

FILE COPY

US 19/US 19E Improvements  
From Future I-26 (existing US 19-23) to SR 1186  
Madison and Yancey Counties  
State Project Numbers 6.869005T and 6.909001T  
T.I.P. Project Numbers R-2518 and R-2519A

ADMINISTRATIVE ACTION  
STATE ENVIRONMENTAL ASSESSMENT

North Carolina Department of Transportation  
Division of Highways

Submitted Pursuant to 42 U.S.C. 4332(2)(C)

AUG 16 2001

Cooperating Agency  
Tennessee Valley Authority

5/31/2001  
Date

*William D. Gilmore*  
William D. Gilmore, P.E., Manager  
Project Development and Environmental Analysis Branch

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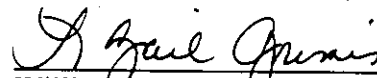
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# PROJECT COMMITMENTS

US 19/US 19E Improvements  
From Future I-26 (existing US 19-23) to SR 1186  
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## Commitments Developed Through Project Development and Design

### *Project Development and Environmental Analysis Branch, Roadway Design, and the State Historic Preservation Office*

Alternate 2 will be designed to avoid direct impacts to the following two properties eligible for listing in the National Register of Historic Places: (1) Porter and Ollie Briggs Ray House in Madison County and (2) Wilkes Hensley House in Yancey County.

### *Project Development and Environmental Analysis Branch*

The archaeological survey for the project will be completed for the final environmental document (FONSI).

### *Project Development and Environmental Analysis Branch*

The proposed project is located within an identified critical habitat area for the federally protected Appalachian elktoe mussel. Therefore, a Section 7 Consultation is required to assess the impacts of the proposed project. Measures that address ways in which the project can minimize or avoid these impacts will be determined during the final design phase of this project. NCDOT will coordinate with the appropriate agencies through the Section 7 Consultation process.

### *Roadside Environmental Unit*

The Roadside Environmental Unit will coordinate landscaping details with Yancey County and Burnsville.

### *Signals and Geometrics Section and Division 13*

Pedestrian signals and crosswalk striping will be included at the signalized intersection of US 19E and South Main Street.

### ***Hydraulic Design Unit***

The proposed project involves sensitive trout streams and is located within a critical habitat area for the federally protected Appalachian elktoe mussel. Therefore, NCDOT will implement erosion and sedimentation control measures, as specified by NCDOT's "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0024). Detailed plans for the placement of appropriate hydraulic drainage structures will be determined during the final design of the project.

### ***Hydraulic Design Unit***

A TVA Section 26a permit is required for all construction or development involving streams or floodplains in the Tennessee River drainage basin. This project will be reviewed under Section 26a of the Tennessee Valley Authority (TVA) Act. The final bridge plans and notice of compliance with the Historic Preservation Act of 1966 will be forwarded to TVA for approval under Section 26a. The TVA is a cooperating agency for this project.

### ***Hydraulic Design Unit***

Existing flood hazards along adjacent properties at all stream crossings will be evaluated in detail in final hydraulics design to ensure measures are taken to the extent practicable to minimize flooding problems to upstream properties and to ensure that the proposed roadway widening and associated drainage accommodations will not have an adverse affect on the existing floodplain area, nor on the associated flood hazards. The Hydraulics Unit will coordinate with the Federal Emergency Management Agency and local authorities in the final design stage to ensure compliance with applicable floodplain ordinances.

### ***Division 13***

During construction, waste material from cut sections will be used as fill in other areas of road construction or will be disposed of properly in upland areas.

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**I. PURPOSE OF AND NEED FOR THE PROPOSED PROJECT**

**A. Summary of Purpose and Need**

The purpose of this project is to add traffic capacity to US 19/US 19E. Other factors contributing to the need of the project are system linkage and safety. The project begins at an interchange on US 19-23 (future I-26) north of Mars Hill in Madison County and ends at SR 1186, west of Micaville in Yancey County as shown by Exhibits 1a and 1b. The length of the US 19/US 19E improvement project is approximately 21 miles (33 kilometers).

**B. Project Status**

Improvements to US 19/US 19E are state funded and identified as Project Numbers R-2518 and R-2519A in the NCDOT 2002-2008 Transportation Improvement Program (TIP). These two projects were combined into one environmental document based on an agency request during a June 1998 project meeting. Proposed improvements consist of widening the current two and three-lane roadway to a multilane facility. TIP Number R-2518 extends along US 19/US 19E from future I-26 (existing US 19-23) to SR 1336 (Jack's Creek Road). TIP Number R-2519A extends along US 19E from SR 1336 (Jack's Creek Road) to SR 1186 west of Micaville. According to the NCDOT 2002-2008 TIP, right of way acquisition is scheduled to begin in Fiscal Year (FY) 2003 and construction is scheduled to begin in FY 2005.

An informal Citizens Informational Workshop for the US 19/US 19E improvement project was held on February 5, 1998 at the Burnsville Town Hall. Representatives from NCDOT were available at the workshop to discuss the project with citizens and public officials. Approximately 130 people attended the workshop. Two agency field reviews were held on June 22, 1998 and on February 28, 2001 to discuss environmental impacts and visit sensitive natural areas along the project (please see Section IV Comments and Coordination for more agency information).

**C. Traffic Capacity**

Capacity is defined as the maximum number of vehicles that can be accommodated in reasonable safety along a roadway within a specific time period. When traffic volumes approach or exceed the capacity of the roadway, operating levels of service are diminished and congestion results. Simply defined, level of service is a qualitative measure that describes operational conditions of a traffic stream along a roadway or at an intersection of two roadways. Six levels of service are defined from A to F, with Level of Service A representing the best and Level of Service F the worst operational conditions.

Estimated Average Daily Traffic (ADT) volumes were developed for the proposed US 19/US 19E improvements for years 1997 and 2025. The year 1997 and 2025 traffic volumes are shown in Exhibits 4 and 5, respectively.

**1. Existing Conditions**

Average daily traffic (ADT) volumes along US 19/US 19E for the year 1997 range from 5,800 vehicles per day at the Madison and Yancey County line to 20,300 vehicles per day east of Burnsville. These traffic volumes result in an undesirable Level of Service E on US 19/US 19E throughout most of the project area as shown by Exhibit 6.

**2. No-Build Conditions - Year 2025**

No-Build conditions in the year 2025 assume that the US 19/US 19E improvements will not be constructed. By the year 2025, average traffic volumes are expected to increase to between 11,500 and 36,600 vehicles per day, resulting in Level of Service F conditions throughout much of the project area. Year 2025 No-Build Levels of Service are in Exhibit 6.

**3. Build Conditions - Year 2025**

The multilane highway proposed with the Build Alternative will add capacity and improve traffic flow along US 19/US 19E. In the year 2025, traffic along much of the proposed multilane highway is expected to operate at Level of Service B, as shown in Exhibit 7. Traffic near Burnsville would operate at Level of Service C and D, while vehicles on the easternmost portion of the project would have Level of Service A conditions.

There are currently five signalized intersections along length of the US 19/US 19E improvement project. These intersections will remain signalized with the proposed improvements along US 19E. Lane configurations for the signalized intersections are shown in Exhibit 8a through 8e. The signalized intersection locations and year 2025 Levels of Service are as follows:

- US 19E and SR 1196 – Level of Service B - Exhibit 8a
- US 19E and South Main Street – Level of Service C – Exhibit 8b
- US 19E and SR 1429/NC 197 – Level of Service B – Exhibit 8c
- US 19E and NC 197 – Level of Service B – Exhibit 8d
- US 19E and SR 1142 – Level of Service B – Exhibit 8e

**D. System Linkage**

The US 19/US 19E improvement project is located in northwest North Carolina where mountains rise to heights over 6000 feet (1800 meters). In addition to providing abundant recreational opportunities, these mountains form transportation barriers with few roadway options for travelers in the area. Two and three-lane US 19/US 19E is the most important transportation facility between Madison, Yancey, Mitchell, and Avery Counties in northwestern North Carolina. In addition, US 19/US 19E provides access between Asheville and recreational opportunities in the Boone area.

US 19/US 19E directly connects travelers in Madison, Yancey, Mitchell, and Avery Counties with future I-26 (TIP Number A-10). Construction of future I-26 is complete between Asheville and the US 19 interchange, and underway between the US 19 interchange and the Tennessee State line. Once completed, I-26 will attract local, regional, and nationwide travelers, thereby enhancing the importance of US 19/US 19E in northwest North Carolina.

**E. Safety**

Accident studies along US 19/US 19E in the project area were collected for a three-year period. Accident information was obtained from the following three sections of US 19/US 19E: (1) from US 23 to the Yancey County line; (2) from the Yancey County line to US 19W; and (3) from SR 1336 to SR 1186. Table 2 provides a summary of the accidents and the corresponding NCDOT Division 13 averages for rural two-lane undivided US routes.

All sections of US 19/US 19E in the project area have crash rates lower than the NCDOT Division 13 averages. However, two sections of the project have high percentages of "rear end" and "ran off road" accidents. "Rear end" collisions account for 50 percent of the total accidents between SR 1336 and SR 1186. The high percentage of rear-end collisions may be attributed to the large number of residential and business access points along this section of US 19E. In the section between the Madison/Yancey County line and SR 1336, the "ran off road" accidents account for 43 percent of all accidents. The "ran off road" accidents may be influenced by the curvature and narrow shoulders of US 19/US 19E in this mountainous area of the project.

The proposed US 19/US 19E improvements should reduce the amount of "rear end" collisions by adding one travel lane in each direction and exclusive turning lanes at various intersections. In addition, the proposed improvements include lanes that are 12 feet (3.6 meters) wide, an improved shoulder area, and up-to-date design standards which should reduce the amount of "ran off road" accidents throughout the entire project area.

**Table 2  
Accident Summary**

Type of Accident	Division 13 Average (US Rural)	Section of US 19/US 19E (from/to)		
		US 23/Yancey Co.	Yancey Co./US 19W	SR 1336/SR 1186
Percentage of All Accidents				
Ran Off Road	n/a	30.1 %	43 %	10.5 %
Rear End	n/a	32.5 %	26.6 %	50.0 %
Left-Turn	n/a	20.4 %	6 %	19.8 %
Angle	n/a	8.4 %	6.7 %	9.9 %
Other	n/a	8.6 %	16.7 %	10.7 %
Crash Rates (accidents/100 million vehicle miles traveled)				
Total	494.51	105.75	52.74	153.66
Fatal	4.36	0.00	0.00	0.95
Non-Fatal	241.08	48.41	17.58	78.73

## **F. Characteristics of the Existing Facility**

The proposed project is located in Madison and Yancey Counties, in western North Carolina. The project area begins approximately 20 miles (32 kilometers) north of Asheville, at the interchange of future I-26 and US 19 in Madison County. The topography along US 19/US 19E consists of steep hillsides, narrow valleys, and rolling hills. The route traverses Ivy Gap at the Madison/Yancey County line. The Town of Burnsville and several rural crossroads communities are located along the project.

The existing alignment of US 19/US 19E was improved in the 1970's and 1980's. The old route of US 19/US 19E is still visible in many locations. During construction of the existing route, the roadbed was raised in some areas and carved out of hillsides in others to improve the alignment. US 19 and US 19E are classified as Principal Arterials.

### **1. Length of Roadway Section Studied**

The length of the US 19/19E improvement area is approximately 21 miles (33 kilometers).

### **2. Existing Typical Sections**

A variety of typical sections currently exist along the 21 mile (33 kilometer) length of the US 19/US 19E project. Beginning at the future I-26 (US 23) interchange, US 19 is a two-lane highway with a lane width of approximately 11 feet (3.3 meters). An eastbound passing lane is added to the highway during the incline and approach to Ivy Gap and the Madison and Yancey County line. Through the communities of Swiss and Bald Creek, US 19/US 19E is a two-lane highway with 12 foot travel lanes (3.6 meter). Within Burnsville, US 19E is a three-lane highway with a continuous center left-turn lane. East of Burnsville, US 19E is a two-lane highway to the end of the project at SR 1186 just west of Micaville.

### **3. Speed Limits**

Speed limits vary throughout the project area. The majority of the US 19/19 E project area has a posted speed limit of 55 miles per hour. However, a substandard horizontal curve near the western project terminus is posted at 35 miles per hour. Within Burnsville, the speed limit is also posted at 35 miles per hour.

### **4. Sidewalks**

No sidewalks are currently in place along US 19/US 19E within the project area.

### **5. Right of Way**

The existing right of way width for US 19/US 19E varies throughout the project area. In Burnsville, the right of way width is approximately 150 feet (45 meters). In the mountainous sections of the project west of Burnsville, the existing right of way width expands to 500 feet (150 meters) in some locations.

## 6. Railroad Crossings

US 19/19E does not cross an active railroad in the project area. An unused railroad corridor for the Black Mountain (Yancey) Railroad is located adjacent to US 19E between Burnsville and Micaville. Over the years of railway inactivity, businesses were established along US 19E within the railroad corridor. According to the NCDOT Rail Division, there are no plans to resume service between Burnsville and Micaville.

## 7. Intersecting Roads

All roadways in the project area have at-grade intersections with US 19/US 19E. Just west of the western project terminus there is an interchange with future I-26 and US 19-23. Traffic signals are used along US 19/US 19E at the intersections of SR 1376 (Wheeler Road), South Main Street, NC 197 S (Pensacola Street), NC 197 N, and SR 1142 (George's Fork Road). All other intersections are stop sign controlled. The following is a list of unsignalized and signalized intersections along US 19/US 19E:

SR 1608	SR 1453
SR 1541	US 19W
SR 1540 Beech Glen Road	SR 1128
SR 1525	SR 1454
SR 1537 Old Mill Bridge Road	SR 1136 Price's Creek Road
SR 1522	SR 1137 Cane River Road
SR 1521	SR 1136 Phipps Creek Road
SR 1526 Crooked Creek Road	SR 1454
SR 1520 Fox Creek Hollow	SR 1456
SR 1517 Shake Rag Road	SR 1115 Baker's Creek Road
SR 1519	SR 1336 Jack's Creek Road
SR 1516 Hill Rice Road	SR 1195
SR 1515	SR 1376 Wheeler Road - <b>Signal</b>
SR 1513	SR 1196 W. Burnsville Church Creek Road
SR 1514 Jordan Branch Road	SR 1438 Charlie Brown Road
SR 1511 Bethel Circle	SR 1375
SR 1509 Holland Creek Road	SR 1374 Love Fox Road
SR 1507 Old Mountain Road	South Main Street - <b>Signal</b>
SR 1421 Windy Gap Road	SR 1139 Hickory Lane
SR 1131	SR 1429/NC 197S Pensacola Street - <b>Signal</b>
SR 1397 Shepherd Branch Road	SR 1436 Clate Wheeler Road
SR 1450	NC 197N- <b>Signal</b>
SR 1202	SR 1140
SR 1451 Schronce Creek Road	SR 1434
SR 1133	SR 1328 Saw Mill Hollow Road
SR 1446	SR 1141 Bill Allen Branch Road
SR 1394 Sam Byrd Road	SR 1142 George's Fork Road - <b>Signal</b>
SR 1393 Lickskillet Drive	SR 1143
SR 1135	SR 1323
SR 1392	SR 1427 Old US 19
SR 1391 Hardscramble Road	SR 1187

SR 1144 Bear Wallow Road  
SR 1321 Plum Branch Road  
SR 1320

SR 1146 Cane Branch Road  
SR 1186

### **8. Degree of Roadside Interference**

Land use in the project area is a mixture of commercial, industrial, and residential development and agricultural uses. Most of the businesses and industries are located near the corporate limits of Burnsville. Residences are scattered throughout the length of the project.

### **9. Structures**

There are two bridge crossings associated with the project. The bridges are located across Price Creek (NCDOT Bridge Number 309) and the Cane River (NCDOT Bridge Number 9).

Bridge Number 309 is located in Yancey County and carries US 19 over Price Creek. The bridge was built in 1984, has a total structure length of approximately 180 feet (55 meters), and a clear roadway width of approximately 40 feet (12 meters). The sufficiency rating of the structure is 91 out of 100.

Bridge Number 9 is located in Yancey County and carries US 19E over the Cane River. The bridge was built in 1984, has a total structure length of approximately 205 feet (62 meters), and a clear roadway width of approximately 40 feet (12 meters). The sufficiency rating of the structure is 84 out of 100.

### **10. Utilities**

There are many utility conflicts along the US 19/US 19E improvement project. All major utilities are located along the existing roadway. An electrical substation is located near the intersection of US 19E and NC 197N.

### **11. Bicycle Routes**

There are no bicycle routes in the project area.

### **12. School Bus Data**

US 19/US 19E is a primary school bus route in Madison and Yancey Counties. School buses use this highway to access secondary roads and schools in the project area.

### **13. Navigable Waters**

There are no navigable waters in the project area.



## **.II. ALTERNATIVES**

The alternatives considered in this Environmental Assessment include the Transportation Systems Management Alternative, Public Transportation Alternative, No-Build Alternative, and Build Alternative. The Build Alternative consists of two options for widening US 19/19E identified as Alternates 1 and 2. Alternate 1 "symmetrically" widens US 19/US 19E about the existing centerline. Alternate 2 uses the "best fit" alignment to minimize impacts.

### **A. Alternatives Considered but Eliminated**

Two of the four alternatives were considered but eliminated because they do not serve the purpose of and need for the project. Alternatives eliminated from further consideration include the Transportation System Management Alternative and the Public Transportation Alternative.

#### **1. Transportation System Management Alternative**

The Transportation System Management (TSM) Alternative includes limited construction activities designed to maximize the traffic flow and energy efficiency of the present transportation system. TSM measures enhance roadway operations while minimizing capital outlay. These measures can include physical improvements to the roadway network as well as operational improvements. Potential TSM options include optimizing traffic signal timing, coordinating signal operations, adding traffic signals at congested intersections, minor realignment of sharp horizontal curves, adding turn lanes at intersections, and other similar improvements.

Two and three-lane US 19/US 19E is already operating at or near capacity (LOS E) throughout much of the project area (see Exhibit 6). By the year 2025, traffic volumes will exceed the capacity of US 19/19E along almost the entire 21 mile (33 kilometer) project length. This corresponds to Level of Service F conditions for travelers. Although Transportation System Management techniques will improve traffic safety and operations, they will not substantially increase capacity or eliminate the need for additional capacity on US 19/US 19E. Therefore, the TSM Alternative was eliminated from further consideration.

#### **2. Public Transportation Alternative**

Limited public transportation opportunities exist in Madison County and Yancey County. Madison County currently has 10 public transportation vans (14 passenger) traveling throughout the county on fixed or on-demand routes. One of the fixed daily routes is along US 19 between US 23 and the Yancey County line. There are no plans to expand the type of public transportation opportunities in the county.

Yancey County has 10 public transportation vans that travel fixed and on-demand routes through the county. The transportation system also makes trips to Asheville and Spruce Pine for medical and shopping needs. Many of the fixed public transportation

routes use US 19/US 19E on a daily basis. There are no plans to expand the public transportation system.

The limited public transportation opportunities in Madison and Yancey Counties are influenced by the rural nature of the area. The privately owned automobile remains the major form of transportation for area residents, commuters, and other travelers. Even with public transportation opportunities in the project area, the Public Transportation Alternative would not remove enough vehicles from US 19/US 19E to eliminate the need for additional capacity and other roadway improvements. Therefore, the Public Transportation Alternative was eliminated from further consideration.

## **B. Alternatives Considered For Detailed Study**

Of the four basic alternatives considered for this project, two were retained for further study or for comparative purposes. These include the No-Build Alternative and the Build Alternative.

### **1. No-Build Alternative**

The No-Build Alternative consists of not constructing the proposed improvements along US 19/US 19E. All other projects currently planned or programmed in the TIP will be constructed in the area as proposed. Continued roadway maintenance and minor improvements along US 19/US 19E would be part of this concept.

The No-Build Alternative does not alleviate existing and future traffic congestion in the project area and does not improve access between Madison and Yancey Counties. In addition, the No-Build Alternative does not improve safety along US 19/US 19E by providing additional and wider travel lanes, improved shoulders, bicycle and pedestrian accommodations, and additional turn-lanes at intersections. The No-Build Alternative is the baseline for comparison with the Build Alternative.

### **2. Build Alternative**

The Build Alternative improves existing two and three lane US 19/US 19E to a multilane facility. The project is approximately 21 miles (33 kilometers) in length and passes through the Town of Burnsville and other small communities including Buckner, Bald Creek, and Windom.

Within the Build Alternative are two different options for widening the roadway. They are identified as Alternates 1 and 2. Alternate 1 widens US 19/US 19E "symmetrically" while Alternate 2 uses the "best fit" widening approach to minimize impacts.

#### **a. Alternate 1**

Alternate 1 widens US 19/US 19E equally on both sides of the existing centerline. This type of roadway improvement is identified as "Symmetric" widening. Alternate 1 follows existing US 19/US 19E regardless of deficiencies in design speed or vertical and horizontal curvature. Alternate 1 is not recommended because it does not minimize impacts or avoid sensitive areas.

**b. Alternate 2**

Alternate 2 uses a combination of symmetric and asymmetric widening along US 19/US 19E. Alternate 2 is identified as the "Best Fit" option and is the recommended option for the project because it considers design criteria and minimizes potential social and environmental impacts along US 19/US 19E. This alternate also contains new location sections to improve the horizontal and vertical curvature along US 19. The following four new location sections are located within Alternate 2:

East of future I-26:	new location length approximately 3020 feet (920 meters)
West of Ivy Gap:	new location length approximately 1020 feet (310 meters)
At Ivy Gap:	new location length approximately 3900 feet (1190 meters)
East of Ivy Gap:	new location length approximately 820 feet (250 meters)

**1) Length of the Proposed Project**

The total length of the US 19/19E improvements is approximately 21 miles (33 kilometers). The proposed project begins along US 19 just east of the future I-26 interchange and ends at the intersection of US 19E and SR 1186 just west of Micaville.

