
4. The impacts of the project on the remaining Section 4(f) land does not impair the use of the land for its intended purpose.
5. "The officials having jurisdiction over the Section 4(f) land must agree, in writing, with the assessment of the impacts of the proposed project and the proposed mitigation." A copy of this Programmatic Section 4(f) Evaluation will be sent to the TVA before final approval by the FHWA.
6. Item 6 is not applicable to the current project as the easement was not purchased or improved with funds under any of the listed acts. However, the action is being coordinated with the TVA as mentioned in item 5 above.
7. An environmental impact statement is not being prepared for this project.

9. Conclusion

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the TVA floatway easement and the proposed action includes all possible planning to minimize harm to the TVA easement resulting from such use.

APPENDIX A

CORRESPONDENCE

Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

May 14, 2002

Post-it® Fax Note 7671	Date	# of pages
To	From	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

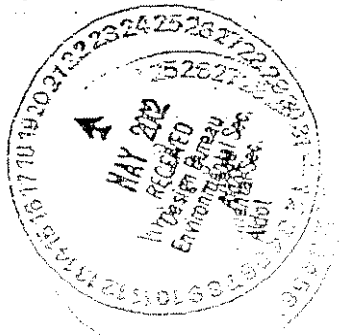
Mr. Alfredo Acuff, Coordinator
Environmental Technical Section
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

Dear Mr. Acuff:

ENVIRONMENTAL ASSESSMENT (EA) - PROJECT BR 392(6), S.R. 17 (U.S. 43) BRIDGE REPLACEMENT OVER BEAR CREEK, MARION COUNTY, ALABAMA

Thank you for the opportunity to review the EA for the proposed four-lane widening of U.S. 43 for two miles north of Hackleburg. We have the following comments and suggestions.

- **Section 4.10, Permits.** The document should note that the bridges, structures, or channelization across Bear Creek, Nix Branch, an unnamed tributary to Nix Branch, and Hill Spring Branch would require approvals under Section 26a of the TVA Act. Because of this jurisdiction, TVA requests that it be included as a cooperating agency, consistent with Section 1309 of the Transportation Equity Act for the 21st Century and the January 30, 2002 Council on Environmental Quality Memorandum on cooperating agencies.
- **Section 4.15, Section 4(f) Impacts.** The document states that there are no publicly owned parks or recreational areas at the bridge crossing. The property at the bridge crossing is subject to a permanent easement for the Bear Creek Floatway, which extends from the tailwaters of Upper Bear Creek Dam to the reservoir influence of Bear Creek Reservoir. This easement was acquired by TVA to provide a scenic, undisturbed canoeing experience. There is also a commercial canoe outfitter located on private property on the northeast corner of the bridge crossing. The canoe rental is mentioned in Appendix C, Ecological Baseline Report. Also, the waterfall on Nix Branch is indicated to be a local attraction. The EA should evaluate the impacts of the roadway project on the recreational activities which take place in this vicinity.
- **Figure 2, Ecological Resources Map.** Two caves are shown on this map, and both are adjacent to the road construction area. The EA should determine if any specific karst protection measures are needed to avoid adverse impacts to these geologic features and water quality in the area.



have any questions, please contact Hamid M. Draper at (865) 632-6889.

Sincerely,

Harold M. Draper

Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning

cc: Mr. Joe D. Wilkerson
Division Administrator
Federal Highway Administration
500 East Boulevard, Suite 200
Montgomery, Alabama 36117-2018

Haworth, Meyer & Boleyn, Inc.
7009 Brockport Court
Montgomery, Alabama 36116

212.08

Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

December 5, 2002

Mr. Bill G. Carwile, P.E.
President
HMB Alabama, LLC
7009 Brockport Court
Montgomery, Alabama 36117

Dear Mr. Carwile:

PROGRAMMATIC SECTION 4(f) EVALUATION - PROJECT BR 392(6), HMB PROJECT 212.08, S.R. 17 (U.S. 43) BRIDGE REPLACEMENT OVER BEAR CREEK, MARION COUNTY, ALABAMA

Thank you for the opportunity to review the draft Section 4(f) evaluation on the impacts of the proposed US 43 bridge on TVA's floatway easement on Bear Creek, as transmitted to TVA by letters of October 22, 2002 and November 18, 2002. We have the following comments and suggestions.

- **Section 3, Description of Property.** We understand that Champion International Corporation was acquired by International Paper. You may wish to verify that International Paper now owns fee title to the easement property.

- **Section 6, Measures to Minimize Harm.** We wish to recommend an additional mitigation measure to compensate for the impacts of the new bridge and to further the original purpose of the easement. The easement restricts the use of the property by vehicles and for camping. Based on our experiences elsewhere, the availability of a bridge could encourage access to the shoreline by vehicles and campers, both adjacent to and underneath the new bridge. TVA requests that vehicle access to the stream banks at the new bridge on the new proposed right-of-way and the existing right-of-way be restricted by the use of extended guard rails or other types of vehicle barriers.

If this additional mitigation measure is included, TVA agrees with the assessment of impact of the proposed project on its floatway easement. There are several other environmental resources outside of the boundaries of the easement which are mentioned in our May 14, 2002 comment letter on the EA, including a waterfall and caves. We assume any

potential impacts to these recreational and ecological resources will be addressed in the FHWA FONSI. Upon completion of the review, please send a copy of the signed FONSI to us. Should you have any questions, please contact Harold M. Draper at (865) 632-6889 or hmdraper@tva.gov.