**2) Typical Section Description**

Three typical sections are being considered for the US 19/US 19E improvement project. A four – lane divided curb and gutter section will be used within Burnsville and two shoulder sections will be used outside Burnsville. Typical sections are shown in Exhibit 3a through 3c. The typical sections are described as follows:

- **Four-lane divided with curb and gutter** – This typical section will be used within the corporate limits of Burnsville. The four-lane divided curb and gutter section has a 16-foot (4.8 meter) raised grassed median and a minimum right of way width of 150 feet (45 meters).
- **Five-lane with shoulders** - This typical section has a minimum right of way width of 200 feet (60 meters) with a 16-foot (4.8 meter) continuous center left-turn lane. It will be used from future I-26 to SR 1336 (Jack's Creek Road). This typical section simplifies snow removal in the higher elevation areas of the project.
- **Four-lane divided with shoulders** – This typical section has a 16-foot (4.8 meter) raised grassed median and a minimum right of way width of 200 feet (60 meters). It will be used east of SR 1336 (Jack's Creek Road) and outside Burnsville.

**3) Right of Way**

The proposed right of way width varies throughout the length of the project and is dependent on the typical section, terrain, and other constraints. A minimum right of way width of 150 feet (45 meters) is needed for the two optional curb and gutter typical sections. The two shoulder typical sections have a minimum right of way width of 200 feet (60 meters).

**4) Access Control**

Partial control of access will be used along the US 19/US 19E improvement project. Partial control of access provides one access point for each property owner along US 19/US 19E. Full access control is being used along some portions of US 19/US 19E between the Madison/Yancey County line and Burnsville.

**5) Intersection Treatment and Type of Control**

At-grade intersections will be used throughout the proposed project. All intersections will be unsignalized except the following five intersections which will be controlled by traffic signals: SR 1376 (Wheeler Road), South Main Street, NC 197S (Pensacola Street), NC 197N, and SR 1142 (George's Fork Road).

**6) Speed Limits**

Design speed and posted speed limits for the proposed project are variable and are dependent on topography and development. East of future I-26, Alternate 2 is on new location with an anticipated posted speed of 55 miles per hour (75 kilometers per hour). Through Burnsville, the posted speed limit will likely vary between 35 and 45 miles per hour (55 and 65 kilometers per hour).

**7) Maintenance of Traffic**

Traffic will be maintained on intersecting roads (Y-lines) at all times during project construction. All traffic control devices used on this project will conform to the most current Manual of Uniform Traffic Control Devices (MUTCD).

**8) Noise Barriers**

No noise barriers are proposed as part of this project.

**9) Sidewalks**

Sidewalks will likely be constructed within the Burnsville corporate limits. The estimated cost of sidewalk along one side of the roadway within the corporate limit is \$165,000. NCDOT will participate in 80 percent of the sidewalk cost and Burnsville will be responsible for providing the remaining funds as outlined in the NCDOT Pedestrian Policy Guidelines. Burnsville will also identify the location(s) where sidewalks will be installed.

**10) Bicycle Accommodations**

Special accommodations for bicycles are included in the proposed project, although US 19/US 19E is not a designated bicycle route. The four-lane divided curb and gutter section within Burnsville has 14-foot (4.3 meter) outside travel lanes to accommodate bicycles. The two shoulder typical sections outside Burnsville have 4-foot (1.2 meter) paved shoulders to accommodate bicycles.

**11) Pedestrian Overpass**

A pedestrian overpass at the intersection of US 19E and South Main Street will not be included as part of this project. However, Yancey County can request Enhancement Funding through NCDOT for the construction of a pedestrian overpass at this

location. This intersection will be controlled with a traffic signal and will also have pedestrian signals and crosswalk striping.

## **12) Structures**

The two existing US 19/US 19E bridges over Price Creek and the Cane River will be widened to accommodate the proposed improvements. Two additional bridges are being evaluated along US 19/US 19E at the crossing of Middle Fork Creek and Bald Creek.

## **13) Special Permits Required**

Impacts to jurisdictional surface waters are anticipated. In accordance with provisions of Section 404 of the Clean Water Act, a permit will be required from the United States Army Corps of Engineers (USACE) for the discharge of dredged or fill material into "Waters of the United States". Based on the impacts associated with Alternate 2, an Individual Permit will be needed for crossing the waters of the United States.

A Tennessee Valley Authority (TVA) Section 26a permit is required for all construction or development involving streams or floodplains in the Tennessee River drainage basin. This project will be reviewed under Section 26a of the TVA Act. The TVA will decide whether to approve the final bridge and culvert plans. The TVA is a cooperating agency for this project.

This project will also require a 401 Water Quality Certification from the Division of Water Quality (DWQ) prior to the issuance of the Individual Permit. Section 401 of the Clean Water Act requires that the state issue or deny water quality certification for any federally permitted or licensed activity that may result in a discharge into Waters of the United States. A Section 401 Water Quality Certification allows surface waters to be temporarily impacted for the duration of the construction or other land manipulation.

### **3. Right of Way Cost**

Right of way costs are based on the preliminary right of way of the two alternates studied in detail. Right of way costs include: residential and business relocation, land and damage, utilities, and acquisitions. The estimated right of way cost for Alternate 1 is \$13,995,000 and Alternate 2 is \$12,104,000.

### **4. Wetland/Stream Mitigation Cost**

Stream and wetland mitigation costs are based on the preliminary right of way of the two alternates. Costs are based on riparian wetland mitigation at \$48,000 per acre and stream mitigation at \$250 per linear foot of stream impacted. The estimated stream and wetland mitigation cost for Alternate 1 is \$12,431,000 and Alternate 2 is \$9,705,000.

### **5. Construction Cost**

Estimated construction costs are based on the preliminary right of way of the two alternates. The construction cost estimate includes items such as clearing and grubbing, earthwork, drainage, structures, paving, and guardrail. The estimated construction cost for Alternate 1 is \$96,750,000 and Alternate 2 is \$107,900,000. Table 3 shows the right of way

cost, construction cost, wetland/stream mitigation cost, and total cost of both alternates under consideration.

**Table 3**  
**Alternate Cost Comparison**

<b>Cost Item</b>	<b>Alternate 1</b>	<b>Alternate 2</b>
Construction Cost	\$96,750,000	\$107,900,000
Right of Way Cost	\$13,995,000	\$12,104,400
Stream and Wetland Mitigation Cost	\$12,431,000	\$9,705,000
Total Cost	\$123,176,000	\$129,709,400

**6. NCDOT Recommended Alternate**

Alternate 2 is the construction option recommended by NCDOT. Alternate 2 is also called the "Best Fit" alternate because it minimizes social and environmental impacts along US 19/US 19E.

### III. SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS

#### A. Land Use

##### 1. Existing Land Uses

###### a. Madison County

Most of the project area in Madison County is undeveloped woodlands or small farms. The predominant developed land use along the project corridor is single family housing, sometimes widely separated and sometimes in small clustered communities. Other land uses include auto-oriented businesses, retail crafts, antiques, churches, and small industrial/heavy commercial uses.

###### b. Yancey County

There are a variety of land uses along the project area in Yancey County. Some of these land uses include undeveloped woodlands, small farms, single family homes, a mobile home park, schools, churches, commercial, and industrial sites. Three industrial facilities and three shopping plazas are located adjacent to the project. Activity in Burnsville is centered on the town square, approximately one block north of the intersection of US 19E and South Main Street. Commercial uses also parallel US 19E along Main Street (SR 1428) for several blocks east and west of the town square. This core area also includes all town and county offices, a senior center, county health department, and Department of Social Services office.

##### 2. Existing Zoning

###### a. Madison County

The majority of the project area in Madison County is zoned Residential-Agricultural. Many business properties are zoned Retail-Business to reflect existing uses.

###### b. Yancey County

Yancey County does not have a zoning ordinance or development regulations. The project area within Burnsville is zoned C2. This district allows retail uses and shopping centers while requiring setbacks and off-street parking.

##### 3. Future Land Use

###### a. Madison County

Future land use patterns may, depending on future zoning, involve auto and truck-oriented development adjacent to the future I-26 interchange along with additional retail and service businesses scattered throughout the remainder of the proposed project.

###### b. Yancey County

The Yancey County Industrial Park is located on a 25 acre tract on the northwest side of SR 1376 (Wheeler Road). Mayland Community College is the only tenant in the Industrial Park at this time and there are no other "under contract" tenants. The extension of utilities east and west of Burnsville along US 19E could result in additional industrial and/or commercial development adjacent to the proposed project. The construction of medians may help minimize haphazard development along the road in areas without development controls.

#### **4. Local/Regional Land Use and/or Development Plans**

##### **a. Madison County**

Madison County is trying to establish countywide low intensity zoning, and to direct higher intensity development within designated growth corridors. US 19 is not designated as a growth corridor in Madison County; however, this status could change in the future. The county is focusing higher intensity development on the Marshall Bypass and the area near the future I-26 interchange at Mars Hill.

##### **b. Yancey County**

Yancey County does not have a future land use or development plan. Burnsville and Yancey County are cooperating to extend water and sewer lines east towards Micaville. No existing or proposed greenways would be severed or impacted by the proposed improvements.

#### **5. Consistency with Local/Regional Plans.**

Madison and Yancey Counties have determined the project is consistent with their ideas and visions. The project includes a proposed median, which will be suitable for landscaping and will control turning movements along the highway. The project also improves the roadway corridor between Asheville/I-26 and the Boone/Blowing Rock resort area.

#### **B. Farmland**

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the impact of land acquisition and construction projects on prime and important farmland soils. North Carolina Executive Order Number 96, Preservation of Prime Agricultural and Forest Lands, requires all state agencies to consider the impact of land acquisition and construction projects on prime farmland soils, as designated by the U.S. Natural Resources Conservation Service (NRCS). The farmland soil designations are based on criteria such as crop yield and level of input of economic resources.

The required additional right of way does not appear to include lands used for agricultural purposes. Rather, lands required for right of way appear to be marginal or unused buffer areas. East of the Cane River, very little land is devoted to agricultural uses because of the urban type of development in and near Burnsville. In addition, no lands within Madison and Yancey Counties are protected by agricultural zoning or use districts. All properties abutting the proposed project may be developed for residential uses (both counties) and commercial or industrial uses (Yancey County).

The proposed project is in areas experiencing urban growth or where urban growth is planned. Furthermore, the conversion of land to highway right of way along the existing corridor will be linear, thereby avoiding an undue burden on any particular farming operation. Therefore, Form AD 1006, (Farmland Conversion Impact Rating) was not processed through the Natural Resource Conservation Service (NRCS).



## **C. Social and Economic Effects**

### **1. Community/Neighborhood Characteristics**

The project area contains isolated homes on large lots, several small communities, and the Town of Burnsville. The small communities are generally made up of homes, churches, a small store, and perhaps a school. In Burnsville, US 19E is a three-lane highway with a combination of residential, commercial, and industrial land uses adjacent to the highway. West of Burnsville, US19/US 19E is a two-lane highway with scattered development.

Throughout the project area, US 19/US 19E limits cross-highway interactions between neighbors; therefore, the proposed improvements will not disrupt or alter neighborhood cohesion or community stability. In addition, relocation impacts associated with the improvements occur along the entire length of the proposed 21 mile (33 kilometer) project and do not affect a large number of homes in any one area.

### **2. Public and Private Facilities**

#### **a. Business Activity/Employment Centers.**

Business activity and employment centers are scattered throughout the length of the US 19/US 19E improvement project. However, most of the businesses are located in or near Burnsville. These employment centers include industries, shopping plazas, and individual businesses. Alternates 1 and 2 would affect and relocate businesses along the 21 mile (33 kilometer) length of the project. Businesses relocated by the alternates include automotive repair shops, convenience stores, hair salons, real estate offices, produce stands, and mini-storage areas. Alternate 1 relocates 33 businesses, and Alternate 2 relocates 29 businesses. More information on business relocations is located in the appendix.

#### **b. Schools and Institutions**

Several schools are located within the project area; however, no schools will be impacted by the proposed US 19/US 19E improvements. Bald Creek Elementary School is located within the Bald Creek community near the intersection of US 19E and SR 1134. Cane River Middle School is located north of SR 1454. Mountain Heritage High School is accessible from US 19E and SR 1376 (Wheeler Road). East Yancey Middle School is located south of US 19E along SR 1142 (George Fork Road). Burnsville Elementary School is located northwest of East Yancey Middle School.

Mayland Community College is located in the Yancey County Industrial Park just west of Burnsville. The community college will not be affected by either alternate.

#### **c. Churches and Non-Profit Organizations**

Several Churches will be relocated as a result of the US 19/US 19E improvements. Middle Fork Independent Baptist Church will be relocated by Alternate 1. The fellowship building of the Bethel Baptist Church will be relocated by Alternate 1. Alternates 1 and 2 will relocate the Seventh Day Adventist Church, just west of Burnsville; the House of Prayer; and the non-profit Bald Creek Masonic Lodge, located near the Yancey/Madison County line. Alternates 1 and 2 will also remove Church property from the following:

**Table 7**  
**Yancey County Population by Age**

	Project Area		Yancey County		North Carolina	
	Number	%	Number	%	Number	%
Total Population - 1990	13,023		15,419		6,628,637	
Age 0 to 64	10,860	83.4	12,776	82.9	5,826,580	87.9
Age 65 or above	2,163	16.6	2,643	17.1	802,057	12.1

**4. Economic Effects**

**a. Income, Poverty, and Unemployment.**

**1) Madison County**

The 1990 Census indicates the project area and Madison County have lower median household, average household, and per capita incomes in 1990 than the North Carolina statewide average. In addition, the project area and Madison County also have a higher percentage of people below the poverty level than the statewide average, as shown in Table 8.

**Table 8**  
**Madison County Income Summary**

	Project Area		Madison County		North Carolina	
	Number	%	Number	%	Number	%
Median Household Income	\$20,604		\$18,956		\$26,647	
Average Household Income	\$23,130		\$23,516		\$33,242	
Per Capita Income	\$8,949		\$9,491		\$13,093	
Persons below poverty level - total	437	21.6	3,276	20.4	829,858	12.5
Persons below 50% of poverty level - total	127	6.3	987	6.1	332,966	5.0

According to the Employment Security Commission, Madison County's unemployment rate in September 1998 was 2.6 percent. This rate is lower than the state's 3.1 percent unemployment rate.

**2) Yancey County**

The 1990 median household income, the average household income, and the per capita income for the project area and Yancey County are lower than those for North Carolina. In addition, the project area and Yancey County also have a higher percentage of people below the poverty level than the statewide average, as shown in Table 9.

**Table 9  
Yancey County Income Summary**

	Project Area		Yancey County		North Carolina	
	Number	%	Number	%	Number	%
Median Household Income	±\$19,719		\$19,401		\$26,647	
Average Household Income	±\$24,207		\$23,583		\$33,242	
Per Capita Income	±\$9,748		\$9,538		\$13,093	
Persons below poverty level - total	2,314	17.8	2,841	18.7	829,858	12.5
Persons below 50% of poverty level - total	692	5.3	880	5.8	332,966	5.0

According to the Employment Security Commission the county's unemployment rate as of June 1998 was 4.9 percent. This rate is higher than the state's 3.4 percent unemployment rate.

**b. Benefits to the State, Region, and Community**

The proposed project will improve access to future I-26 and I-40 and provide new construction and expansion opportunities for businesses. Highway-oriented commercial development is anticipated near the US 19 and future I-26 interchange. Another possible benefit is increased tourism. Vacation travel along US 19/19E may increase economic development opportunities for Madison and Yancey Counties.

The project is consistent with regional goals to improve business access to interstate highways and to enhance tourist access to resort areas. The use of vegetated medians is consistent with the goal to keep US 19E visually attractive. The proposed project will benefit the region and community by making travel more efficient, increasing traffic carrying capacity, and improving safety.

**5. Indirect and Cumulative Impacts**

One unintended consequence of roadway improvements can be - depending upon local land development regulations, development demand, water/sewer availability, and other factors - land development and sprawl. Improvements to levels of service, better accommodation of merging and exiting traffic, and reductions in travel times can result in increased land development outside of the immediate project area.

New growth and development within a mountain area always has the potential to degrade water quality, scenic values and recreational opportunities unless proper planning is utilized. This potential is increased when it occurs in an area with minimal or new planning programs and virtually non-existent development controls. Intensive development adjacent to natural areas can reduce use of important wildlife edge habitat areas while possibly affecting tourism, hiking, picnicing, hunting, fishing, and other recreational activities.

Yancey County's six percent growth rate is one-half the state's average 12% growth rate for the 1990-97 period. This appears to be due in part to distance from interstate highways and large metropolitan areas, the shortage of easily developable lands in the Appalachian region, and limited water and sewer services. However, development pressures do exist within this region. New industries are attracting new residents. Tourism, an increasingly important part of the local economy is assisting the market for second home development. Regionally, the proposed improvements to US 19E in combination with other area projects will strengthen the link between the Asheville and Boone areas and will make the area more accessible to a greater number of tourists, enhance truck access to I-26 and I-40, and shorten the commute to metropolitan Asheville.

Tourist-oriented businesses which provide goods and services for through travelers would likely locate along US 19E, where both water and sewer services are available or proposed. This could result in linear sprawl, with associated congestion and safety concerns. The use of medians with the proposed improvement should minimize this possibility.

Narrow mountain roads often present safety concerns for large trucks, and recreational vehicles. Widening the roadway would make this route safer for large vehicles cars, motorcycles, and bicycles. In addition, this project should enhance access to I-26 and from there to I-40, a major national truck route. However, the potential for substantial amounts of industrial development as a secondary impact is somewhat limited due to the topography of Yancey County.

Local officials believe that a substantial number of citizens commute out of the county, primarily to work in the Asheville/Buncombe County area. Road improvements would make this commute easier and quicker for local citizens, which could contribute both to extended family and community stability. However, these improvements may also attract new residents willing to make this enhanced commute. Residential development often represents a net tax loss to local governments when not balanced by additional commercial and industrial development. Thus, if local governments do not actively seek balanced growth, the additional residential development could negatively impact the county tax base.

The Mountain Gateway Museum in Old Fort, a regional branch of the North Carolina Museum of History, is currently preparing an oral and photographic history in the wake of the I-26 project. Sam Gray, Museum Director, believes that most communities located along roads intersecting US 19E will benefit from the proposed project. Increased opportunities for local work (new and expanded industries as well as tourism) and enhanced commutes to the Weaverville/Asheville area would help stabilize these communities by reducing the need for out-migration.

Area residents welcome opportunities for new commercial uses along improved roads. Due to the general lack of planning and zoning, much of this new development is expected to have negative visual impacts. Mr. Gray referred to this future development as "rural sprawl". This highway-oriented growth may be counter-productive for the area's tourist industry. New resorts on the scale of those around Boone and Blowing Rock are not

expected. Smaller scale resorts similar to Maggie Valley are more likely along and near US 19E. Most such developments likely would occur in pockets or clusters.

Much new residential development is expected to be fueled by second home development and retirees. These types of homeowners are low impact users of local public services; therefore, their presence is often good for the local economy. However, Mr. Gray noted that these new residents are often wealthier, older and better educated than the general population, and their influx can change the political and social character of an area. Such development can also increase the cost of housing beyond the means of area residents.

The various road projects within the mountain region are expected to dramatically accelerate the rate of change. While some communities are already in a "state of flux," according to Mr. Gray, these road projects may have a dramatic impact on the extended family structures of the remaining traditional communities.

### 6. Relocation Impacts

Alternates 1 and 2 have different relocation impacts. Table 10 provides a summary of the relocation impacts anticipated for both alternates. Alternate 1 relocates 59 residences, 33 businesses, and 5 non-profit organizations. Alternate 2 relocates 56 residences, 29 businesses, and 4 non-profit organizations. Neither alternate relocates farms or minorities. Relocation reports for Alternates 1 and 2 are located in Appendix 1 and are based on Sections A through R as shown on Exhibit 2.

**Table 10  
Relocation Impact Summary**

		Alternate 1	Alternate 2
<b>Residences</b>	<b>Owners</b>	50	52
	<b>Tenants</b>	9	4
	<b>Total</b>	59	56
	<b>Minority</b>	0	0
<b>Businesses</b>	<b>Owners</b>	20	17
	<b>Tenants</b>	13	12
	<b>Total</b>	33	29
	<b>Minority</b>	0	0
<b>Farms</b>		0	0
<b>Non-Profit Organizations</b>		5	4

The Division of Highways offers a Relocation Assistance Program to help minimize the effects of displacement on families. The occupants of the affected residences may qualify for aid under one or more of the NCDOT relocation programs. It is the policy of the NCDOT to ensure that comparable replacement housing will be available prior to construction of state and federally assisted projects. Furthermore, the North Carolina Board of Transportation has the following three programs to minimize the inconvenience of relocation:

The average household income for Madison and Yancey Counties is approximately 30 percent lower than the average household income for the entire state. Additionally, approximately 20 percent of the population in Madison and Yancey Counties is below the poverty level; which is much higher than the statewide average poverty level of 12.5 percent.

The relocation report for the project shows that approximately 20 percent of the potential relocatees may be low income households. This percentage is consistent with the demographics and economics of the project area and the poverty levels in Madison and Yancey Counties. Residential relocations occur throughout the 21 mile (33 kilometer) project length. Therefore, the proposed project does not appear to be disproportionate for low income populations.

This assessment finds no evidence or indication that this project will result in disproportionately high and adverse impacts on minority or low-income populations. Furthermore, this assessment finds no evidence or indication of discrimination on the basis of race, color, national origin, age, sex, or disability. This project will be implemented in accordance with Title VI of the Civil Rights Act of 1964 and Executive Order 12898.

## **8. Cultural Resources**

### **a. Historic Architectural Resources**

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106. Section 106 requires that if a federally permitted project has an effect on a property listed in or eligible for the National Register of Historic Places, the Advisory Council on Historic Preservation be given an opportunity to comment. This project is also subject to compliance with Section 4(f) of the Department of Transportation Act of 1966, as amended.

An architectural survey for structures listed in the National Register or eligible for nomination to the National Register was conducted in the project area. No properties in the project area are listed in the National Register of Historic Places. However, there are seven properties in the project area eligible for listing in the National Register of Historic Places. These properties are described as follows:

- **Porter and Ollie Briggs Ray House**

The Porter and Ollie Briggs Ray House is located on the southeast side of US 19 on a portion of the old US 19 across from the intersection of US 19 and SR 1520. The Porter and Ollie Briggs Ray House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of an early Craftsman bungalow in rural east Madison County.