Sincerely,

Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning

cc: Mr. Joe D. Wilkerson
Division Administrator
Federal Highway Administration
500 East Boulevard, Suite 200
Montgomery, Alabama 36117-2018

Mr. Alfredo Acuff, Coordinator
Environmental Technical Section
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36130-3050

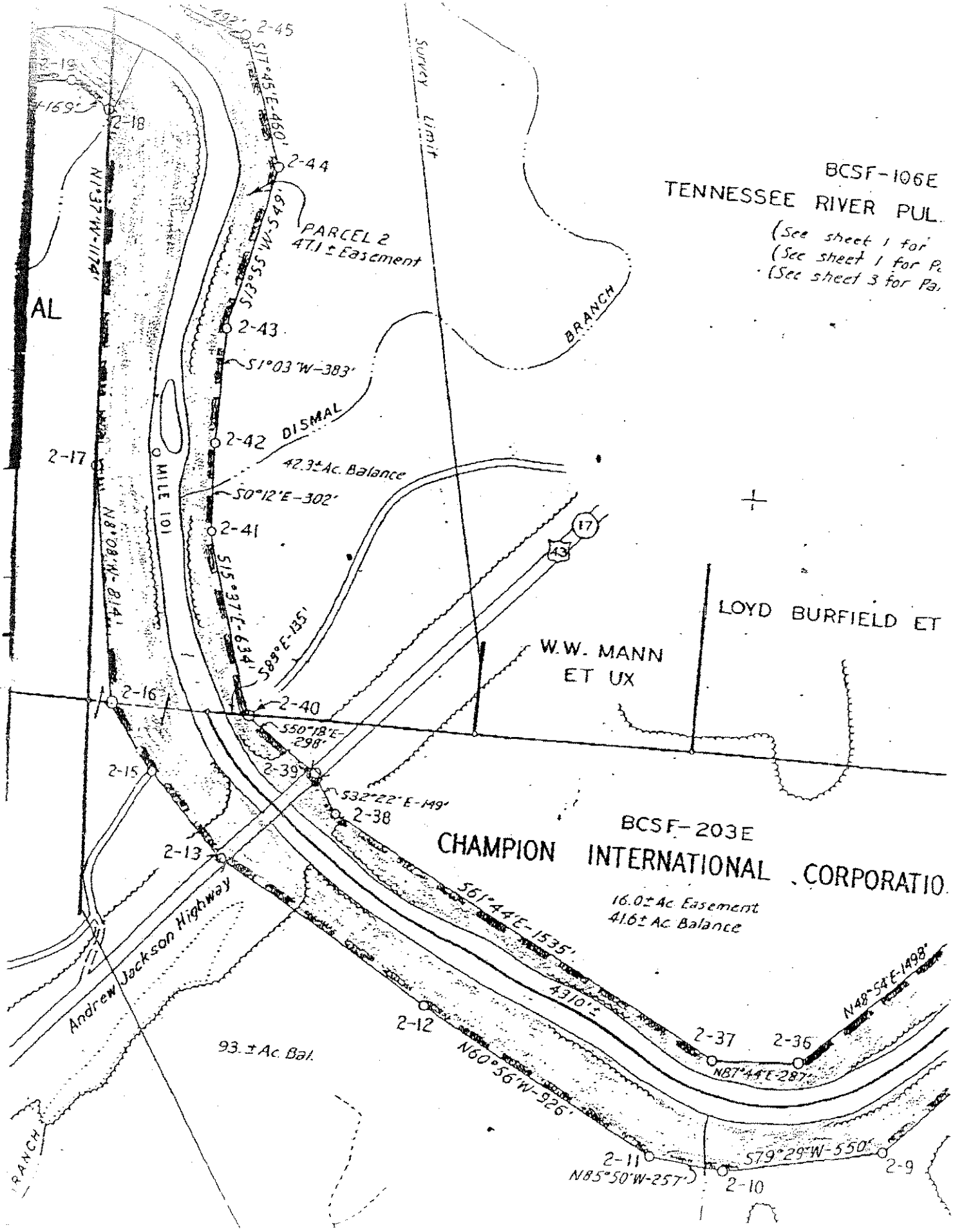
MAP OF FLOATWAY EASEMENT

(Fax)

From: Harold Draper of the Tennessee Valley Authority

To: Shawn Jacobsen of HMB ALABAMA LLC

Date: December 12, 2002


BCSF-106E
TENNESSEE RIVER PUL
(See sheet 1 for
(See sheet 1 for P
(See sheet 3 for Pa
AL
2-45
S17°45'E-460'
2-19
2-18
N13°37'W-1174'
2-44
PARCEL 2
47.1 ± Easement
S13°55'W-549'
Survey Limit
BRANCH
2-43
S1°03'W-383'
DISMAL
2-42
42.3± Ac. Balance
2-17
MILE 101
S0°12'E-302'
2-41
N8°08'W-814'
S15°37'E-634'
S89°E-135'
17
43
LOYD BURFIELD ET
W.W. MANN
ET UX
2-16
2-40
S50°18'E-298'
2-39
2-15
S32°22'E-149'
2-38
BCSF-203E
CHAMPION INTERNATIONAL CORPORATIO
2-13
16.0± Ac Easement
41.6± Ac Balance
S61°44'E-1535'
4310'±
N48°54'E-1498'
Andrew Jackson Highway
2-12
2-37
2-36
N87°44'E-287'
93.± Ac Bal.
N60°56'W-926'
2-11
N85°50'W-257'
S79°29'W-550'
2-9
2-10
RANCH