- **Otto Buckner House**

The Otto Buckner House is located on the southeast side of US 19 at the intersection of old US 19 and SR 1510 (Ponder Creek Road). The Otto Buckner House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of an early Craftsman bungalow in rural east Madison County.

- **Sam Byrd House**  
The Sam Byrd House is located on the north side of US 19E at the intersection of US 19E and SR 1394 (Sam Byrd Road). The Sam Byrd House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it is representative of the application of the asymmetry and varied wall surfaces of the Queen Anne style to the traditional I-house form.
- **Bald Creek School and Gymnasium**  
The Bald Creek School and Gymnasium is located on the south side of US 19E in the community of Bald Creek. Bald Creek flows between the school property and US 19E. Bald Creek School and Gymnasium is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it is representative of the types of civic construction projects built by the federal government's Works Progress Administration (WPA) program during the 1930's.
- **Captain E. E. Neill House**  
The Captain E. E. Neill House is located on the north side of US 19E across the highway from the community of Bald Creek. The Captain E. E. Neill House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of a two-story single-pile plan house in the region.
- **Wilkes Hensley House**  
The Wilkes Hensley House is located on the north side of US 19E between the community of Bald Creek and the Cane River. Bald Creek flows through the property. The Wilkes Hensley House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of a late nineteenth to early twentieth-century agricultural complex in Yancey County.
- **Horton Hill Cemetery**  
Horton Hill Cemetery is located on top of a ridge on the south side of US 19E near the intersection of SR 1196, just west of Burnsville. Horton Hill Cemetery is eligible for listing in the National Register of Historic Places under Criterion A for ethnic heritage as it represents the establishment of African-American communities in the period following the Civil War in Yancey County. The Cemetery is also eligible under Criterion Consideration D as it derives its primary significance from association with historic events, primarily the settlement of the area by an African-American community of which few other resources remain.

**b. Section 106 Determination of Effects**

A Determination of Effects meeting was held on July 7, 2000 for the aforementioned properties eligible for listing in the National Register of Historic Places. It was determined the proposed project has no effect on four of the properties (Otto Buckner House, Sam Byrd House, Bald Creek School and Gymnasium, and Captain E. E. Neill

House). Alternates 1 and 2 have no adverse effect on the Horton Hill Cemetery and an adverse effect on the Porter and Ollie Briggs Ray House and the Wilkes Hensley House.

Alternates 1 and 2 will not remove property from the Horton Hill Cemetery in Yancey County. Additionally, the proposed improvements to US 19/US 19E will maintain access to the cemetery along the existing access road.

Although the Porter and Ollie Briggs Ray House (Madison County) and the Wilkes Hensley House (Yancey County) are adversely effected by both alternates, the NCDOT Roadway Design Unit is committed to avoiding these properties. Alternate 2 will avoid these two historical properties. A redetermination of effects will be included in the Finding of No Significant Impact.

**b. Section 4(f) Resources**

Section 4(f) of the Department of Transportation Act of 1966 protects the use and function of publicly owned parks, recreation areas, wildlife/waterfowl refuges, and historic properties. A transportation project can only use land from a Section 4(f) resource when there are no other feasible or prudent alternatives and when the project includes all possible planning to minimize harm to the resource.

The Porter and Ollie Briggs Ray House, Wilkes Hensley House, and Horton Hill Cemetery are protected by Section 4(f). Alternate 2 will not require temporary easements or additional right of way from these properties. Therefore, provisions of Section 4(f) of the Department of Transportation Act of 1966 are not applicable to the Porter and Ollie Briggs Ray House, Wilkes Hensley House, and Horton Hill Cemetery.

**d. Archaeological Resources**

An archaeological survey of the project area between future I-26 and SR 1336 (Jacks Creek Road) was conducted between the dates of June 28, 1999 and July 23, 1999. An additional investigation was conducted on January 19, 2001. The survey methodology took into consideration guidance from the National Park Service, the President's Advisory Council on Historic Preservation, and the Federal Highway Administration.

A total of 13 archaeological sites were identified and evaluated during the surveys. Seven sites are considered not eligible for the National Register of Historic Places and six sites are regarded as potentially eligible for the National Register of Historic Places. The six eligible sites are identified as 31MD351/351\*\*, 31MD353/353\*\*, 31MD355, 31MD359, 31MD360, 31YC43, and a petroglyph. The eligibility status of these sites is temporary, pending additional testing to render a definitive and final eligibility recommendation. The project Finding of No Significant Impact (FONSI) will identify the results of the archaeological survey and eligibility status.

**D. Environmental Effects**

**1. Methodology**

A pre-field investigation was conducted prior to the on-site field investigations. Information sources used in the pre-field investigation of the study area include:



US Geological Survey (USGS) quadrangle maps (Burnsville, Mars Hill, Bald Creek, Barnardsville, and Micaville North Carolina), Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) soil information, and NCDOT aerial photographs of the project area (1:5000 and 1:2500). Water resource information was obtained from publications of the North Carolina Department of Environment and Natural Resources (NCDENR, 1993) and from the NC Center for Geographic Information and Analysis (Environmental Sensitivity Base Map of Madison and Yancey Counties, 1995). Information concerning the occurrence of federal and state protected species in the study area was gathered from the US Fish and Wildlife Service (FWS) list of protected species and federal species of concern, and the NC Natural Heritage Program (NHP) database of rare species and unique habitats.

General field surveys were conducted along the proposed alternates on June 16 and 17, 1998; on July 13 and 14, 1998; and on October 6 and 7, 1999. Plant communities and their associated wildlife were identified and recorded. Wildlife identification involved using one or more of the following observation techniques: active searching and capture, visual observations (binoculars), and identifying characteristic signs of wildlife (sounds, scat, tracks and burrows).

Jurisdictional wetland determinations were performed using delineation criteria prescribed in the "Corps of Engineers Wetland Delineation Manual" (Environmental Laboratory, 1987). Jurisdictional surface water determinations were performed using guidance provided by NCDENR Division of Water Quality (DWQ), "Field Location of Streams, Ditches, and Ponding" (Environmental Lab, 1997).

## **2. Terminology and Definitions**

Definitions for the terminology used in area descriptions contained in this report are as follows: Project Study Area denotes the area bounded by proposed right of way limits; Project Vicinity describes an area extending 0.5 miles (0.8 kilometers) on all sides of the project study area; and Project Region is equivalent to an area represented by a 7.5 minute USGS quadrangle map with the project occupying the central position.

## **3. Physical Resources**

The project study area lies within the Mountain Physiographic Province. Mountainous areas that are frequently dissected by streams characterize the topography within the project region. The project area is situated in a valley and mountainous landscape, wherein lie Middle Fork Creek, California Creek, Price Creek, Ivy Gap Branch, Bald Creek, Cane River, Pine Swamp Creek, Little Crabtree Creek and their tributaries.

The project area topography varies from relatively flat to very steep. The average elevation is approximately 2,600 feet (790 meters) above mean sea level (amsl). The highest portion of the project area is at an elevation of 2,805 feet (844 meters) amsl northeast of Ivy Gap. Higher mountaintops within the project region approach 4,000 feet (1,220 meters).

Land use in the project vicinity consists of forests on the steeper slopes, with pastures and forage crop fields on gentler slopes. Along US 19E, residential and commercial development predominates, especially in and around the town of Burnsville.

**a. Soils**

Four major soil series occur within the study area: Udorthents, Clifton clay loam, Dellwood-Reddies complex and Fannin sandy loam. Table 11 lists the major study area soils. The probability of encountering acid rock (pyrite formations) in the project area is low; however, any areas of concern will be identified during upcoming site investigations.

**Table 11  
Soils Within the Project Study Area**

Map Unit	Soil	Percent Slope	Drainage Class	Hydric Classification
Ud	Udorthents	0-50	Somewhat excessively To moderately well drained	Hydric Inclusions
CnC2	Clifton clay loam	8-15	Well drained	Non hydric
DeA	Dellwood-Reddies Complex	0-3	Moderately well drained	Hydric Inclusions
FeD2	Fannin sandy clay loam	15-30	Well drained	Non-hydric

Soil information provided by the NRCS of Yancey County.

*Udorthents* are the dominant soil series within the project area. This soil series consists of soils where the natural soil layering sequence was destroyed by earth moving machines (NRCS). The disturbance is such that, the original soil series is no longer identifiable. Soil characteristics such as, drainage class, slope, and productivity are highly variable. Consequently, this soil series is not assigned an agricultural or woodland suitability class. Udorthents are present along the US 19E corridor where substantial soil disturbance associated with roadway construction and commercial and urban development has occurred. Udorthents are listed as having inclusions of hydric soils in drainageways and seep areas.

*Clifton clay loam* is a very deep, well drained soil in intermountain hill and low mountains. This soil has moderate permeability and a severe erosion hazard. Clifton clay loam is well suited to agricultural development and well suited to woodland productivity. Its woodland suitability class is rated as very high for eastern white pine (*Pinus strobus*).

The *Dellwood-Reddies complex* is also present in intermountain hills and mountains and is generally found on bottomland slopes. This complex is composed of 45 percent Dellwood soils and 35 five percent Reddies soils. Permeability is moderately rapid and the erosion hazard is slight. This complex is well suited for cropland and woodland. The woodland productivity class is well suited for yellow poplar (*Liriodendron tulipifera*). The Dellwood-Reddies complex is listed has having inclusions of hydric soils in depressions and old channels away from streams in backwater areas.

*Fannin sandy clay loam* is found in intermountain hills and low mountains on summits and side slopes. This soil has moderate permeability and a very severe erosion hazard due to steepness of slope. Fannin soils are poorly suited for cropland, however, they are rated as suited for pastureland and orchard crops. Woodland productivity is rated as very high for eastern white pine.

There is a low probability of encountering "acid-rock" during the construction of the proposed improvements along US 19/US 19E. "Acid-rock" formations are typically found in the westernmost counties of North Carolina.

#### **b. Water Resources**

This section contains information concerning those water resources likely to be impacted by the project. Water resource information encompasses physical aspects of the resource, its relationship to major water systems, Best Usage Standards and water quality of the resources. Probable impacts to these water bodies are also discussed, as are means to minimize impacts.

##### **1) Waters Impacted and Characteristics**

Waters in the project vicinity are part of the French Broad River Basin. The French Broad River Basin in North Carolina consists of three major river systems that include the French Broad, Pigeon and Nolichucky Rivers. The French Broad River occupies a central position within the basin, while the Pigeon River is in the west and the Nolichucky River is in the eastern portion of the basin. The three rivers flow in a northwesterly direction and eventually have their confluence in Tennessee.

The six major water resources within the project area are Middle Fork Creek, Bald Creek, Price Creek, the Cane River, Pine Swamp Branch, and Little Crabtree Creek. Middle Fork Creek flows to the south from Bethel to the French Broad River. Bald Creek flows to the North from the top of Ivy Gap to the Cane River. Price Creek flows north from Chestnut Mountain to the Cane River. The Cane River flows north from the Pisgah National Forest to the Toe River. Pine Swamp Branch flows to the west from Burnsville and is a tributary to the Cane River. Little Crabtree Creek flows to the east from Burnsville and is a tributary to the South Toe River (see Exhibits 9 and 10 for the location of rivers and streams).

Waters within the project area are located in the Nolichucky River system, of the French Broad River basin. Surface waters from the Madison and Yancey County line west to future I-26 drain to Little Ivy Creek (sub basin no. 04-03-04; US Department of Interior Hydrologic Unit no. 06010105). Surface waters from west of Burnsville to the Madison-Yancey County line drain to the Cane River (sub basin no. 04-03-07; US Department of Interior Hydrologic Unit no. 06010108) while project area surface waters east of Burnsville drain to the South Toe River (sub basin no. 04-03-06). There are a total of 84 streams and two ponds within the project study area. Table 12 lists project area surface waters and their characteristics.

**Table 12**  
**Project Area Surface Waters and Characteristics**

<b>Water Resource</b>	<b>Channel Width feet (meters)</b>	<b>Channel Depth inches (centimeters)</b>	<b>Substrate</b>	<b>Receiving Stream</b>
California Creek	12 (3.7)	6 (15.2)	C,G,Si,S,B	Middle Fork Creek
UT CC 1	2 (0.6)	2 (5.1)	S,Si,G,C	California Creek
UT CC 2	15 (4.6)	4 (10.2)	S,Si,G,C	California Creek
Middle Fork Creek	2 (0.6)	4 (10.2)	S,Si,G,C	Little Ivy Creek
UT MFC 1	12 (3.7)	4 (10.2)	C,G,Si,S	Middle Fork Creek
UT MFC 2	1 (0.3)	3 (7.6)	S,Si,G,C	Middle Fork Creek
UT MFC 3	2 (0.6)	2 (5.1)	S,Si,G,C	Middle Fork Creek
UT MFC 4	4 (1.2)	2 (5.1)	S,Si,G,C	Middle Fork Creek
UT MFC 5	3 (0.9)	16 (40.6)	Si,S	Middle Fork Creek
UT MFC 6	2 (0.6)	4 (10.2)	S,Si,G,C	Middle Fork Creek
Bailey Branch	1 (0.3)	3 (7.6)	S,Si,G,C	Middle Fork Creek
Crooked Creek	8 (2.4)	4 (10.2)	S,Si,G,C	Middle Fork Creek
Turkey Branch	4 (1.2)	3 (7.6)	S,Si,G,C	Middle Fork Creek
Polly Branch	1 (0.3)	2 (5.1)	S,Si,G,C	Middle Fork Creek
Jordan Branch	2 (0.6)	4 (10.2)	S,Si,G,C	Middle Fork Creek
Ponder Creek	4 (1.2)	8 (20.3)	S,Si,G,C	Middle Fork Creek
Ivy Gap Branch	6 (1.8)	6 (15.2)	S,Si,G,C	Middle Fork Creek
Holland Creek	6 (1.8)	6 (15.2)	S,Si,G,C	Ponder Creek
UT IGB 1	4 (1.2)	6 (15.2)	S,Si,G,C	Ivy Gap Branch
UT IGB 2	5 (1.5)	6 (15.2)	S,Si,G,C	Ivy Gap Branch
UT IGB 3	5 (1.5)	6 (15.2)	S,Si,G,C	Ivy Gap Branch
UT IGB 4	4 (1.2)	5 (12.7)	S,Si,G,C	Ivy Gap Branch
UT IGB 5	4 (1.2)	4 (10.2)	S,Si,G,C	Ivy Gap Branch
UT IGB 6	3 (0.9)	2 (5.1)	S,Si,G,C	Ivy Gap Branch
UT IGB 7	3 (0.9)	2 (5.1)	S,Si,G,C	Ivy Gap Branch
UT IGB 8	2 (0.6)	2 (5.1)	S,Si,G,C	Ivy Gap Branch
Bald Creek	6 (1.8)	9 (22.9)	S,Si,G,C	Cane River
Shepard's Branch	4 (1.2)	4 (10.2)	S,Si,G,C,B	Bald Creek
UT BC 1	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 2	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 3	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 4	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 5	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 6	2 (0.6)	4 (10.2)	S,Si,G,C	Bald Creek
UT BC 7	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 8	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 10	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 11	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 12	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 13	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 14	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 15	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek

Water Resource	Channel Width feet (meters)	Channel Depth inches (centimeters)	Substrate	Receiving Stream
UT BC 16	4 (1.2)	4 (10.2)	S,Si,G,C	Bald Creek
UT BC 17	2 (0.6)	7.6 (3)	S,Si,G,C	Bald Creek
UT BC 18	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
UT BC 19	2 (0.6)	2 (5.1)	S,Si,G,C	Bald Creek
Lickskillet Branch	4 (1.2)	4 (10.2)	S,Si,G,C,B	Bald Creek
Nubbinscuffle Creek	4 (1.2)	4 (10.2)	S,Si,G,C	Bald Creek
UT PC 1	2 (0.6)	7.6 (3)	S,Si,G,C,B	Price Creek
UT PC 2	2 (0.6)	7.6 (3)	S,Si,G,C,B	Price Creek
UT PC 3	2 (0.6)	7.6 (3)	S,Si,G,C	Price Creek
Price Creek	5 (1.5)	5.1 (2)	S,Si,G,C	Cane River
Cane River	5 (1.5)	30.5 (12)	S,Si,G,C,B	French Broad
UT CR 1	3 (0.9)	4 (10.2)	S,Si,G,C,B	Cane River
UT CR 2	3 (0.9)	4 (10.2)	S,Si,G,C,B	Cane River
UT CR 3	3 (0.9)	4 (10.2)	S,Si,G,C,B	Cane River
UT CR 4	4 (1.2)	4 (10.2)	S,Si,G,C,B	Cane River
UT CR 5	3 (0.9)	7.6 (3)	S,Si,G,C,B	Cane River
UT CR 6	4 (1.2)	4 (10.2)	S,Si,G,C,B	Cane River
SW1 Little Crabtree Cr.	20 (6)	12 (30)	B,R,G,S	South Toe River
SW3	2.5 (0.8)	1.5 (3.8)	*	Little Crabtree Creek
SW4	1.5 (0.5)	1.5 (3.8)	R,G,S,Si	Little Crabtree Creek
SW5 Plum Branch	6.0 (1.8)	6 (15)	R,G,S,Si	Little Crabtree Creek
SW6	2.5 (0.8)	2 (5)	*	Little Crabtree Creek
SW7 Shoal Creek	8.0 (2.4)	6 (15)	B,R,G,S	Little Crabtree Creek
SW8 George Fork	6.0 (1.8)	5 (13)	B,R,G,S,Si	Little Crabtree Creek
SW9	4.0 (1.2)	2 (5)	R,G,S	George Fork
SW10 Allen Branch	4.0 (1.2)	4 (10)	B,R,G,S	Little Crabtree Creek
SW11	1.5 (0.5)	4 (10)	*	Little Crabtree Creek
SW12 Ray Creek	8.0 (2.4)	12 (25)	R,G,S,Si	Little Crabtree Creek
SW13	4.0 (1.2)	3.0 (7.6)	*	Little Crabtree Creek
SW14	4.0 (1.2)	3.0 (7.6)	*	Little Crabtree Creek
SW15 Pine Swamp Br.	7.0 (2.1)	6 (15)	B,R,G,S,Si	Cane River
SW16 McIntosh Br.	4.0 (1.2)	3.0 (7.6)	B,R,G,S,Si	Pine Swamp Branch
SW17	3 (1)	2 (5)	R,G,S,Si	Pine Swamp Branch
SW18 Baileys Br.	4.0 (1.2)	3.0 (7.6)	B,R,G,S,Si	Pine Swamp Branch
SW19	1.5 (0.5)	2 (5)	B,R,G,S	SW20
SW20	4.0 (1.2)	3.0 (7.6)	B,R,G,S	Cane River
SW21	3 (1)	2 (5)	R,G,S,Si	SW20
SW22	3 (1)	1.5 (3.8)	R,G,S	SW20

B=boulder, R=rubble, G=gravel, S=sand, Si=silt.

\* No data was collected since the stream was enclosed in pipe or severely channelized.

All streams within the project area exhibit some form of human impact. Most of the smaller streams have severe impacts, such as channel modification and/or enclosure in a pipe or culvert. Current stream impacts are apparently the result of residential and commercial development, and their associated impacts, such as roadways, parking lots and driveways. The topography in the project vicinity is mountainous. The valleys formed by larger streams, and the hollows formed by the smaller streams, provide some topographic relief in an otherwise steep terrain. Historically, development has targeted these areas of gentler slopes and the streams have been modified as a result.

Fish passage and restriction of the low flow channel are two primary concerns which will be addressed in the final hydraulics design stage. The bottom of any new culverts will be placed sufficiently below the bed elevation so as to not restrict the low flow and consideration will be given to using bottomless structures. An analysis will be made of the flow velocities and bed material movement to determine whether additional special design measures, such as baffles or sills, will be required in the culvert to promote retention of bed material and to ensure proper fish passage.

## **2) Flood Hazard Evaluation**

Madison and Yancey Counties are participants in the National Flood Insurance Regular Program. The crossings of Cane River, Bald Creek, Little Crabtree Creek, and Ray Creek are in designated flood hazard zones and are included in a detailed flood study with established 100-year floodplains and floodways with corresponding regulatory water surface elevations. It is anticipated that a floodway revision will not be required at these crossings. Most of the floodplain areas at the major stream crossings are rural and wooded or cleared pasture and cultivated areas. There is a considerable amount of development within the floodplain along Middle Fork Creek, Bald Creek, Little Crabtree Creek, and Ray Creek. There may be numerous buildings along the project with floor elevation below the 100-year flood level.

Existing flood hazards along adjacent properties at all stream crossings will be evaluated in detail in final hydraulics design to ensure measures are taken to the extent practicable to minimize flooding problems to upstream properties and to ensure that the proposed roadway widening and associated drainage accommodations will not have an adverse affect on the existing floodplain area, nor on the associated flood hazards. The Hydraulics Unit will coordinate with the Federal Emergency Management Agency and local authorities in the final design stage to ensure compliance with applicable floodplain ordinances.

## **3) Best Usage Classification**

Streams are assigned a best usage classification (BUC) by the NCDENR Division of Water Quality pursuant to 15A NCAC 2B .0100 and 15A NCAC 2B .0200. Unnamed tributaries have the best usage classification of the named collector stream. Table 13 lists the hydrologic order and the best usage classification for surface waters located within the project area.

**Table 13**  
**Hydrologic Order of Surface Waters and Best Usage Classification (BUC)**

Water resource	Tributary	Second Order Tributary	DWQ Index Number	BUC
Middle Fork Creek (MFC)			6-96-10-1	WS-II
	California Creek (CC)		6-96-10-2	WS-II
		UT CC 1	6-96-10-2	WS-II
		UT CC 2	6-96-10-2	WS-II
	UT MFC 1		6-96-10-1	WS-II
	UT MFC 2		6-96-10-1	WS-II
	UT MFC 3		6-96-10-1	WS-II
	UT MFC 4		6-96-10-1	WS-II
	UT MFC 5		6-96-10-1	WS-II
	UT MFC 6		6-96-10-1	WS-II
	Bailey Branch		6-96-10-1	WS-II
	Crooked Creek		6-96-10-1-8	WS-II
	Turkey Branch		6-96-10-1-6	WS-II
	Polly Branch		6-96-10-1-5	WS-II
	Jordan Branch		6-96-10-1-4	WS-II
	Ponder Creek		6-96-10-1-3	WS-II
		Holland Creek	6-96-10-1-2	WS-II
	Ivy Gap Branch (IGB)		6-96-10-1-1	WS-II
		UT IGB 1	6-96-10-1-1	WS-II
		UT IGB 2	6-96-10-1-1	WS-II
		UT IGB 3	6-96-10-1-1	WS-II
		UT IGB 4	6-96-10-1-1	WS-II
		UT IGB 5	6-96-10-1-1	WS-II
		UT IGB 6	6-96-10-1-1	WS-II
		UT IGB 7	6-96-10-1-1	WS-II
		UT IGB 8	6-96-10-1-1	WS-II
Cane River (CR)			7-3-(13.7)	C Tr
	Bald Creek (BC)		7-3-22	C Tr
		Shepard's Branch	7-3-22-3	C Tr
		UT BC 1	7-3-22	C Tr
		UT BC 2	7-3-22	C Tr
		UT BC 3	7-3-22	C Tr
		UT BC 4	7-3-22	C Tr
		UT BC 5	7-3-22	C Tr
		UT BC 6	7-3-22	C Tr
		UT BC 7	7-3-22	C Tr
		UT BC 8	7-3-22	C Tr
		UT BC 10	7-3-22	C Tr
		UT BC 11	7-3-22	C Tr
		UT BC 12	7-3-22	C Tr
		UT BC 13	7-3-22	C Tr
		UT BC 14	7-3-22	C Tr

Water resource	Tributary	Second Order Tributary	DWQ Index Number	BUC
		UT BC 15	7-3-22	C Tr
		UT BC 16	7-3-22	C Tr
		UT BC 17	7-3-22	C Tr
		UT BC 18	7-3-22	C Tr
		UT BC 19	7-3-22	C Tr
		Lickskillet Branch	7-3-22-5	C Tr
		Nubbinscuffle Creek	7-3-22-6	C Tr
	Price Creek (PC)		7-3-21	C Tr
		UT PC 1	7-3-21	C Tr
		UT PC 2	7-3-21	C Tr
		UT PC 3	7-3-21	C Tr
	UT CR 1		7-3-(13.7)	C Tr
	UT CR 2		7-3-(13.7)	C Tr
	UT CR 3		7-3-(13.7)	C Tr
	UT CR 4		7-3-(13.7)	C Tr
	UT CR 5		7-3-(13.7)	C Tr
	SW15 Pine Swamp Br.		7-3-15	C Tr
		SW16 McIntosh Branch	7-3-15-1	C Tr
		SW17	7-3-15	C Tr
		SW18 Baileys Branch	7-3-15-2	C Tr
	SW20		7-3-(13.7)	C Tr
		SW19	7-3-(13.7)	C Tr
		SW21	7-3-(13.7)	C Tr
		SW22	7-3-(13.7)	C Tr
South Toe River			7-2-52-(30.5)	C Tr
	SW1 Little Crabtree Cr.		7-2-52-33	C Tr
		SW3	7-2-52-33	C Tr
		SW4	7-2-52-33	C Tr
		SW5 Plum Branch	7-2-52-33-9	C Tr
		SW6	7-2-52-33	C Tr
		SW7 Shoal Creek	7-2-52-33-7	C Tr
		SW8 George Fork	7-2-52-33-6	C Tr
		SW9	7-2-52-33	C Tr
		SW10 Allen Branch	7-2-52-33-4	C Tr
		SW11	7-2-52-33	C Tr
		SW12 Ray Creek	7-2-52-33-3	C Tr
		SW13	7-2-52-33	C Tr
		SW14	7-2-52-33	C Tr



Surface waters located within the project area have been given classifications WS-II and C Tr. Classification WS-II waters are protected as water supplies, which are generally in predominantly undeveloped watersheds. Stringent stormwater management measures may be required on a case-by-case basis where it is determined that additional measures are required to protect water quality and maintain existing and anticipated uses of these waters (DWQ, 1995). Point source dischargers of treated wastewater are permitted pursuant of applicable rules and regulations. Class WS-II waters are suitable for all class C uses. Class C waters are freshwaters protected for secondary recreation, agriculture, fishing, aquatic life including propagation and survival, and wildlife. The supplemental Tr classification assignment designates these freshwaters protected for natural trout propagation and survival of stocked trout.

A water supply intake for Burnsville is located on the Cane River approximately 1.9 miles (3.2 kilometers) upstream of the project area. The Cane River, at Burnsville's water supply intake [index no. 7-3-(0.5)], is assigned a best usage classification of WS-II Tr CA. The classification WS-II denotes waters protected as water supplies which are generally in predominantly undeveloped watersheds. Point source discharges of treated wastewater are permitted pursuant to Rule .0104 and .0211 of this Subchapter. Local programs to control nonpoint sources and stormwater discharges of pollution shall be required, suitable for all Class C uses. CA denotes critical area, "the area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed." The critical area is defined as extending either one half mile (0.8 kilometer) from the normal pool elevation of the reservoir in which the intake is located or the ridge line of the watershed, or one half mile (0.8 kilometers) upstream from and draining to the intake located directly in the stream of river.

Neither High Quality Waters (HQW), Water Supplies (WS-I: undeveloped watersheds or WS-II: predominately undeveloped watersheds) nor Outstanding Resource Waters (ORW) occur within 1.0 mile (1.6 kilometer) of project study area. However, because of considerable involvement with sensitive trout streams, erosion and sedimentation will be controlled through erosion and sedimentation control measures as specified in the North Carolina regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0024).

#### **4) Water Quality**

The Benthic Macroinvertebrate Ambient Network (BMAN) is managed by the DWQ and is part of an ongoing ambient water quality monitoring program which addresses long term trends in water quality. The program assesses water quality by sampling for benthic macroinvertebrate organisms at fixed monitoring sites. Many benthic macroinvertebrates have stages in their life cycle that can last from six months to a year; therefore, the adverse effects of a toxic spill will not be overcome until the next generation. Different taxa of macroinvertebrates have different tolerances to pollution, thereby, long term changes in water quality conditions can be identified by population shifts from pollution sensitive to pollution tolerant organisms (and vice versa). Overall, the species present, the population diversity and the biomass are reflections of long term water quality conditions.

In sub basin 04-03-04, Little Ivy Creek at SR 1610 was sampled for benthic macroinvertebrates on July 22, 1992. This sampling station is approximately 3.2 miles (5.1 kilometers) south and downstream of the western project terminus. Sampling Little Ivy Creek at this location was part of a study to determine if any areas were suitable for high quality water classification (HQW). Little Ivy Creek received bioclassifications of good on that date.

In sub basin 04-03-07, the Cane River near Sioux on US 19W, was sampled for benthic macroinvertebrates. This station is approximately eight miles (13 kilometers) downstream of the Burnsville wastewater treatment plant. BMAN data collected at this station has displayed continuous improvement in water quality since 1983. In August of 1983 and 1985 the Cane River received a bioclassification of Good-Fair. Water quality improved during August 1987 and 1989 with bioclassifications of Good. In July 1992, a bioclassification of Excellent was assigned to the Cane River. The DWQ suggests that the improvement in water quality was the result of improvements to the Burnsville wastewater treatment plant (DWQ, 1994).

In sub basin 04-03-06, the South Toe River at NC 80 was sampled for benthic macroinvertebrates on June 18, 1990 and January 17, 1991. This sampling station is approximately 1.2 miles (1.9 kilometers) east and upstream of the eastern project terminus. Sampling the South Toe River at this location was part of a special study associated with bridge construction. The South Toe River received bioclassifications of Excellent on both dates.

The North Carolina Index of Biotic Integrity (NCIBI) is a method for assessing a stream's biological integrity by examining the structure and health of its fish community. The NCIBI summarizes the effects of all classes of factors influencing aquatic faunal communities. The index incorporates information about species richness and composition, trophic composition, fish abundance, and fish condition (DEM 1995).

The assessment of biological integrity using the NCIBI is provided by the cumulative assessment of 12 parameters (metrics). The values provided by these metrics are converted into scores on a one-three-five scale. A score of five represents conditions expected for undisturbed streams in the specific river basin or ecoregion, while a score of one indicates that the conditions vary greatly from those expected in an undisturbed stream of the region. The scores are summed to attain the overall NCIBI score (DEM, 1995). The NCIBI score is then assigned an integrity class which ranges from No Fish to Excellent.

In sub basin 04-03-06, the North Toe River at NC 80 (downstream of the project area) was sampled for fish community structure. On October 1992 the North Toe River at this location received an NCIBI score of Good. In Sub basin 04-03-07, the Cane River at US 19W, received an NCIBI score of Good.

Point source dischargers located throughout North Carolina are permitted through the National Pollutant Discharge Elimination System (NPDES) Program. Any

discharger is required to register for a permit. Permitted point source dischargers within the project vicinity are detailed in Table 14.

**Table 14**  
**Permitted Point Source Dischargers within the Project Vicinity**

<b>Permit Number</b>	<b>Facility</b>	<b>Receiving Stream</b>
NC0033651	Cane River Middle School	Cane River
NC0027898	NCDOC Yancey County Correctional Center	Cane River
NCG550253	Nell Shepard Residence	Bald Creek
NCG550130	Donald Angel Residence	Bald Creek
NC0033651	Cane River Middle School	Cane River
NC0027898	NCDOC Yancey County Correctional Center	Cane River
NC0020290	Burnsville Wastewater Treatment Plant	Cane River
NC0075965	Burnsville Water Treatment Plant	Unnamed tributary to Little Crabtree Creek
NC0033642	East Yancey Middle School	George Fork
NCG550661	Messiah of the Mountains Lutheran Church	Little Crabtree Creek
NC0000434	Deneen Mica Company	South Toe River

Non-point source refers to runoff that enters surface waters through stormwater or snowmelt (DWQ, 1994). Most of the project area is somewhat developed with heavy traffic on the existing roadway. The project area also contains rural communities with agriculture and landscaping activities contributing to non-point source pollution. In urban developed areas, such as Burnsville, high concentration of impervious surface greatly increases runoff rates and volumes. Stormwater collection systems then transport runoff waters quickly to receiving streams with little or no filtering by vegetated surfaces (DWQ, 1994). Contaminants originating from urban development include: lawn care products, such as, pesticides and fertilizers; automobile-related pollutants that include lubricants, abraded tire and brake linings; lawn and household wastes; and fecal coliform bacteria from animals and failing septic systems (DWQ, 1995). The terrain of the project area contains very steep slopes and is seasonally exposed to heavy water flow; thus, the high velocity and volumes of runoff can also cause increased erosion of stream channels through physical scouring of the stream banks and floodplain. Overall, the water quality appears to be above average based on current data.

## 5) Summary of Anticipated Impacts

The following impacts to surface water resources are likely to result from construction activities such as clearing and grubbing on streambanks, riparian canopy removal, in-stream construction, fertilizer and pesticide use and pavement installation.

- Increased sedimentation and siltation downstream of the crossing and increased erosion in the project area.
- Changes in light incidence and water clarity due to increased sedimentation and vegetation removal.
- Alteration of water levels and flows due to interruptions and/or additions to surface and ground water flow from construction.
- Changes in and destabilization of water temperature due to vegetation removal.
- Increased nutrient loading during construction via runoff from exposed areas.
- Increased concentrations of toxic compounds in roadway runoff.
- Increased potential for release of toxic compounds such as fuel and oil from construction equipment and other vehicles.
- Alteration of stream discharge due to silt loading and changes in surface and groundwater drainage patterns.

Because of the presence of trout streams in the project area, The North Carolina regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0024) will be implemented. The precautions contained in the sensitive watersheds design standards will minimize the potential for water quality degradation in the project area.

### 4. Wild and Scenic Rivers

The Wild and Scenic Rivers Act of 1968, as amended, declared it the policy of the United States to preserve certain selected rivers, "which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic cultural, or other similar values." The Act established the Wild and Scenic River System. The Natural and Scenic Rivers Act of 1971 declared it the policy of North Carolina to retain "the natural and scenic conditions in some of the State's valuable rivers by maintaining them in a free-flowing state and to protect their water quality and adjacent lands by retaining these natural and scenic conditions." At present, designated state Natural and Scenic Rivers are identical with designated federal Wild and Scenic Rivers. No river, stream or creek within the project area is designated as a Wild and Scenic River.

### 5. Biotic Resources

Biotic resources include aquatic and terrestrial ecosystems. This section describes the ecosystems encountered in the study area, as well as, the relationships between fauna and flora within these ecosystems. Composition and distribution of biotic communities throughout the project area are reflective of topography, hydrologic influences and past and present land uses in the study area. Descriptions of the terrestrial systems are presented in the context of plant community classifications and follow descriptions presented by Schafale and Weakley (1990) where possible. Dominant flora and fauna observed, or likely to occur, in each community are described and discussed.

Scientific nomenclature and common names (when applicable) are provided for each animal and plant species described. Plant taxonomy generally follows Radford, et al. (1968). Animal taxonomy follows Martof, et al. (1980), Menhenick (1991), Potter, et al. (1980), and Webster, et al. (1985). Subsequent references to the same organism will include the common name only. Fauna observed during the site visits are denoted with an asterisk (\*). Published range distributions and habitat analysis are used in estimating fauna expected to be present within the project area.

**a. Biotic Communities**

Four biotic communities are identified in the project study area: maintained/disturbed, mixed hardwood forest, perennial surface waters, and emergent wetland. Community boundaries within the study area are well defined and do not have a transition zone between them due to development within the study area. Faunal species likely to occur within the study area will exploit all communities for shelter and foraging opportunities or as movement corridors.

**1) Maintained/Disturbed**

Several habitats are included in this description: road shoulders, residential and business landscapes, and agricultural fields. Road shoulders are irregularly maintained, receiving only periodic mowing and herbicide applications. Residential and business landscapes receive more frequent mowing and general maintenance. The agricultural fields within the study area consist of pasture and forage crop fields, where the vegetation receives continuous disturbance through grazing and harvesting.

Road shoulders act as buffers between the roadway and surrounding communities by filtering stormwater run-off. Vegetation occurring here includes fescue (*Festuca* spp.), dandelion (*Taraxacum officinale*), wood sorrel (*Oxalis* spp.), clover (*Trifolium* spp.), chickory (*Cichorium intybus*), violets (*Viola* spp.), and buckhorn plantain (*Plantago lanceolata*). Areas receiving less frequent maintenance are occupied by broomsedge (*Andropogon virginicus*), poison ivy (*Toxicodendron radicans*), staghorn sumac (*Rhus typhina*), saplings of yellow poplar (*Liriodendron tulipifera*), blackberry (*Rubus allegheniensis*), Japanese honeysuckle (*Lonicera japonica*), goldenrod (*Solidago* spp.), yarrow (*Achillea millefolium*), and ragweed (*Ambrosia* sp.).

Vegetation associated with residential and business landscapes includes: flowering dogwood (*Cornus florida*), Chinese dogwood (*C. kousa chinensis*), apple (*Malus* sp.), forsythia (*Forsythia* sp.), azalea (*Rhododendron* sp.), lilac (*Syringa vulgaris*), white pine (*Pinus strobus*), hemlock (*Tsuga canadensis*), northern red oak (*Quercus rubra*), and various ornamental hybrids of hollies (*Ilex* sp.), arbor vitae (*Thuja* sp.) and juniper (*Juniperus* spp.). Fescue, clover, plantains and crabgrass (*Digitaria* spp.) dominate lawn areas.

Agricultural fields, which are used for pasture and forage crop production are primarily present within the western portion of the project area. Vegetation within the agricultural fields is dominated by fescue. Vegetative species that occur to a lesser extent include: clover, chickory, wild carrot (*Daucus carota*), buttercup (*Ranunculus* sp.), yarrow, goldenrod, ragweed, and asters (*Aster* spp.).

## 2) Mixed Hardwood Forest

Mixed hardwood forest is present in a variety of sizes and ages within the project area. All areas of this forest have had some degree of disturbance. Residential and commercial activities have displaced the majority of the original forest with disturbed habitat. The larger parcels of this community type are located in the middle portion of the project area where steeper slopes are present. Smaller remnants of the mixed hardwood forest community are situated within the maintained/disturbed community. The canopy of the larger parcels is dominated by white oak (*Quercus alba*), red oak (*Q. rubra*), yellow poplar, honey locust (*Gleditsia triacanthos*), and mockernut hickory (*Carya tomentosa*). Other representatives of the canopy include red maple (*Acer rubrum*) and black locust (*Robinia pseudoacacia*). Shortleaf pine (*Pinus echinata*), white pine and eastern red cedar (*Juniperus virginiana*) occur along the edges of this community. The shrub layer generally consists of flowering dogwood and saplings of the canopy layer. Representative vine species include grape (*Vitis* sp.), poison ivy, and Japanese honeysuckle.

## 3) Perennial Surface Waters

There are eighty-four perennial streams and two ponds located within the project area. The streams vary in size from the largest, Little Crabtree Creek which is 20 feet (6 meters), to smaller first order streams that are one foot (0.3 meters) wide. Vegetation along the stream banks varies considerably with regard to human impact and floodplain development.

The larger streams, such as Bald Creek, Middle Fork Creek, Ivy Gap Creek, Price creek, Cane River, Pine Swamp Branch, and Little Crabtree Creek have more floodplain development than the smaller first order streams. The composition of stream bank vegetation varies in response to the degree of human impact. Stream banks that have received little impact are vegetated with woody shrubs, such as tag alder (*Alnus serrulata*), viburnums (*Viburnum* spp.), ironwood (*Carpinus caroliniana*), black willow (*Salix nigra*), and honey locust. Stream banks that are in an early successional stage are vegetated by Japanese knotweed (*Polygonum cuspidatum*), Joe-pye-weed (*Eupatorium dubium*), wingstem (*Verbesina alternifolia*), and bluegrass (*Poa* spp.). Stream banks that have recent impacts are sparsely covered with vegetation and are subject to erosive forces of the water resource.

The smaller first order streams also display varying levels of human impact. Due to very limited floodplain development, the vegetative composition of the stream banks is similar to the adjacent terrestrial community. In residential areas the stream banks are vegetated with lawn grasses, while in a forested community the stream banks contain vegetation characteristic of the community. Many of the stream channels for these streams have received severe impacts, such as enclosure in pipe or bank hardening with "rip-rap" or concrete.

There are two man made surface water impoundments within the project area. Both ponds are located within the maintained/disturbed community. One pond is used for trout propagation for sale. The other pond is approximately 0.7 acres (0.3 hectares) and drains to SW8. Vegetation surrounding the ponds consists of fescue and other plant species

commonly associated with lawn areas. No submersed aquatic vegetation was observed during the survey.

#### 4) Wetlands

Four jurisdictional wetlands were identified during the natural resource investigation. The locations of the four wetlands are shown in Exhibit 9. Wetland 1 is located in a depression adjacent to Little Crabtree Creek, in Yancey County. This is an emergent wetland dominated by herbaceous vegetation which includes soft stem rush (*Juncus effusus*), fowl meadow grass (*Glyceria striata*), cattail (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), carex (*Carex* spp.), with elderberry (*Sambucus canadensis*) occurring on the outer edges of the wetland. During the field investigation, soils had a Munsell color notation of 10 YR 4/1 and were saturated to the surface.

Wetland 2 is also located in a depression adjacent to Little Crabtree Creek, in Yancey County. This wetland can be described as a scrub-shrub wetland. Vegetation within this system includes elderberry, swamp rose (*Rosa palustris*), black willow, gray willow (*Salix cinerea*), and tag alder. During the field investigation, soils in this area were disturbed but did exhibit mottling and contained oxidized rhizospheres and had a Munsell color notation of 10 YR 4/1. The soils were saturated to the surface.

Wetland 3 is an emergent wetland in Yancey County situated in a depression associated with a ditch draining to Little Crabtree Creek. Vegetation within this wetland includes fowl meadow grass, and cattail, with scattered individuals of black willow and elderberry. During the field investigation, soils had a Munsell color notation of 10 YR 4/1 and were saturated to the surface.

Wetland 4 is located in Madison County at the intersection of US 19 and SR 1519 between each roadway. This wetland was presumably created by construction of these two roads trapping water in between. This emergent wetland is dominated by herbaceous vegetation which includes soft stem rush (*Juncus effusus*), fowl meadow grass (*Glyceria striata*), black willow, wingstem, knotweed, orange-spotted jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), and sedge (*Carex* sp.), with elderberry (*Sambucus canadensis*) occurring on the outer edges of the wetland. During the field investigation, soils had a Munsell color notation of 10 YR 4/1 and were saturated to the surface. See page 47 for further discussion of jurisdictional wetlands.

#### b. Wildlife

Many faunal species are highly adaptive and may populate or exploit all biotic communities discussed. The maintained/disturbed community dominates the project area. Nearly all the forested parcels within the project area have received some degree of impact by human activities. Generally, the community boundaries are abrupt, with little transitional area between them. Forested tracts and drainage ways provide habitat for species requiring a forest community, and also provide shelter and movement corridors for other species of wildlife within the project vicinity.

### 1) Terrestrial Fauna

The conglomeration of community types within the project area forms a contiguous and diverse association of habitats, which allows for similarly complex faunal components. Because of the disturbed/degraded nature of all of the habitats in the project area, the faunal component is expected to consist of opportunistic animals able to adapt to the "edge" habitat created by human activities. Conversely, species which require large undisturbed forested habitats are likely absent from the project area.

Despite the degradation of the forest areas by invasive species such as privet and multiflora rose, a vertically stratified and complex habitat with abundant food and shelter resources is available for a variety of fauna. The canopy strata provide a plethora of food items including insects, mast and leaves. Primarily bird species such as downy woodpecker (*Picoides pubescens*), red-bellied woodpecker (*Melanerpes carolinus*), yellow-bellied sapsucker (*Sphyrapicus varius*), ruby-crowned kinglet (*Regulus calendula*), golden-crowned kinglet (*Regulus satrapa*), brown creeper (*Certhia familiaris*), blue-gray gnatcatcher (*Poliophtila caerulea*), yellow-rumped warbler (*Dendroica coronata*), white-breasted nuthatch (*Sitta carolinensis*), tufted titmouse (*Parus bicolor*)\*, solitary vireo (*Vireo solitarius*), gray catbird (*Dumetella carolinensis*) and northern cardinal (*Cardinalis cardinalis*) use the canopy. However, gray squirrel (*Sciurus carolinensis*), southern flying squirrel (*Glaucomys volans*), Virginia opossum\*, grey treefrog (*Hyla chrysoscelis* or *H. versicolor*) and eastern fence lizard (*Sceloporus undulatus*) also use this stratum.

Bats are also important components of forested communities. The northern long-eared bat (*Myotis septentrionalis*) and evening bat (*Nycticeius humeralis*) are two of the more common species that forage on forested hillsides, while little brown bat (*Myotis lucifugus*) and eastern pipistrelle bat (*Pipistrellus subflavus*) more commonly forage over water. Old buildings, hollow trees, or crevices under tree bark are often used as roost sites by these species. Caves and abandoned mine shafts (which are not present in the project area) are used as hibernation areas by many bat species in winter months.

Many of the ground-dwelling species, including worm snake (*Carphophis amoenus*), southeastern crowned snake (*Tantilla coronata*), southeastern shrew (*Sorex longirostris*), woodland vole (*Microtus pinetorum*) and eastern chipmunk (*Tamias striatus*) are fossorial (living in burrows). Other species occupying the forest floor include the ground nesting ovenbird (*Seiurus aurocapillus*), American toad (*Bufo americanus*)\*, ground skink (*Scincella lateralis*) and eastern box turtle (*Terrapene carolina*). Earthworms, insects and other invertebrates constitute the majority of these species' diets. The woodland vole and the eastern chipmunk consume mainly plant material; and fungi are an important dietary item for the eastern box turtle and various rodents.

Top predators expected to occur here include great horned owl (*Bubo virginianus*), various hawks (*Accipiter* spp. and *Buteo* spp.), gray fox (*Urocyon cinereoargenteus*), and copperhead (*Agkistrodon contortrix*). These species are important in maintaining populations of rodents, small birds, and other small animals. Because of the open, relatively non-stratified nature of maintained/disturbed communities such as pasture/field and roadside habitats, resident vertebrate fauna are generally small in size.



Small mammals such as least shrew (*Sorex cinereus*) and house mouse (*Mus musculus*) are able to utilize the limited amount of vegetative cover of crop fields and pastures. The burrowing eastern mole (*Scalopus aquaticus*) and woodchuck (*Marmota monax*)\* are common in open areas bordering forested tracts. These small mammals are important prey items for black rat snake (*Elaphae constrictor*), red fox (*Vulpes vulpes*), red-tailed hawk (*Bueto jamacensis*)\*, and other birds of prey.

Faunal community complexity is a function of vegetative community complexity. Few animals reside along roadsides because of the limited size and complexity of the habitat. Various species of birds feed along roadsides on seeds, berries and insects. Some of these species include the northern cardinal\*, American robin (*Turdus migratorius*)\*, and white-throated sparrow (*Zonotrichia albicollis*). Snakes such as the black racer (*Coluber constrictor*) and eastern garter snake (*Thamnophis sirtalis*) may venture into this habitat to feed on insects and small mammals.

Virginia opossum and raccoon (*Procyon lotor*)\* frequently forage nocturnally in these habitats, or travel along roadways between habitats. These animals are often road kill victims. Consequently road kills attract a large number of scavenger species including turkey vulture (*Carthartes aura*)\* and common crow (*Corvus brachyrhynchos*)\*, as well as domestic dogs and cats.

## 2) Aquatic Fauna

Aquatic communities impacted by the proposed project include the 84 perennial streams and two ponds. Physical characteristics of the water body and condition of the water resource influence faunal composition of aquatic communities. Terrestrial communities adjacent to a water resource also influence the aquatic community.

Fauna associated with aquatic communities include various invertebrate and vertebrate species. Species abundance and diversity within a stream are dependent on the size of the water body. For example, larger project area streams such as Price Creek, Bald Creek, Little Crabtree Creek, and Pine Swamp Branch can be expected to have a higher abundance of individuals and greater species diversity than the smaller first order streams. The first order streams within the project area are generally too small to support a rich diversity of ichthyofauna, or large individuals of representative species. These streams are likely to support smaller individuals of the larger species such as fry and young of the year fish, as well as those species that are generally small in size.

Project area surface waters can be expected to provide habitat for a variety of ichthyofauna which are representative of four trophic guilds: omnivore, herbivore, insectivore and piscivore. Common omnivores in project area streams include creek chub (*Semotilus atromaculatus*) and common sucker (*Catostomus commersoni*). The herbivore guild is represented by the central stoneroller (*Campostoma anomalum*). The insectivores, the trophic guild that has the largest number of representative species, include shiners (*Notropis* spp.), longnose dace (*Rhinichthys cataractae*), black nose dace (*R. atratulus*), darters (*Etheostoma* spp.), redbreast sunfish (*Lepomis auritus*), bluegill (*L. macrochirus*), and mottled sculpin (*Cottus bairdi*). The brown trout (*Salmo trutta*), rainbow trout

(*Oncorhynchus mykiss*), and brook trout\* (*Salvelinus fontinalis*) are insectivores that are valuable gamefish. The piscivore guild is represented by the rock bass (*Ambloplites rupestris*).

Fish (1968) did not recommend Little Crabtree Creek as a fishing water. He described the creek as being "used as a trash dump and now contains little habitat for gamefish." Apparently, this situation has changed since the publication of Fish's classic work "A Catalog of the Inland Fishing Waters in North Carolina." During the field investigations for this project, Little Crabtree Creek was found to be relatively free of debris and offered a considerable amount of habitat for gamefish, especially in areas where stream banks have been stabilized by woody vegetation.

The Tennessee Valley Authority (TVA) produced a list of fish species including several rare fish species found in the French Broad and Nolichucky Rivers and their tributaries. These fish lists were compiled after collection surveys on June 4, 1997, August 8, 1997, August 8, 1997, June 25 and 26, 1997. The species contained within these fish lists are expected to be found within these waters.

Invertebrates that would be present in project larval stages of mayflies (Order: Ephemeroptera), stoneflies (Order: Plecoptera), caddisflies (Order: Trichoptera), true flies (Order: Diptera), and beetles (Order: Coleoptera). Very cursory aquatic investigations revealed the presence of some common invertebrates, including mayflies (*Ephemera* spp.), stoneflies (*Acroneuria* spp.), caddisflies (*Hydropsyche* spp. and *Symphitopsyche* spp.), and water penny (*Psephenus* spp.). The bullfrog (*Rana catesbeiana*), pickerel frog (*R. palustris*), queen snake (*Regina septemvittata*), and northern water snake (*Nerodia sipedon*) are also common permanent residents in this community.

### **c. Summary of Anticipated Impacts**

Construction of the subject project will have various impacts on the biotic resources described. Any construction related activities in or near these resources have the potential to impact biological functions. This section quantifies and qualifies impacts to the natural resources in terms of area impacted and ecosystems affected. Temporary and permanent impacts are considered here as well.

#### **1) Terrestrial Community Impacts**

Direct impacts of roadway construction on new location include loss of and fragmentation of wildlife habitat, as well as individual mortality of various animal species from construction activities and vehicular collisions. These impacts can result in changes in biotic community functions and viability. The majority of the project will impact the maintained disturbed community. The impacts to these ecosystems will extend beyond the project corridor boundaries.

##### **a) Quantitative Impacts: Habitat Loss**

Portions of the three biotic community types occurring in the project area will be cleared or altered as a result of project construction. These alterations consequently affect the associated floral and faunal communities in a variety of ways. The

estimated quantified impacts to these communities for each alternate studied in detail are shown in Table 15. Estimated impacts to terrestrial resources are derived using the entire proposed right of way width of 200 or 250 feet (60 or 76 meters). Potential impacts were measured from a NCDOT photomosaic (1:5000) of the project area. Impacts are given for Alternate 1 and Alternate 2.

**Table 15**  
**Anticipated Area Impacts to Terrestrial Communities**

Community	Impact Area acres (hectares)	
	Alternate 1	Alternate 2
Maintained disturbed	376.4 (152.4)	394.3 (159.6)
Mixed pine-hardwood	116.3 (47.1)	102.1 (41.3)
Riparian	12.5 (5.1)	8.5 (3.4)
Total	505.2 (204.5)	504.9 (204.4)

**b) Faunal Population Impacts**

The plant communities found along existing US 19/US 19E serve as shelter, nesting, and foraging habitat for numerous species of wildlife. Individual mortalities are likely to occur to numerous animals during project construction, as clearing will destroy species living/nesting within trees, and grading/filling activities will impact ground dwelling species. Many other individuals will simply be displaced into other habitats.

However, by concentrating these organisms into a smaller area, over-utilization and degradation of the habitat may occur, which ultimately lowers the carrying capacity of the remaining habitat and is manifested in some species becoming more susceptible to disease, predation and starvation.

Habitat fragmentation is another direct consequence of roadways constructed on new location. At the western terminus of the project, near future I-26, Alternate 2 is on new location for approximately 3020 feet (920 meters). Construction of Alternate 2 will fragment the already disturbed habitats in this portion of the project.

**2) Aquatic Community Impacts**

Impacts to stream communities, resulting from project construction can be directly attributed to sedimentation, rechannelization/loss of natural channel, stream relocation, substrate disturbance and reduced water quality resulting from project construction. Although substrate disturbance and sedimentation may be temporary processes during the construction phase of this project, environmental impacts from these processes may be long-lived. Suspended solids, sedimentation, and turbidity result in reduced biodiversity as well as a decline in productivity at all trophic levels (Gilbert 1989). These processes can cause the formation of sandbars at the site and downstream, thereby altering water flow and the growth of vegetation. Streamside alterations also lead to more direct

sunlight penetration and to elevations of water temperatures, which may impact many species.

Populations of photosynthetic species can be greatly affected by siltation. The increased amount of suspended particles in the water column reduces the photosynthetic ability of plants, by absorbing available light. Clogging of feeding apparatus of suspension feeders (collectors) and burial of newly settled larvae of these organisms, are other effects of siltation. These species are often primary consumers in the food chain, and are a major step in the aquatic food web. Impacts to these organisms may directly effect organisms higher in the food chain, such as fish, amphibians, reptiles, birds and mammals.

Mobile aquatic organisms may escape some of the effects of siltation; however, the abrasive action of sediment in the water column is harmful to the gills of fish, crustaceans and larval amphibians and insects. Spawning habitats for fish may become filled with sediment, diminishing reproductive success and inevitably reducing populations.

Benthic organisms are particularly sensitive to construction activities such as dredging, filling, culvert construction/extension, pile-driving operations and slope stabilization. These activities physically disturb the substrate, resulting in loss of sessile benthic organisms. Improperly placed culverts can have substantial impacts on stream morphology. Stream impacts often associated with culverts include alteration of flow, scour at culvert outlets, degradation of adjacent streambanks and headcutting. Loss of natural stream channel will eliminate the existing substrate and associated fauna. Many of these aquatic organisms are slow to recover, or repopulate an area, because they require a stabilized substrate for attachment. Substrate stability may take a long time to develop; therefore changes in community composition will occur, particularly in relocated segments.

Increased water temperature/decreased dissolved oxygen caused by loss of riparian vegetation, and the introduction of toxic materials into the water are potential consequences of project construction. This water quality degradation will result in a continual decline of species diversity and productivity, as the intolerant organisms disappear.

## **6. Jurisdictional Topics**

### **a. Waters of the United States**

Surface waters and wetlands fall under the broad category of "Waters of the United States", which include lakes, ponds, streams (including intermittent streams), rivers, creeks springs, wetlands, territorial seas, tidal waters and other bodies of open water as defined in Section 33 of the Code of Federal Register (CFR) Part 328.3. Wetlands, defined in 33 CFR 328.3, are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated conditions. Any action that proposes to place fill into these areas falls under the jurisdiction of the U.S. Army Corps of Engineers (COE) under Section 404 of the Clean Water Act (33 U.S.C. 1344).

### 1) Characteristics of Wetland Impacts

Potential wetland communities were evaluated using the criteria specified in the 1987 "Corps of Engineers Wetlands Delineation Manual". For an area to be considered a "wetland", the following three specifications must be met: 1) presence of hydric soils (low soil chroma values among other indicators), 2) presence of hydrophytic vegetation, and 3) evidence of hydrology, including: saturated soils, stained leaf litter, oxidized root channels, matted vegetation, high water marks on trees, buttressed tree bases and surface roots.

Two of the four jurisdictional wetlands identified within the project study area are impacted by the proposed project (see page 41 for a description of wetlands). Wetland 1 has 0.06 acres (0.02 hectares) of impacts from Alternates 1 and 2. Both alternates also impact 0.10 acres (0.04 hectares) of Wetland 4, as shown in Table 16. Wetlands 2 and 3 are not impacted by either alternate.

**Table 16**  
**Impacts to Jurisdictional Wetlands**  
**Acres (hectares)**

<b>Wetland</b>	<b>Alternate 1</b>	<b>Alternate 2</b>
Wetland 1	0.06 (0.02)	0.06 (0.02)
Wetland 4	0.10 (0.04)	0.10 (0.04)

### 2) Characteristics of Surface Water Impacts

Impacts to jurisdictional surface waters are calculated based on the linear feet of the stream that is located within the proposed right-of-way. Impacts to jurisdictional surface waters are located in Table 17. Surface Water locations are shown in Exhibit 10.

Encroachment into jurisdictional wetlands and surface waters as a result of project construction is inevitable. Although a discreet site may qualify under NWP authorizations, overall, cumulative impacts from a single and complete project may require authorization under an Individual Permit (IP). Cumulative impacts to wetlands and surface waters, resulting from this project will likely require authorization under an individual permit issued by the US Army Corps of Engineers (COE).

A North Carolina Division of Water Quality (DWQ) Section 401 Water Quality General Certification is required prior to the issuance of the Section 404 Individual Permit. Since the proposed project is located in a designated "Trout" county and will likely impact designated trout waters, the authorization of a permit by the COE is conditioned upon the concurrence of the Wildlife Resource Commission (WRC).

**Table 17**  
**Impacts to Surface Waters**

Water Resource	Linear Impacts feet (meters)	
	Alternate 1	Alternate 2
California Creek	336 (102)	336 (102)
UT CC 1	152 (46)	152 (46)
UT CC 2	659 (201)	659 (201)
Middle Fork Creek	7,230 (2,204)	3,837 (1,169)
UT MFC 1	791 (241)	300 (92)
UT MFC 2	111 (34)	442 (135)
UT MFC 3	366 (112)	320 (98)
UT MFC 4	324 (99)	324 (99)
UT MFC 5	55 (17)	425 (129)
UT MFC 6	180 (55)	105 (32)
Bailey Branch	163 (50)	183 (56)
Crooked Creek	120 (37)	66 (20)
Commercial trout pond	465 (142)	465 (142)
Turkey Branch	1066 (325)	1066 (325)
Polly Branch	297 (91)	0
Jordan Branch	275 (84)	151 (46)
Ponder Creek	639 (199)	466 (142)
Ivy Gap Branch	2,513 (766)	1,874 (571)
Holland Creek	299 (91)	366 (111)
UT IGB 1	207 (63)	207 (63)
UT IGB 2	229 (70)	229 (70)
UT IGB 3	505 (154)	535 (163)
UT IGB 4	29 (9)	83 (25)
UT IGB 5	442 (135)	184 (56)
UT IGB 6	250 (76)	315 (96)
UT IGB 7	261 (79)	0
UT IGB 8	383 (117)	209 (64)
Bald Creek	9,307 (2,838)	6,056 (1,846)
Shepard's Branch	299 (91)	324 (99)
UT BC 1	316 (96)	342 (104)
UT BC 2	355 (108)	389 (118)
UT BC 3	226 (67)	226 (69)
UT BC 4	251 (77)	225 (69)
UT BC 5	171 (52)	171 (52)
UT BC 6	945 (288)	945 (288)
UT BC 7	202 (62)	320 (97)
UT BC 8	213 (65)	346 (106)
UT BC 10	338 (103)	284 (87)
UT BC 11	278 (85)	382 (116)
UT BC 12	546 (166)	209 (64)
UT BC 13	198 (60)	135 (41)
UT BC14	131 (40)	97 (30)
UT BC 15	31 (9)	134 (41)

Water Resource	Linear Impacts feet (meters)	
	Alternate 1	Alternate 2
UT BC 16	508 (155)	207 (63)
UT BC 17	322 (98)	306 (93)
UT BC 18	250 (76)	222 (68)
UT BC 19	118 (36)	0
Lickskillet Branch	213 (65)	213 (65)
Nubbinscuffle Creek	213 (65)	330 (100)
UT PC 1	517 (158)	478 (146)
UT PC 2	307 (94)	294 (90)
UT PC 3	853 (260)	853 (260)
Price Creek	1,385 (422)	1,385 (422)
Cane River	197 (60)	197 (60)
UT CR 1	372 (113)	307 (94)
UT CR 2	455 (139)	455 (139)
UT CR 3	275 (84)	275 (84)
UT CR 4	871 (265)	871 (265)
UT CR 5	253 (77)	253 (77)
UT CR 6	861 (262)	861 (262)
SW1 Little Crabtree Cr.	5,609 (1,710)	4,608 (1,405)
SW3	23 (7)	82 (25)
SW4	213 (65)	49 (15)
SW5 Plum Branch	131 (40)	49 (15)
SW6	98 (30)	33 (10)
SW7 Shoal Creek	115 (35)	131 (40)
SW8 George Fork	754 (230)	558 (170)
SW9	131 (40)	148 (45)
SW10 Allen Branch	66 (20)	115 (35)
SW11	115 (35)	49 (15)
SW12 Ray Creek	33 (10)	98 (30)
SW13	0	0
SW14	33 (10)	66 (20)
SW15 Pine Swamp Br.	98 (30)	0
SW16 McIntosh Branch	115 (35)	115 (35)
SW17	82 (25)	82 (25)
SW18 Baileys Branch	98 (30)	82 (25)
SW19	148 (45)	246 (75)
SW20	1,443 (440)	623 (190)
SW21	98 (30)	98 (30)
SW22	164 (50)	164 (50)
<b>TOTAL</b>	<b>49,692 (15,150)</b>	<b>38,789 (11,826)</b>

### **3) Permits**

The proposed project is located in the Tennessee Valley Authority's (TVA) Land Management District. A permit pursuant to Section 26a of the TVA Act. is required for all construction or development involving streams or floodplains in the Tennessee River drainage basin.

### **4) Mitigation**

The COE has adopted through the Council on Environmental Quality (CEQ) a wetland mitigation policy which embraces the concept of "no net loss of wetlands" and sequencing. The purpose of this policy is to restore and maintain the chemical, biological and physical integrity of Waters of the United States, specifically wetlands and surface waters. Mitigation of wetland impacts has been defined by the CEQ to include: avoiding impacts (to wetlands), minimizing impacts, rectifying impacts, reducing impacts over time and compensation for impacts (40 CFR 1508.20). Each of these three aspects (avoidance, minimization and compensatory mitigation) must be considered sequentially.

#### **a) Avoidance**

Avoidance mitigation examines all appropriate and practicable possibilities of averting impacts to Waters of the United States. According to a 1990 Memorandum of Agreement (MOA) between the Environmental Protection Agency (EPA) and the COE, in determining "appropriate and practicable" measures to offset unavoidable impacts, such measures should be appropriate to the scope and degree of those impacts and practicable in terms of cost, existing technology and logistics in light of overall project purposes. Encroachment into jurisdictional wetlands and surface waters as a result of project construction is inevitable in order to achieve the purpose of and need for the project.

During the natural resources investigation, wetlands were located and mapped for avoidance and minimization measures. Four wetlands are located along the 21 mile (33 kilometer) length of the project. Wetlands 2 and 3 were avoided early in the alternate development process. However, Wetlands 1 and 4 can not be avoided because of adjacent environmental and land use constraints. Alternates 1 and 2 impact the same amount of wetlands; 0.16 acres (0.06 hectares).

#### **b) Minimization**

Minimization includes the examination of appropriate and practicable steps to reduce the adverse impacts to Waters of the United States. Implementation of these steps will be required through project modifications and permit conditions. Minimization typically focuses on decreasing the footprint of the proposed project through the reduction of median widths, right of way widths, fill slopes and/or road shoulder widths. Other practical mechanisms to minimize impacts to Waters of the United States crossed by the proposed project include: reduction of clearing and grubbing activity; reduction/elimination of direct discharge into streams; relocation of stream channel; reduction of runoff velocity; re-establishment of vegetation on exposed areas, with judicious pesticide and herbicide usage; minimization of "in-stream" activity; and litter/debris control.



Early in the alternate development process, impacts to wetlands were minimized through land use and environmental constraints mapping. Alternates 1 and 2 impact 0.06 acres (0.02 hectares) of Wetland 1 and 0.10 acres (0.04 hectares) of Wetland 4, for a total of 0.16 acres (0.06 hectares) of jurisdictional wetlands.

**c) Compensatory Mitigation**

Compensatory mitigation is not normally considered until anticipated impacts to Waters of the United States are avoided and minimized to the maximum extent possible. It is recognized that "no net loss of wetlands" functions and values may not be achieved in each and every permit action. Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts, which remain after all appropriate and practicable minimization are implemented. Compensatory actions often include restoration, creation and enhancement of Waters of the United States. Compensatory mitigation is anticipated, due to extensive stream crossing impacts to Waters of the United States; however, final decisions concerning compensatory mitigation will be made during the design phase of the project.

The stream mitigation site for NCDOT TIP Project number A-10 is located to the south of US 19 in Madison County. NCDOT and NC Wildlife Resources Commission were successful in generating landowner interest in Madison County for the stream mitigation. There is more than enough potential mitigation land to compensate for A-10 impacts. Therefore, it may be possible to continue mitigation work in the same area for the US 19/US 19E improvement project.

**b. Rare and Protected Species**

Some populations of fauna and flora were in, or are in, the process of decline either due to natural forces or their inability to coexist with human activities. Federal law (under the provisions of the Endangered Species Act of 1973, as amended) requires that any action, likely to adversely affect a species classified as federally-protected, be subject to review by the Fish and Wildlife (FWS). Other species may receive additional protection under separate state laws.

**1) Federally-Protected Species**

Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE) and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. Table 18 shows the FWS list of federally-protected species for Yancey and Madison Counties. A brief description of each species' characteristics and habitat follows.

**Table 18**  
**Federally Protected species for Madison and Yancey Counties**

Scientific Name	Common Name	Status
<i>Clemmys muhlenbergii</i>	bog turtle	Threatened due to Similarity of Appearance-Y
<i>Corynorhinus townsendii virginianus</i>	Virginia big-eared bat	Endangered-Y
<i>Falco peregrinus anatum</i>	peregrine falcon	Endangered-Y.M
<i>Felis concolor couguar</i>	eastern cougar	Endangered-Y
<i>Glaucomys sabrinus coloratus</i>	Carolina northern flying squirrel	Endangered-Y
<i>Alasmidonta raveneliana</i>	Appalachian elktoe	Endangered-Y
<i>Microhexura montivaga</i>	spruce-fir moss spider	Endangered-Y
<i>Geum radiatum</i>	spreading avens	Endangered-Y
<i>Houstonia montana</i> var. <i>montana</i>	Roan Mountain bluet	Endangered-Y
<i>Spiraea virginiana</i>	Virginia spiraea	Endangered-Y
<i>Gymnoderma lineare</i>	rock gnome lichen	Endangered-Y
<i>Hybopsis monacha</i>	Spotfin chub	Threatened-Y.M

Endangered –a taxon “in danger of extinction throughout all or a significant portion of its range.”  
 Threatened –a taxon “likely to become endangered within the foreseeable future throughout all or a significant portion of its range.”

M -Species listed in Madison County

Y -Species listed in Yancey County

***Clemmys muhlenbergii* (bog turtle) Threatened due to Similarity of Appearance**

Family: Emydidae

Date Listed: 01 May 1997

The bog turtle is North Carolina’s smallest turtle, measuring 3 to 4 inches (7 to 10 centimeters) in length. It has a dark brown carapace and black plastron. The bright orange or yellow blotch on each side of the head and neck is a readily identifiable characteristic. It inhabits damp grassy fields, bogs and marshes in the mountains and western piedmont.

The bog turtle is shy and secretive, and will burrow rapidly in mud or debris when disturbed. The bog turtle forages on insects, worms snails, amphibians and seeds. In June or July three to five eggs are laid in a shallow nest in moss or loose soil. The eggs hatch in about fifty-five days. (Bernard S. Martof, et. al., 1980).

**BIOLOGICAL CONCLUSION: NOT APPLICABLE**

The southern species of bog turtle is listed as Threatened due to Similarity of Appearance (T S/A) due to its similarity of appearance to the northern subspecies that is listed for protection. T S/A species are not biologically endangered or threatened and are not subject to Section 7 consultation. Habitat for the bog turtle may be present within project area wetlands.

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***Plecotus townsendij virginianus* (Virginia big-eared bat) Endangered**

Family: Vespertilionidae

Date Listed: 03 October 1979

The Virginia big-eared bat is most easily recognized by its large ears and large glandular masses on its muzzle. The ears are held erect when the bat is awake and are curled around the head when it is hibernating or at its summer roost. The fur on Virginia big-eared bats is long and soft, it is brown in color and darker on the dorsal side. The hair on the feet does not extend beyond the toes.

Virginia big-eared bats occupy caves in the summer and winter. Hibernating colonies are typically located in deep cave passage ways that have stable temperatures and air movement, the temperature in these hibernacula may be lower than that tolerated by other bats (6-12 C). Roost sites are generally located in mines or caves in oak-hickory forests. They will use alternate roost sites but there is no record of long migrations. They are nocturnal and leave their roost to forage on moths, beetles, and other insects.

**BIOLOGICAL CONCLUSION**

**NO EFFECT**

Roosting habitat and hibernacula in the form of caves and mines are not present within the project study area. Additionally, the N.C. Natural Heritage Program database of rare species and unique habitats contained no listing of the Virginia big-eared bat within the project vicinity. Therefore, the proposed project will not affect the Virginia big-eared bat.

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***Falco peregrinus anatum* (Peregrine falcon) Endangered**

Family: Falconidae

Date Listed: 20 March 1984

The peregrine falcon has a dark plumage along its back and its underside is lighter, barred and spotted. It is most easily recognized by a dark crown and a dark wedge extending below the eye forming a distinct helmet.

The American peregrine falcon is found throughout the United States in areas with high cliffs and open land for foraging. Nesting for the falcons is generally on high cliff ledges, but they may also nest in broken off tree tops in the eastern deciduous forest and on skyscrapers and bridges in urban areas. Nesting occurs from mid-March to May.

Prey for the peregrine falcon consists of small mammals and birds, including mammals as large as a woodchuck, birds as large as a duck, and insects. The preferred prey is medium sized birds such as pigeons.

**BIOLOGICAL CONCLUSION**

**NO EFFECT**

The maintained/disturbed community dominates the project area where there is no suitable nesting habitat for the peregrine falcon. The proposed project will not affect foraging opportunities for this species. Additionally, the N.C. Natural Heritage Program database of rare species and unique habitats contained no listing of the peregrine falcon within the project vicinity. Therefore, the proposed project will not affect the peregrine falcon.

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**Felis concolor cougar (eastern cougar) Endangered**

Family: Felidae

Date Listed: 04 June 1973

Cougars are tawny colored with the exception of the muzzle, the backs of the ears, and the tip of the tail, which are black. In North Carolina the cougar is thought to occur in only a few scattered areas, possibly including coastal swamps and the southern Appalachian mountains. The eastern cougar is found in large remote wilderness areas where there is an abundance of their primary food source, white-tailed deer. A cougar will usually occupy a range of 25 miles (40 kilometers) and they are most active at night.

**BIOLOGICAL CONCLUSION**

**NO EFFECT**

Habitat in the form of remote wilderness is not present within the project area. The maintained/disturbed community dominates the project area. The proposed project involves the widening of an existing facility and will not fragment undisturbed wilderness. The N.C. Natural Heritage database of rare species and unique habitats was reviewed and contained no listing of the eastern cougar within the project vicinity. Therefore, the proposed project will not affect the eastern cougar.

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**Glaucomys sabrinus coloratus (Carolina northern flying squirrel) Endangered**

Family: Sciuridae

Date Listed: 01 July 1985

The Carolina northern flying squirrel has a large well-furred flap of skin along either side of its body. This furred flap of skin is connected at the wrist in the front and at the ankle in the rear. The skin flaps and its broad flattened tail allow the northern flying squirrel to glide from tree to tree. It is a solely nocturnal animal with large dark eyes.

There are several isolated populations of the northern flying squirrel in the western part of North Carolina, along the Tennessee border. This squirrel is found above 5,000 feet (1,517 meters) amsl in the vegetation transition zone between hardwood and coniferous forests. Both forest types are used to search for food and the hardwood forest is used for nesting sites.

**BIOLOGICAL CONCLUSION**

**NO EFFECT**

Habitat required for the Carolina northern flying squirrel in the form of a transitional zone between hardwood and coniferous forests is not present within the project area. Additionally, the project is situated at 2,600 feet (790 meters) amsl which is well below the 5,000 feet (1,517 meters) amsl elevations where it is known to occur. The N.C. Natural Heritage Program database of rare species and unique habitats was reviewed and contained no listing of the Carolina northern flying squirrel within the project vicinity. Therefore, the proposed project will not affect the Carolina northern flying squirrel.

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***Alasmodonta raveneliana* (Appalachian elktoe) Endangered**

Animal Family: Unionidae

Date Listed: 03 September 1993

The Appalachian elktoe is a small mussel with a maximum length reaching up to 3 inches (8 centimeters). Its shell is thin although the shell is not fragile nor subovate (kidney-shaped). The periostracum (outer shell) of the adult Appalachian elktoe is dark brown in color, while juveniles have a yellowish-brown color.

The Appalachian elktoe is known to occur in the Nolichucky system of the French Broad basin (including the Cane River and the North Toe River), the Tuckasegee River, and the Little Tennessee River and its tributaries. The Appalachian elktoe has been observed in gravelly substrates often mixed with cobble and boulders, in cracks of bedrock and in relatively silt-free, coarse sandy substrates.

**BIOLOGICAL CONCLUSION**

**UNRESOLVED**

The Appalachian elktoe is known to occur in the Cane River and the North Toe River systems. Project area waters draining to the west flow into the Cane River, while project waters draining to the east will eventually reach the North Toe River. It can be assumed that suitable habitat for the Appalachian elktoe may be present in project area surface waters. Currently, the biological conclusion for this species remains unresolved. A Section 7 Consultation will be concluded for this project.

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***Microhexura montivaga* (spruce-fir moss spider) Endangered**

Animal Family: Dipluridae

Date Listed: 1/27/94

The spruce-fir moss spider occurs in well-drained moss and liverwort mats growing on rocks or boulders. These mats are found in well-shaded areas in mature, high elevation (>5000 feet / 1524 meters) Fraser fir and red spruce forests. The spruce-fir moss spider is very sensitive to desiccation and requires situations of high and constant humidity. The need for humidity relates to the moss mats which cannot become too parched or else the mats become dry and loose. The moss mats cannot be too wet either because large drops of water can also pose a threat to the spider. The spider constructs its tube-shaped webs in the interface between the moss mat and the rock surface. Some webs have been found to extend

into the interior of the moss mat. No prey has been found in the webs, but the probable prey for the spruce-fir moss spider is the abundant springtails found in the moss mats.

Males of the species mature during September and October, and females are known to lay eggs in June. The egg sac usually contains between seven to nine eggs. The life span of these spiders is unknown although it has been estimated that maturity may take four years.

The loss and decline of the spruce-fir moss spider relates directly to habitat loss/alteration of the spruce-fir forest from air pollution and exotic insect pests, particularly the balsam woolly adelgid. The death and thinning of the forest canopy results in locally drastic changes in microclimate, including increased temperatures, increased light and decreased moisture on the forest floor. These alterations of the microclimate lead to desiccation of the moss mats on which the spider and, possibly its prey base, depend for survival.

#### **BIOLOGICAL CONCLUSION**

#### **NO EFFECT**

Habitat for the spruce-fir moss spider in the form of Fraser fir and red spruce forests does not exist in the project area. Additionally, the average project elevation of 2,600 feet (790 meters) amsl is well below the elevations where the spruce-fir moss spider is known to occur. The N.C. Natural Heritage Program database of rare species and unique habitats was reviewed and contained no listing of the spruce-fir moss spider within the project vicinity. Therefore, the proposed project will not affect the spruce-fir moss spider.

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#### ***Geum radiatum* (spreading avens) Endangered**

Family: Rosaceae

Federally Listed: 05 April 1990

Flowers Present: June - early July

Spreading avens is a perennial herb having stems with an indefinite cyme of bright yellow radially symmetrical flowers. Flowers of spreading avens are present from June to early July. Spreading avens has basal leaves which are odd-pinnately compound; terminal leaflets are kidney shaped and much larger than the lateral leaflets, which are reduced or absent.

Spreading avens is found only in the North Carolina and Tennessee sections of the Southern Appalachian Mountains. Spreading avens occurs on scarps, bluffs, cliffs and escarpments on mountains, hills, and ridges. Known populations of this plant have been found to occur at elevations of 5,060-5,080 feet (1,535-1,541 meters), 5,680-5,760 feet (1,723-1,747 meters) and 5,800 feet (1,759 meters). Other habitat requirements for this species include full sunlight and shallow acidic soils. These soils contain a composition of sand, pebbles, humus, sandy loam, clay loam, and humus. Most populations are pioneers on rocky outcrops.

#### **BIOLOGICAL CONCLUSION**

#### **NO EFFECT**

Habitat for spreading avens in the form of scarps, bluffs, cliffs and escarpments on mountains, hills, and ridges is not present within the project area. Additionally, the average project elevation of 2,600 ft (790 meters) amsl is well below the elevations where the spreading avens is known to occur. The N.C. Natural Heritage Program database of rare species and unique habitats was reviewed and contained no listing of spreading avens within the project vicinity. Therefore, project construction will not affect spreading avens.

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***Houstonia purpurea* var. *montana***

(mountain purple or Roan Mountain bluet) Endangered

Family: Rubiaceae

Federally Listed: 05 April 5 1990

Flowers Present: June - July (best time is mid June)

Roan Mountain bluet is a perennial species with roots and grows in low tufts. Roan Mountain bluet has several bright purple flowers arranged in a terminal cyme.

This plant can be found on cliffs, outcrops, steep slopes, and in the gravelly talus associated with cliffs. Known populations of Roan Mountain bluet occur at elevations of 4,600-6,200 feet (1,400-1,900 meters). It grows best in areas where it is exposed to full sunlight and in shallow acidic soils composed of various igneous, metamorphic, and metasedimentary rocks.

**BIOLOGICAL CONCLUSION**

**NO EFFECT**

Habitat in the form of cliffs, outcrops, steep slopes, and the gravelly talus associated with cliffs is not present within the project study area. Additionally, the average project elevation of 2,600 feet (790 meters) amsl is well below the elevations where the Roan Mountain bluet is known to occur. The NC Natural Heritage Program data base of rare species and unique habitats contains no listing of the Roan Mountain bluet within the project vicinity. Therefore, the proposed project will not affect Roan Mountain bluet.

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***Spiraea virginiana* (*Virginia spiraea*) Endangered**

Family: Rosaceae

Federally Listed: 15 June 15 1990

Flowers Present: June - July

This shrub has arching and upright stems that grow to heights of 3 to 10 feet (1 to 3 meters). *Virginia spiraea* often grow dense clumps, having alternate leaves which vary greatly in size, shape, and degree of serration. They are green above and usually somewhat glaucous below. The cream colored flowers are present from June to July and occur in branched, flat-topped inflorescences. *Virginia spiraea* is easily located during the late fall while herbaceous growth is minimal and the leaves are down.

Virginia spiraea is found in a very narrow range of habitats in the mountains of North Carolina. Habitats for the plants consist of scoured banks of high gradient streams, on meander scrolls, point bars, natural levees, or braided features of lower reaches. The scour must be sufficient to prevent canopy closure, but not extreme enough to completely remove small, woody species. This species occurs in the maximum floodplain, usually at the water's edge with various other disturbance-dependent species. It is most successful in areas with full sunlight, but can survive in shaded areas until it is released from competition.

## **BIOLOGICAL CONCLUSION**

## **NO EFFECT**

Habitat for Virginia spiraea is present along stream banks of project area streams. Plant by plant surveys for Virginia spiraea along the stream banks of project area streams were conducted on 13, 14, and 15 July 1998. No Virginia spiraea was observed during the surveys. Additionally, the N.C. Natural Heritage Program database of rare species and unique habitats was reviewed and contained no listing of Virginia spiraea within the project vicinity. Therefore, the proposed project will have no effect on Virginia spiraea.

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### **Gymnoderma lineare (Rock gnome lichen) Endangered**

Family:

Federally Listed: 28 December 28 1994

The rock gnome lichen is a squamulose lichen in the reindeer moss family. The lichen can be identified by its fruiting bodies which are born singly or in clusters, black in color, and are found at the tips of the squamules. The fruiting season of the rock gnome lichen occurs from July through September.

The rock gnome lichen is a narrow endemic, restricted to areas of high humidity. These high humidity environments occur on high elevation (>4,000 feet / 1,220 meters) mountaintops and cliff faces which are frequently bathed in fog or lower elevation (<2,500 feet / 762 meters) deep gorges in the Southern Appalachians. The rock gnome lichen primarily occurs on vertical rock faces where seepage water from forest soils above flows at (and only at) very wet times. The rock gnome lichen is almost always found growing with the moss Adreaea spp. in these vertical intermittent seeps. The major threat of extinction to the rock gnome lichen relates directly to habitat alteration/loss of high elevation coniferous forests. These coniferous forests usually lie adjacent to the habitat occupied by the rock gnome lichen. The high elevation habitat occurs in the counties of Ashe, Avery, Buncombe, Graham, Haywood, Jackson, Mitchell, Rutherford, Swain, Transylvania, and Yancey. The lower elevation habitat of the rock gnome lichen can be found in the counties of Jackson, Rutherford and Transylvania.

## **BIOLOGICAL CONCLUSION**

## **NO EFFECT**

Suitable habitat in the form of high humidity areas, high elevation vertical rock faces and deep gorges does not exist within the project study area. Additionally, the NC Natural Heritage Program database of rare species and unique habitats contains no listing of the rock



gnome lichen within the project vicinity. Therefore, the proposed project will not affect the rock gnome lichen.

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**Hybopsis monacha (spotfin chub) Threatened**

Formerly: *Cyprinella monacha*

Animal Family: Cyprinidae

Date Listed: 9/9/77

The spotfin chub is a small minnow that is olive green above with silver sides and the females are whitish below. The males have a brilliant turquoise blue coloring on their backs, sides of the head, and mid-lateral part of the body, fins are tipped with white during peak development. Males and females are both characterized by a prominent black spot on the lower part of the caudal fin.

The spotfin chub now occurs in the Little Tennessee River drainage system found in Swain and Macon Counties. This minnow inhabits moderate to large streams, 50 to 230 feet (15 to 70 meters) in width. These streams should have a good current, clear water, cool to warm temperatures, and pools alternating with riffles. Specimens of spotfin chub have been taken from a variety of substrates but rarely from significantly silted substrates. The spotfin chub feeds on insect larvae. It is considered to be a "sight feeder" that selects its prey off of clean substrates.

**BIOLOGICAL CONCLUSION: NO EFFECT**

The spotfin chub occurs doesn't occur within the project vicinity. Known populations of spotfin chub occur within the Little Tennessee River drainage system. Additionally, the NC Natural Heritage Program database of rare species and unique habitats contains no listing of the spotfin chub within the project vicinity. Therefore, the proposed project will not affect the spotfin chub.

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**2) Federal Species of Concern and State Listed Species**

There are 25 Federal Species of Concern (FSC) listed for Yancey and Madison Counties. Federal Species of Concern are not afforded federal protection under the ESA and are not subject to any of its provisions, including Section 7, until they are formally proposed or listed as Threatened or Endangered. Federal Species of Concern are defined as those species, which may or may not be listed in the future. These species were formally candidate species, or species under consideration for listing for which there was insufficient information to support a listing of Endangered, Threatened, Proposed Endangered and Proposed Threatened. Organisms which are listed as Endangered (E), Threatened (T), Significantly Rare (SR) or Special Concern (SC) by the North Carolina Natural Heritage Program (NCNHP) list of rare plant and animal species are afforded state protection under the State Endangered Species Act and the North Carolina Plant Protection and Conservation Act of 1979.

Table 19 lists Federal Species of Concern and State listed species, the species state status and the existence of suitable habitat for each species in the study area. This species list is provided for information purposes as the status of these species may be upgraded in the future.

**Table 19**  
**Federal Species of Concern for Yancey and Madison Counties**

Scientific Name	Common Name	State Status	Habitat
<i>Contopus borealis</i>	olive-sided flycatcher	SC	No
<i>Cryptobranchus alleganiensis</i>	hellbender	SC	No
<i>Microtus chrotorrhinus carolinensis</i>	southern rock vole	SC	No
<i>Myotis leibii</i>	eastern small-footed myotis	SC	Yes
<i>Percina squamata</i>	olive darter	SC	Yes
<i>Sylvilagus obscurus</i>	Appalachian cottontail	SR	No
<i>Glyphyalinia clingmani</i>	fragile glyph	E	No
<i>Paravitrea vardens*</i>	Roan supercoil	T	Yes
<i>Stygobromus carolinensis*</i>	Yancey sideswimmer	SR	No
<i>Abies fraseri</i>	Fraser fir	C	No
<i>Calamagrostis cainii</i>	Cain's reedgrass	E	No
<i>Cardamine clematitis</i>	mountain bittercress	C	No
<i>Euphorbia purpurea</i>	glade spurge	C	No
<i>Juglans cinerea</i>	butternut	W5	Yes
<i>Lilium grayi</i>	Gray's lily	T-SC	Yes
<i>Saxifraga caroliniana</i>	Carolina saxifrage	C	No
<i>Silene ovata</i>	mountain catchfly	C	No
<i>Plagiochila sharpii</i>	liverwort	C	No
<i>Plagiochila sullivantii</i> var. <i>sullivantii</i>	liverwort	C	No
<i>Sphenobolopsis pearsonii</i>	liverwort	C	No
<i>Acipenser fulvescens</i>	Lake sturgeon	SC*	No
<i>Corynorhinus (=Plecotus) rafinesquii</i>	Rafinesque's big-eared bat	SC/PT*	Yes
<i>Polyodon spathula</i>	Paddlefish	E*	No
<i>Paravitrea ternaria</i>	Sculpted supercoil	T	Yes
<i>Buckleya distichophylla</i>	Piratebush	E	Yes

"E"--An Endangered species is one whose continued existence as a viable component of the State's flora is determined to be in jeopardy.

"T"--A Threatened species is one which is likely to become endangered species within the foreseeable future throughout all or a significant portion of its range.

"SC"--A Special Concern species is one which requires monitoring but may be taken or collected and sold under regulations adopted under the provisions of Article 25 of Chapter 113 of the General Statutes (animals) and the Plant Protection and Conservation Act (plants). Only propagated material may be sold of Special Concern plants that are also listed as Threatened or Endangered.

"C"--A Candidate species is one which is very rare in North Carolina, generally with 1-20 populations in the state, generally substantially reduced in numbers by habitat destruction, direct exploitation or disease. The species is also either rare throughout its range or disjunct in North Carolina from a main range in a different part of the country or the world.

"W5"--A Watch Category 5 species is a species with increasing amounts of threats to its habitat; populations may or may not be known to be declining.

"/P\_"--denotes a species which has been formally proposed for listing as Endangered, Threatened, or Special Concern, but has not yet completed the listing process.

\* -- Historic record - the species was last observed in the county more than 50 years ago.

Surveys for these species were not conducted during the site visit, nor were any of these species observed. A review of the N.C. Natural Heritage Program database of the rare species and unique habitats revealed records of two rare species, striped shiner (*Luxilus chrysocephalus*) and marsh marigold (*Caltha palustris*), and one unique habitat, Cane River aquatic habitat (Identified Priority Area). The striped shiner (*Luxilus chrysocephalus*) was first observed in 1991 in the Cane River at the junction of SR 1441 and was last observed November 6, 1994 (updated October 23, 1998). Another sighting of the striped shiner was observed 0.75 miles (1.2 kilometers) downstream from US 19 at Riverdale in the Cane River in 1984 and was last observed August 15, 1994 (updated October 23, 1998). In addition, the striped shiner was also found on August 16, 1994 in Bald Creek on US 19 east of the town of Bald Creek. Marsh marigold was found on June 7, 1958 on SR 1395 north of Mt. Pleasant Church (updated February 20, 1991). These cited observations were found within one mile (1.6 kilometers) of the project study area.

## 7. Hazardous Materials

A "Limited Environmental Site Assessment" for the project area was conducted to identify areas of potential environmental concern, such as underground storage tanks (UST), above ground storage tanks (AST), hazardous waste sites, or similar problem sites. Thirty-seven (37) sites could pose environmental concerns for the proposed project. The location of the potential hazardous material sites are shown in Exhibit 11. Twenty-six (26) of these sites are underground storage tank (UST) facilities, one (1) is a Superfund Site, and ten (10) other sites are potentially contaminated properties. There are no regulated or unregulated landfills or dumpsites within the project limits. Alternate 1 will likely impact at least 15 hazardous material sites and Alternate 2 will likely impact at least 13 hazardous material sites

### a. Underground Storage Tank (UST) Facilities

The following facilities potentially have UST's in the project area:

#### **Former Gas Station/Garage**

This former gas station/garage (Sluders Food Mart) is located approximately 0.4 mile (0.6 kilometers) east of US 23 on north side of US 19. Four (4) USTs were removed from the site in September 1990. The former pump island is approximately 66 feet (20 meters) from the centerline of US 19, while the former UST area is about 49 feet (15 meters) from US 19. No monitoring wells are at the site and the site is not under remediation at this time. Alternate 1 will likely impact the pump island and former UST area. Alternate 2 will not impact the area.

### **Leadford's Auto Parts (Citgo)**

The Leadford's Auto Parts (Citgo) gas station/garage is located approximately 0.5 mile (0.8 kilometers) east of US 23 on south side of US 19. Three (3) USTs are currently in use at the site. The UST area is approximately 46 feet (14 meters) from the centerline of US 19 and the pump island is about 56 feet (17 meters) away. There is also a partially buried heating oil tank behind the building. No monitoring wells are on the site and the site is not under remediation. Alternate 1 will likely impact the pump island and UST area. Alternate 2 impacts the business.

### **P & E Farm Supply**

The P & E Farm Supply gas station is located in the northwest quadrant of the US 19 and SR 1525 intersection. Four (4) USTs are currently in use at the site. The UST area is approximately 49 feet (15 meters) from the centerline of US 19, while the pump island is approximately 46 feet (14 meters) away. The site is not under remediation. Alternates 1 and 2 will likely impact the pump island and UST area.

### **Former Gulf Gas Station**

A former Gulf gas station is located in the northwest quadrant of the US 19 and SR 1520 intersection. The building now operates as an antique store and car lot. The former gas station has not operated since 1966. The former pump island is approximately 89 feet (27 meters) from the centerline of US 19. The fill port for the UST is about 109 feet (33 meters) from US 19. No monitoring wells are at the site and the site is not under remediation. Alternates 1 and 2 will likely not impact the former pump island, fill port, and oil changing pit.

### **Tri County Repairs**

The Tri County Repairs garage is a former gas station located just north of SR 1519 on the east side of US 19. Two fill ports and vents are located near the southern end of the building, approximately 115 feet (35 meters) from the centerline of US 19. The former pump island is approximately 66 feet (20 meters) from US 19. No monitoring wells are at the site and the site is not under remediation. Alternates 1 and 2 will likely impact the former pump island and port/vent area.

### **D & N Enterprises**

D & N Enterprises is at the site of a former gas station located approximately 0.1 mile (0.16 kilometers) south of SR 1511 on the west side of US 19. The gas station stopped operating about 15 years ago and the building has been used as a pawn shop. There are two (2) vents approximately 56 feet (17 meters) from the centerline of US 19. The USTs and pump island may have been removed. A heating oil UST is located on the north side of the building 75 feet (23 meters) from the centerline of US 19. No registry information could be located for any of the USTs and the site is not under remediation. Alternate 1 will likely impact the vent and UST areas of the former gas station. Alternate 2 will likely impact the vent area.

### **Flea Market**

The Flea Market is at the site of a former gas station located approximately 0.1 mile (0.16 kilometers) south of SR 1511 on the west side of US 19. The gas station stopped operating

about 15 years ago and the building has been used as a pawn shop. One (1) fill port is approximately 59 feet (18 meters) from the centerline of US 19 and the former pump island is about 62 feet (19 meters) from US 19. No registry information could be located for the UST and the site is not under remediation. Alternates 1 and 2 will likely impact the fill port and former pump island area of the former gas station.

#### **Raymond Chandler Grocery (BP)**

The Raymond Chandler Grocery (BP) is located in the southwest quadrant of the US 19 and SR 1507 intersection. Four (4) USTs are currently in use at the site. The main UST area and pump island are approximately 66 feet (20 meters) from the centerline of US 19. No monitoring wells were at the site and the site is not under remediation. Alternates 1 and 2 will likely impact the UST and pump island area of this site.

#### **The Store**

The Store site is an inactive gas station/hardware store located approximately 0.2 mile (0.3 kilometers) east of SR 1134 on the south side of US 19. Six (6) USTs are currently at the site. The main UST field is approximately 85 feet (26 meters) from the centerline of US 19 and the pump island is approximately 112 feet (34 meters) from US 19. No monitoring wells are at the site and the site is not under remediation. Alternates 1 and 2 will likely impact the UST area of this site.

#### **Price's Creek Store (Amoco)**

Price's Creek Store (Amoco) is a gas station/hardware store located just east of SR 1136 on the north side of US 19. Five (5) USTs are currently at the site. The UST field is approximately 175 feet (53 meters) from the centerline of US 19 and the pump island is 141 feet (43 meters) from US 19. The site is not under remediation. Alternates 1 and 2 will likely not impact the UST and pump island area of this site.

#### **Riddle's Riverside Grocery (BP)**

Riddle's Riverside Grocery (BP) is a gas station/convenience store located approximately 100 feet (30 meters) west of SR 1115 on the south side of US 19. Six (6) USTs are currently at the site. The main UST field is approximately 82 feet (25 meters) from the centerline of US 19 and the pump island is 102 feet (31 meters) from US 19. The USTs were upgraded about 3 years ago. No monitoring wells are at the site and the site is not under remediation. Alternates 1 and 2 will likely not impact the UST and pump island areas.

#### **Mountain Heritage High School**

The Mountain Heritage High School has a UST for heating oil. The UST is located approximately 1,600 feet (488 meters) south of the centerline of US 19E. Alternates 1 and 2 will likely not impact the UST area.

#### **Taylor Motors**

Taylor Motors is a used car sales and auto repair facility located approximately 180 feet (55 meters) to the east of SR 1375 on the north side of US 19E. There is no UST information available for this site.

### **Andy's**

Andy's is a gas station located approximately 200 feet (61 meters) east of SR 1375 on the north side of US 19E. Three UST's and two kerosene AST's. The UST's are located approximately 133 feet (41 meters) from the centerline of US 19E on the east side of the building. The AST's are located approximately 235 feet (72 meters) to the north of the centerline of US 19E at the northwestern portion of the property. The pump islands associated with the gasoline UST's are located approximately 78 feet (24 meters) and 102 feet (31 meters) to the north of the centerline and the pump island directly in front of the building. The pump island associated with the diesel and kerosene AST's is located approximately 108 feet (33 meters) to the north of the centerline on the eastern portion of the property. The site is not undergoing remediation. Alternates 1 and 2 will likely not impact the pump island area.

### **Burnsville Amoco**

Burnsville Amoco is a gasoline station located approximately 800 feet (244 meters) to the east of SR 1196 on the south side of US 19E. There are four fuel UST's and two diesel AST's at this facility. The USTs are located approximately 108 feet (33 meters) to the south of the centerline of US 19E on the western portion of the property. The pump islands associated with the gasoline USTs are also located approximately 108 feet (33 meters) to the south of the centerline of US 19E in the center of the property directly in front of the building. The diesel UST and the two diesel AST's are located approximately 103 feet (31 meters) to the south of the centerline of US 19E on the eastern portion of the property. There are no monitoring wells on the property and the site is not undergoing remediation. This facility is listed on the closed-out groundwater incident list. A surface spill of heating oil occurred at this facility. No groundwater contamination resulted from the spill. Alternates 1 and 2 will likely not impact the UST, AST, and pump island areas.

### **M&H Chevrolet Buick**

M&H Chevrolet Buick is a car dealership and service garage located approximately 1,000 feet (305 meters) east of SR 1139 on the north side of US 19E. There is one waste oil UST at this facility. The UST is located approximately 130 feet (40 meters) north of the centerline of US 19E. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely not impact the UST and pump island areas.

### **Riddle Fuel Oil Company**

Riddle Fuel Oil Company is a fuel oil distribution company. The facility is located approximately 1,600 feet (488 meters) to the west of NC 197 on the north side of US 19E. This facility has two UST's located on the eastern side of the building approximately 91 feet (28 meters) north of the centerline of US Highway 19E. The associated pump island is located approximately 66 feet (20 meters) north of the centerline of US Highway 19E. There are no records for this facility in the UST registration database. The site is not undergoing remediation. Alternates 1 and 2 will likely not impact the UST or pump island area.

### **Texaco**

The Texaco facility is a gas station located at the southwestern quadrant of the intersection of US 19E and NC 197. Two UST's are located on the property with groundwater monitoring

wells. No remediation is taking place. Work was suspended at the site because of the status of the state trust fund. Texaco's UST's are on the northeastern side of the property approximately 95 feet (29 meters) south of the centerline of US 19E. The associated pump island is located in front of the building approximately 78 feet (24 meters) south of the centerline of US 19E. Alternates 1 and 2 will likely not impact the pump island area.

#### **Burnsville Gas, Inc.**

The Burnsville Gas, Inc. (Phillips 66) facility is a gas station located at the southwest quadrant of US 19E and SR 1140. This facility has five AST's located on the property. The AST's are approximately 68 feet (21 meters) south of the centerline of US 19E. The associated pump islands are located approximately 75 feet (23 meters) south of the centerline of the road. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely not impact the pump islands, former tank field, or AST area.

#### **Shell Gasoline Station/Raceway Food Mart**

The Shell Gasoline Station/Raceway Food Mart is located at the intersection of Main Street and US 19E. The facility has five UST's. The UST area and diesel and kerosene pump island are located on the eastern portion of the property, approximately 95 feet (29 meters) north of US 19E. The gasoline pump islands are located approximately 93 feet (28 meters) north of the centerline. There are no monitoring wells on the property and the site is not undergoing remediation. Alternate 1 will likely impact the pump island and UST area. Alternate 2 will likely impact the UST area.

#### **East Yancey Chevron**

East Yancey Chevron is a gasoline station and automobile repair station located at the intersection of US 19E and SR 1329. This facility has one waste oil UST. The waste oil UST is located behind the building approximately 145 feet (44 meters) north of the centerline of US 19E. The pump island is located approximately 92 feet (28 meters) north of the centerline in front of the building. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely not impact the pump island, UST, or AST areas.

#### **Styles Grocery**

Styles Grocery is a former gasoline/convenience store located approximately 1,000 feet (305 meters) west of SR 1141 on the south side of US 19E. Two USTs were installed in 1961 and permanently closed in 1989. A former pump island may be located approximately 57 feet (17 meters) to the south of the centerline of US 19E. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely impact the former pump island area.

#### **Hercules**

Hercules (Edd's Independent) is a gasoline station located at the intersection US 19E and SR 1142 (Georges Fork Road). The facility has four UST's approximately 100 feet (31 meters) south of the centerline of US 19E. One pump island is located approximately 125 feet (38 meters) south of the centerline and another pump island is located approximately 89

feet (27 meters) from the centerline. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely impact the pump island area.

#### **Former BP Gasoline Station**

A former BP Gasoline Station is located at the intersection of US 19E and SR 1143. This property is used as an ice cream shop, produce stand, and used car lot. Five USTs and the remains of two pump islands are located on the property. The UST registration database did not have a listing for this facility. The UST area is located on the southwest side of the building approximately 143 feet (44 meters) south of the centerline of the road. One former pump island is located approximately 114 feet (35 meters) south of the centerline of the road. Another UST area and associated pump island are approximately 89 feet (27 meters) south of the centerline of the road. There are no monitoring wells on the property and the site is not undergoing remediation. Alternates 1 and 2 will likely impact the UST area.

#### **Heritage Tire**

Heritage Tire is a tire changing service located approximately 200 feet (61 meters) east of SR 1144 on the south side of US 19E. There are no UST's located on the property. An area observed to be a former UST and pump island is on the eastern portion of the property. Five groundwater monitoring wells are on the property in the area of the former UST and pump island. This facility could not be identified in the UST registration database. The former UST area is located approximately 47 feet (14 meters) south of the centerline of US 19E and the former pump island is located approximately 59 feet (18 meters) to the south of the centerline. Three UST's were removed in January 1995 and during closure activities, petroleum contamination was identified in soils within the tank excavation. The amount of the release is unknown. Alternates 1 and 2 will likely impact the monitoring wells and former pump island and UST areas.

#### **B&R Grocery**

B&R Grocery is a gasoline station located on US 19E at the intersection of SR 1146 (Cane Branch Road). There are three UST's located on the eastern portion of the property approximately 98 feet (30 meters) to the south of the centerline of US Highway 19E. The associated pump island is located in front of the building approximately 95 feet (29 meters) south of the centerline. The UST's were upgraded in approximately 1994. There are no monitoring wells on the property and the site is not undergoing remediation. Alternate 1 will likely impact the pump island and UST area. Alternate 2 will likely not affect these areas.

#### **b. Superfund Sites**

Glen Raven Mills and superfund site is located at the intersection of US 19E and NC 197 and has been an active weaving mill since 1948. It is currently on the Inactive Hazardous Waste Sites list for North Carolina. The company reportedly poured waste solvents from a quill cleaning process onto the ground and into storm drains between 1948 and 1983. It is estimated a maximum of 20 to 100 gallons (76 to 379 liters) of waste solvents were dumped on the premises each year. The Site Screening Investigation found no groundwater contamination. Contaminated soil covering an area of approximately 285-square feet (27-square meter) is located on the north side of the facility. Low levels of



lead, mercury, and cadmium were found in this area. There is evidence of migration of low-level mercury contamination from the site to Little Crabtree Creek. Alternates 1 and 2 will likely impact the migration area of the superfund site.

**c. Landfills/Other Potentially Contaminated Properties**

No landfills are found within the project area. However, the following potentially contaminated sites are located near the project area.

**Tipton Automotive**

Tipton Automotive is a automotive service garage located approximately 0.3 mile (0.5 kilometers) east of SR 1137 on the north side of US 19. Drums of waste oil and three (3) AST's are located at the site.

**Westside Market Place and Nursery**

Westside Market Place and Nursery is occupied by a nursery and rental equipment business located at the southwest corner of the intersection of US 19E and SR 1196. Drums of used oil are at the site. Propane AST's are also on the property.

**Young and McQueen Grading Co., Inc.**

Young and McQueen Grading Co., Inc. is located at the northwest corner of the intersection of US 19E and SR 1196. The site was a body shop prior to the grading company. The site contains AST's inside the garage area. Two propane ASTs are located at the northern end of the building.

**Dean's Body Shop**

Dean's Body Shop is an auto repair garage located at the northeast corner of the intersection of US 19E and SR 1375. The site was likely a residence prior to the body shop.

**Avondale Mills**

This site is a parking lot of Avondale Mills located on the north side of Main Street. A fuel oil AST is approximately 90 feet (27 meters) north of the centerline of US 19E. Two leaking underground storage tank incidents are listed for this facility. Both incidents appeared to have occurred on the north side of the building, approximately 1,000 feet (305 meters) to the north of the centerline of US 19E.

**Styles Automotive**

Styles Automotive is an automotive parts store and garage located on the south side of US 19E approximately 1,200 feet (365 meters) east of Hillside Drive. The site contains AST's.

**Ken's Muffler and Brakes**

Ken's Muffler and Brakes is an auto repair shop located on the south side of US 19E approximately 590 feet (180 meters) east of NC 197 S. The facility uses oil for hydraulic lifts.

### **Sam's Oil Company**

Sam's Oil Company is located on Main Street at the southeast corner of US 19E and Claten Wheeler Road. The site has three AST's approximately 100 feet (30 meters) south of the centerline of US 19E.

### **Burnsville Equipment**

Burnsville Equipment is an auto parts retail store and garage located on the north side of US 19E approximately 1,400 feet (430 meters) east of SR 1141 (Bill Allen Branch Road). The garage was previously a car repair shop and is now used for truck maintenance.

### **Gouge Trucking**

Gouge Trucking is a trucking business located at the southwest corner of the intersection of US 19E and SR 1141 (Bill Allen Branch Road). Trucks are maintained in the garage. An AST is located on the south side of the building.

## **8. Noise**

This analysis was performed to determine the effect on noise levels in the immediate project area as the result of the proposed widening and improvements along US 19/19E. This investigation includes an inventory of existing noise sensitive land uses and a field survey of ambient (existing) noise levels in the study area. It also includes a comparison of the predicted noise levels and the ambient noise levels to determine if traffic noise impacts are expected to result from the proposed project. Traffic noise impacts are determined from the current procedures for the abatement of highway traffic noise and construction noise, appearing as Part 772 of Title 23 of the Code of Federal Regulations. If traffic noise impacts are predicted, examination and evaluation of alternative noise abatement measures for reducing or eliminating the traffic noise impacts will be considered

### **a. Characteristics of Noise**

Noise is basically defined as unwanted sound. It is emitted from many sources including airplanes, factories, railroads, power generation plants, and highway vehicles. Highway noise, or traffic noise, is usually a composite of noises from engine exhaust, drive train, and tire-roadway interaction.

The magnitude of noise is usually described by its sound pressure. Since the range of sound pressure varies greatly, a logarithmic scale is used to relate sound pressures to some common reference level, usually the decibel (dB). Sound pressures described in decibels are called sound pressure levels and are often defined in terms of frequency weighted scales (A, B, C, or D).

The weighted-A decibel scale is used almost exclusively in vehicle noise measurements because it places the most emphasis on the frequency range to which the human ear is most sensitive (1,000-6,000 Hertz). Sound levels measured using a weighted-A decibel scale are often expressed as dBA. Throughout this report, all noise levels will be expressed in dBA's. Several examples of noise pressure levels in dBA are listed in Appendix 2, Table N1.

Review of Table N1 (Appendix 2) indicates that most individuals in urbanized areas are exposed to fairly high noise levels from many sources as they go about their daily activities. The degree of disturbance or annoyance of unwanted sound depends essentially on three things: 1) The amount and nature of the intruding noise, 2) The relationship between the background noise and the intruding noise, and 3) The type of activity occurring when the noise is heard.

Over time, particularly if the noises occur at predicted intervals and are expected, individuals tend to accept the noises that intrude into their lives. Attempts have been made to regulate many of these types of noises including airplane noise, factory noise, railroad noise, and highway traffic noise. In relation to highway traffic noise, methods of analysis and control have developed rapidly over the past few years.

**b. Noise Abatement Criteria**

The Federal Highway Administration (FHWA) has developed Noise Abatement Criteria (NAC) and procedures to be used in the planning and design of highways to determine whether highway noise levels are or are not compatible with various land uses. These abatement criteria and procedures are set forth in the aforementioned Federal reference (Title 23 CFR Part 772). A summary of the noise abatement criteria for various land uses is presented in Table N2 (Appendix 2). The Leq, or equivalent sound level, is the level of constant sound which in a given situation and time period has the same energy as does time varying sound. In other words, the fluctuating sound levels of traffic noise are represented in terms of a steady noise level with the same energy content.

**c. Ambient Noise Levels**

Noise measurements were taken in the vicinity of the project to determine ambient (existing) noise levels for the identified land uses. The purpose of this noise level information is to quantify the existing acoustic environment and to provide a base for assessing the impact of noise level increases. The existing Leq noise levels along US 19/US 19E, as measured at 50 feet (15 meters), ranged from 65.1 to 69.8 dBA. Tables N3a and N3b (Appendix 2) show the ambient noise levels for the project. The ambient noise monitoring locations are shown in Exhibit 12.

The existing roadway and traffic conditions were used with the most current traffic noise prediction model in order to compare calculated existing noise levels with the measured existing noise levels. The calculated existing noise levels averaged approximately 1 dBA higher than the measured existing noise levels for the locations where ambient noise levels were measured. Hence, the computer model is a reliable tool in the prediction of noise levels. Differences in dBA levels can be attributed to "bunching" of vehicles, low traffic volumes, and actual vehicle speeds versus the computer's "evenly-spaced" vehicles and single vehicular speed.

**d. Procedure for Predicting Future Noise Levels**

In general, traffic conditions consist of a large number of variables that describe different cars driving at different speeds through a continual changing highway configuration and surrounding terrain. Due to the complexity of these conditions, certain assumptions and

simplifications must be made to predict highway traffic noise. The procedure used to predict future noise levels is the Noise Barrier Cost Reduction Procedure, STAMINA 2.0 and OPTIMA (revised March 1983). The BCR (Barrier Cost Reduction) procedure is based upon the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The BCR traffic noise prediction model uses the number and type of vehicles on the planned roadway, their speeds, the physical characteristics of the road (curves, hills, depressed, elevated, etc.), receptor location and height, and, if applicable, barrier type, barrier ground elevation, and barrier top elevation.

In this regard, it is noted that only preliminary design data was available for use in this noise analysis. The roadway sections and proposed intersections were assumed to be flat and at-grade. Thus, this analysis represents the "worst-case" topographical conditions. The noise predictions made in this report are highway-related noise predictions for the traffic conditions during the year being analyzed.

Peak hour design and Level of Service C volumes were compared, and the volumes resulting in the noisiest conditions were used with the proposed posted speed limits. Hence, during all other time periods, the noise levels will be no greater than those indicated in this report. The STAMINA 2.0 computer model was utilized in order to determine the number of land uses (by type) which will be impacted during the peak hour of the design year 2025. Land use is considered to be impacted when exposed to noise levels approaching or exceeding the FHWA noise abatement criteria and/or predicted to sustain a substantial noise increase.

**e. Traffic Noise Impacts and Noise Contours**

Traffic noise impacts occur when the predicted traffic noise levels either: [a] approach or exceed the FHWA noise abatement criteria (with "approach" meaning within one dBA of the Table N2 value), or [b] substantially exceed the existing noise levels. The NCDOT definition of substantial increase is shown in the lower portion of Table N2. Consideration for noise abatement measures is given to receptors that fall in either category.

In accordance with NCDOT Traffic Noise Abatement Policy, the Federal and State governments are not responsible for providing noise abatement for new development when building permits are issued within the noise impact area of a proposed highway after the Date of Public Knowledge. The Date of Public Knowledge of the location of a proposed highway project is the approval date of the final environmental document or the Design Public Hearing, whichever comes later. For development occurring after this public knowledge date, local governing bodies are responsible to insure that noise compatible designs are utilized along the proposed facility.

The approximate maximum number of receptors predicted to be impacted by future traffic noise in Alternate 1 is shown in Tables N4.1a and N4.1b (Appendix 2). Tables N4.2a and N4.2b (Appendix 2) show the predicted number of receptors impacted for Alternate 2. Under Title 23 CFR Part 772, Alternate 1 impacts 86 residential receptors and 10 business receptors. Alternate 2 impacts 83 residential receptors and 15 business receptors. The maximum extent of the 72 and 67 dBA noise level contours are 105.9 and 184.0 feet

(32.3 and 56.1 meters), respectively, from the center of the proposed roadway. This information should assist local authorities in exercising land use control over the remaining undeveloped lands adjacent to the roadway. For example, with the proper information on noise, the local authorities can prevent further activities and land uses incompatible with the predicted noise levels of an adjacent highway.

In Appendix 2, Tables N5.1a and N5.1b (Alternate 1) and Tables N5.2a and N5.2b (Alternate 2) show the exterior traffic noise level increases for the identified receptors by roadway section and alternate. There are two receptors predicted to experience a substantial increase in exterior noise levels associated with Alternate 2. These two receptors are located in the community of Bethel. Alternate 1 does not have any receptors predicted to experience a substantial increase in noise levels. The predicted noise level increases for this project range up to 10 dBA. When real life noises are heard, it is possible barely to detect noise level changes of 2 to 3 dBA. A 5 dBA change is more readily noticeable. A 10 dBA change is judged by most people as a doubling or a halving of the loudness of the sound.

#### **f. Traffic Noise Abatement Measures**

If traffic noise impacts are predicted, examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts are considered. Consideration for noise abatement measures is given to all impacted receptors. There are 86 impacted receptors along Alternate 1 and 83 impacted receptors along Alternate 2 due to highway traffic noise in the project area.

##### **1) Highway Alignment**

Highway alignment involves the horizontal or vertical orientation of the proposed improvements in such a way as to minimize impacts and costs. The selection of alternative alignments for noise abatement purposes must consider the balance between noise impacts and other engineering and environmental parameters. For noise abatement, horizontal alignment selection is primarily a matter of siting the roadway at a sufficient distance from noise sensitive areas.

##### **2) Traffic System Management Measures**

Traffic management measures that limit vehicle type, speed, volume and time of operations are often effective noise abatement measures. For this project, traffic management measures are not considered appropriate for noise abatement due to their effect on the capacity and level-of-service on the proposed roadway.

##### **3) Noise Barriers**

The application of solid mass attenuable measures to effectively diffract, absorb, and reflect highway traffic noise can often be applied with a measurable degree of success. Solid mass, attenuable measures may include earth berms or artificial abatement walls.

For a noise barrier to provide sufficient noise reduction it must be high enough and long enough to shield the receptor from a substantial portion of the highway. Openings in the barrier severely reduce the noise reduction provided by the barrier.

Therefore, it is economically unreasonable to construct a barrier for a small noise reduction. Safety at access openings (driveways, crossing streets, etc.) due to restricted sight distance is also a concern. Furthermore, to provide a sufficient reduction, a barrier's length is normally eight times the distance from the barrier to the receptor. For example, a receptor located 50 feet (15 meters) from the barrier requires a barrier 400 feet (120 meters) long. An access opening of 40 feet (12 meters) or ten percent of the area, limits its noise reduction to approximately 4 dBA (FUNDAMENTAL AND ABATEMENT OF HIGHWAY TRAFFIC NOISE, Report No. FHWA-HHI-HEV-73-7976-1, USDOT, chapter 5, section 3.2, page 5-27).

In addition, businesses, churches, and other related establishments located along a highway typically require accessibility and high visibility. Solid mass, attenuable measures for traffic noise abatement tend to disallow these two qualities, and thus, are not acceptable abatement measures in this case.

**g. No-Build Alternative**

Traffic noise impacts were also considered for the No-Build Alternative. If the proposed widening did not occur, 121 residential receptors and 16 business receptors would experience traffic noise impacts by approaching or exceeding the FHWA NAC. Also, the receptors could anticipate experiencing an increase in exterior noise levels in the range up to 7 dBA. As previously noted, it is barely possible to detect noise level changes of 2 to 3 dBA. A 5 dBA change in noise levels is more readily noticed.

**h. Construction Noise**

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 passers-by and those individuals living or working near the project, can be expected particularly from paving operations and from the earth moving equipment during grading operations. However, considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours, these impacts are not expected to be substantial. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

**i. Noise Analysis Summary**

Based on these preliminary studies, traffic noise abatement is not recommended, and no noise abatement measures are proposed. This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772, and unless a major project change develops, no additional noise reports will be submitted for this project.

**9. Air Quality Analysis**

The air quality analysis was performed in accordance with the Federal-Aid Policy Guide. Madison and Yancey Counties are in compliance with the National Ambient Air Quality Standards. 40 CFR Part 51 is not applicable, because the proposed project is located in an attainment area.

Air pollution originates from various sources. Emissions from industry and internal combustion engines are the most prevalent sources. The impact resulting from highway construction ranges from intensifying existing air pollution problems to improving the ambient air quality. Changing traffic patterns are a primary concern when determining the impact of a new highway facility or the improvement of an existing highway facility. Motor vehicles emit carbon monoxide (CO), nitrogen oxide (NO), hydrocarbons (HC), particulate matter, sulfur dioxide (SO<sub>2</sub>), and lead (Pb) (listed in order of decreasing emission rate). Automobiles are considered to be the major source of CO in the project area. For this reason, most of the analysis presented herein is concerned with determining expected carbon monoxide levels in the vicinity of the project due to traffic flow.

In order to determine the ambient CO concentration at a receptor near a highway, two concentration components are used: local and background. The local concentration is defined as the CO emissions from cars operating on highways in the near vicinity (i.e., distances within 328 feet (100 meters)) of the receptor location. The background concentration is defined by the North Carolina Department of Environment and Natural Resources (DENR) as "the concentration of a pollutant at a point that is the result of emissions outside the local vicinity; that is, the concentration at the upwind edge of the local sources."

In this study, the local concentration was determined using line source computer modeling and the background component was obtained from the DENR. Once the two concentration components were ascertained, they were added together to determine the ambient CO concentration for the project area and compared to the National Ambient Air Quality Standards (NAAQS).

Automobiles are regarded as sources of hydrocarbons and nitrogen oxides. Hydrocarbons and nitrogen oxides emitted from cars are carried into the atmosphere where they react with sunlight to form ozone and nitrogen dioxide. Automotive emissions of HC and NO are expected to decrease in the future due to the continued installation and maintenance of pollution control devices on new cars. However, regarding area-wide emissions, these technological improvements maybe offset by the increasing number of cars on the transportation facilities of the area.

The photochemical reactions that form ozone and nitrogen dioxide require several hours to occur. For this reason, the peak levels of ozone generally occur 16 to 32 miles (10 to 20 kilometers) downwind of the source of hydrocarbon emissions. Urban areas as a whole are regarded as sources of hydrocarbons, not individual streets and highways. The emissions of all sources in an urban area mix together in the atmosphere, and in the presence of sunlight, the mixture reacts to form ozone, nitrogen dioxide, and other photochemical oxidants. The best example of this type of air pollution is the smog that forms in Los Angeles, California.

Automobiles are not regarded as significant sources of particulate matter and sulfur dioxide. Nationwide, highway sources account for less than seven percent of particulate matter emissions and less than two percent of sulfur dioxide emissions. Particulate matter

and sulfur dioxide emissions are predominantly the result of non-highway sources (e.g., industrial, commercial, and agricultural). Because emissions of particulate matter and sulfur dioxide from automobiles are very low, there is no reason to suspect that traffic on the project will cause air quality standards for particulate matter and sulfur dioxide to exceed the NAAQS.

Automobiles without catalytic converters can burn regular gasoline. The burning of regular gasoline emits lead as a result of regular gasoline containing tetraethyl lead, which is added by refineries to increase the octane rating of the fuel. Cars with catalytic converters burn unleaded gasoline eliminating lead emissions. Also, the Clean Air Act Amendments of 1990 made the sale, supply, or transport of leaded gasoline or lead additives unlawful after December 31, 1995. Because of these reasons, it is not expected that traffic on the proposed project will cause the NAAQS for lead to be exceeded.

A microscale air quality analysis was performed to determine future CO concentrations resulting from the proposed highway improvements. "CAL3QHC - A Modeling Methodology For Predicting Pollutant Concentrations Near Roadway Intersections" was used to predict the CO concentration near sensitive receptors.

Inputs into the mathematical model used to estimate hourly CO concentrations consisted of a level roadway under normal conditions with predicted traffic volumes, vehicle emission factors, and worst-case meteorological parameters. The traffic volumes are based on the annual average daily traffic projections. Carbon monoxide vehicle emission factors were calculated for the years 2005 and 2025, using the EPA publication "Mobile Source Emission Factors", and the MOBILE5A mobile source emissions computer model.

The background CO concentration for the project area was estimated to be 1.8 parts per million (ppm). Consultation with the Division of Air Quality, North Carolina Department of Environment and Natural Resources indicated that an ambient CO concentration of 1.8 ppm is suitable for most suburban and rural areas.

The worst-case air quality scenario is located along the edge of the right of way, 98 feet (30.0 meters) from the centerline of the proposed roadway. The predicted one-hour average CO concentrations for the years 2005 and 2025 are 2.7 and 3.0 ppm, respectively. In the evaluation of the No-Build Alternative, the predicted average one-hour CO concentrations are 5.5 ppm and 12.3 ppm for the years 2005 and 2025, respectively.

Comparison of the predicted CO concentrations with the NAAQS (maximum permitted for 1-hour averaging period = 35 ppm; 8-hour averaging period = 9 ppm) indicates no violation of these standards. Since the results of the worst-case 1-hour CO analysis for the build scenario is less than 9 ppm, it can be concluded that the 8-hour CO level does not exceed the standard.

This project is not anticipated to create any adverse effects on the air quality of the project area or the region. This evaluation completes the assessment requirements for air



quality of the 1990 Clean Air Act Amendments and the NEPA process, and no additional reports are necessary.

#### **10. Construction Impacts**

Environmental impacts associated with highway construction are generally of short term duration. To minimize potential adverse effects caused by construction of the proposed project, the following measures, along with those already mentioned, will be enforced during the construction phase:

- All possible measures will be taken to insure that the public's health and safety will not be compromised during the movement of any materials to and from construction sites along the project and that any inconveniences imposed on the public will be kept to a minimum.
- Dust control will be exercised at all times to prevent endangering the safety and general welfare of the public and to prevent diminishing the value, utility, or appearance of any public or private properties.
- The contractor shall be required to observe and comply with all laws, ordinances, regulations, orders and decrees, including those of the N.C. State Board of Health, regarding the disposal of solid waste. All solid waste will be disposed of in accordance with the Standard Specifications of the Division of Highways. These specifications have been reviewed and approved by the Solid Waste Vector Control Section of the Division of Health Services, N.C. Department of Human Resources.
- Waste and debris will be disposed of in areas outside of the right of way and provided by the contractor, unless otherwise required by the plans or special provisions or unless disposal within the right of way is permitted by the Engineer. Disposal of waste and debris in active public waste or disposal areas will not be permitted without prior approval by the Engineer. Such approval will not be permitted when, in the opinion of the Engineer, it will result in excessive siltation or pollution.
- The construction of the project is not expected to cause any serious disruptions in service to any of the utilities serving the area. Before construction is started, a preconstruction conference involving the contractor, pertinent local officials and the Division of Highways will be held to discuss various construction procedures, including a discussion of precautionary steps to be taken during the time of construction that will minimize interruption of service.
- Prior to construction, a determination will be made regarding the need to relocate or adjust any existing utilities in the project area. A determination of whether the NCDOT or the utility owner will be responsible for this work will be made at that time.
- Any burning will be done in accordance with applicable local laws and ordinances, along with the regulations of the North Carolina Plan for Implementing the National Ambient Air Quality Standards. Burning will be done only in the right of way, under constant

surveillance, with good atmospheric conditions, and as remote from dwellings as possible.

- During construction of the proposed project, all materials resulting from clearing and grubbing, demolition or other operations will be removed from the project, burned or otherwise disposed of by the Contractor. Any burning done will be done in accordance with applicable local laws and ordinances and regulations of the North Carolina SIP for air quality in compliance with 15 NCAC 2D.0520. Care will be taken to insure burning will be done at the greatest distance practical from dwellings and not when atmospheric conditions are such as to create a hazard to the public. Burning will be performed under constant surveillance. Also during construction, measures will be taken to reduce the dust generated by construction when the control of dust is necessary for the protection and comfort of motorists or area residents.
- The Contractor will be required to perform erosion control in accordance with the project erosion control plans, contract, standards, and/or Standard Specifications or as requested by the Resident Engineer. These contract documents are in accordance with the erosion control measures outlined in the Department of Transportation's FHPM 6-7-3-1. Temporary erosion control measures will be installed in accordance with the plans. Additional measures to control erosion throughout the project will be added as needed. North Carolina regulations for "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0024) will be followed during project construction to prevent siltation of nearby streams.
- Prior to the approval of any borrow source developed for use on this project, the contractor shall obtain a certification from the North Carolina Department of Cultural Resources certifying that the removal of material from the borrow source will have no effect on any known district, site, building, structure, or object that is included or eligible for inclusion in the National Register of Historic Places. A copy of this certification shall be furnished to the Engineer prior to performing any work on the proposed borrow source.
- Traffic service in the immediate project area may be subjected to brief disruption during construction of the project. Every effort will be made to insure that the transportation needs of the public will be met both during and after construction.

### **11. Visual impacts**

The proposed project will require the removal of hillsides, trees and other vegetation during construction. Visual impacts are anticipated to be minor. The use of vegetated medians is expected to have a positive visual impact. Local sources indicate that most of the project area business community strongly supports a "boulevard" approach through use of medians suitable for landscaping within Burnsville. Both counties support this minimization of visual impacts as it makes the roadway more pleasant for use by both residents and tourists.

## IV. COMMENTS AND COORDINATION

### A. Comments Received

The project has been coordinated with appropriate federal, state, and local agencies listed below. Written comments were received from agencies noted with an asterisk (\*). These comments were considered during the preparation of this assessment. Appendix 3 contains copies of the comments received.

- \*US Army Corps of Engineers – Asheville Regulatory Field Office
- \*US Fish and Wildlife Service – Asheville Field Office
- US Environmental Protection Agency
- \*Tennessee Valley Authority
- \*NC Department of Administration, NC State Clearinghouse
- \*NC Department of Environment and Natural Resources
  - \*NC Wildlife Resources Commission
  - \*Division of Water Quality
  - \*Division of Soil and Water Conservation
  - \*Division of Forest Resources
  - \*Division of Land Resources
  - \*Division of Parks and Recreation
- \*NC Department of Cultural Resources - SHPO
- \*NC Department of Public Instruction
- \*Land of Sky Regional Council of Governments (Madison County)
- \*Region D Council of Governments (Yancey County)
- Madison County
- \*Yancey County

### B. Citizens' Informational Workshop

A Citizens Informational Workshop was held on February 5, 1998 from 4 p.m. to 7 p.m. at the Burnsville Municipal Building for R-2518 and R-2519A. Approximately 130 people attended the workshop. Aerial photographs and other maps were on display at the workshop. The widening options shown at the workshop included Alternate 1 (symmetric) and Alternate 2 (best fit) widening. A handout and comment sheet was available to everyone in attendance. Appendix 4 shows the handouts used at the Citizens Informational Workshop.

### C. Agency Coordination

A National Environmental Policy Act (NEPA) / 404 Merger Team was established for the project to improve environmental protection and the regulatory process. The merger team consists of representatives from the following state and federal agencies:

- US Army Corps of Engineers
- US Fish and Wildlife Service
- US Environmental Protection Agency
- Tennessee Valley Authority
- NC Wildlife Resources Commission

Merger team meetings were held to discuss and agree on the project purpose and need, alternatives under consideration, and to review the impacts associated with the alternates under consideration.

**D. Coordination with Yancey County**

On February 21, 2001 a meeting was held with Yancey County representatives to discuss sidewalks, bicycle accommodations, median landscaping, lighting, a pedestrian overpass, and the impacts associated with Alternates 1 and 2. Yancey County is in full support of the US 19/US 19E improvement project.

**E. Public Hearing**

A public hearing will be held for this project following the circulation of this document. At the hearing, more detailed information about the proposed improvements will be available for the public. At the hearing, the public will be invited to make comments or voice concerns regarding the proposed project. A final decision with regard to a preferred alternative will not be made until all public hearing comments are fully evaluated.

# EXHIBITS

- Exhibit 1**      **Project Location (a and b)**
- Exhibit 2**      **Project Aerial**
- Exhibit 3**      **Typical Sections (a through c)**
- Exhibit 4**      **1997 Traffic Data**
- Exhibit 5**      **2025 Traffic Data**
- Exhibit 6**      **Existing and 2025 No-Build Levels of Service**
- Exhibit 7**      **2025 Build Levels of Service**
- Exhibit 8**      **Signalized Intersection Lane Configurations and Level of Service (a through e)**
- Exhibit 9**      **Water Resources and Wetlands**
- Exhibit 10**     **Surface Waters (a through d)**
- Exhibit 11**     **Hazardous Material Sites**
- Exhibit 12**     **Noise Monitoring Locations**

## Environmental Assessment

Prepared by the  
Project Development and Environmental Analysis Branch  
of the Division of Highways  
North Carolina Department of Transportation

### SUMMARY

#### 1. Type of Action

This is a North Carolina State Administration Action. Environmental Assessment.

#### 2. Description of Action

The North Carolina Department of Transportation (NCDOT), Division of Highways, proposes to widen US 19/US 19E from future I-26 (existing US 19-23) in Madison County to SR 1186 near Micaville in Yancey County. The purpose of this project is to add traffic capacity to US 19/US 19E. Other factors contributing to the need of the project are system linkage and safety. The project will upgrade the existing two and three-lane roadway to a multi-lane facility. The total length of the project is approximately 21 miles (34 kilometers). Exhibit 1a and 1b shows the location of the project and Exhibit 2 shows an aerial view of the project area.

This project is identified in the approved NCDOT 2002-2008 Transportation Improvement Program (TIP) as Project Numbers R-2518 and R-2519A. TIP Number R-2518 extends along US 19/US 19E from future I-26 (existing US 19-23) to SR 1336 (Jack's Creek Road). TIP Number R-2519A extends along US 19E from SR 1336 (Jack's Creek Road) to SR 1186 west of Micaville. According to the approved NCDOT 2002-2008 TIP, right of way acquisition is scheduled to begin in Fiscal Year (FY) 2003 and construction to begin in FY 2005.

The total estimated cost of the project for Alternate 2 is \$129,709,400 consisting of \$107,900,000 for construction, \$12,104,400 for right of way acquisition, and \$9,705,000 for wetland and stream mitigation. Alternate 2 is identified as the NCDOT recommended alternative for the project in this Environmental Assessment.

#### 3. Alternatives Considered

Several alternatives were considered for the proposed project. The alternatives include the Transportation Systems Management Alternative, Public Transportation Alternative, No-Build Alternative, and Build Alternative. The Transportation Systems Management Alternative and the Public Transportation Alternative were considered but eliminated because they do not serve the purpose of and need for the project.

The Transportation System Management (TSM) Alternative includes limited construction activities such as optimizing traffic signal timing, coordinating signal operations, adding traffic signals at congested intersections, minor realignment of sharp

horizontal curves, adding turn lanes at intersections, and other similar improvements. Transportation System Management techniques will not substantially increase capacity on the existing roadway. Although TSM measures do improve traffic safety and operations, they do not eliminate the need for additional capacity on US 19/US 19E. Therefore, the TSM Alternative was eliminated from further consideration.

The Public Transportation Alternative would provide bus/van service to travelers in Madison County and Yancey County. Currently public transportation vans travel throughout these counties on fixed or on-demand routes, including US 19/US 19E. Public transportation opportunities in Madison and Yancey Counties are limited by the rural nature of the area and there are no plans to expand service in the counties. The privately owned automobile remains the major form of transportation for area residents, commuters, and other travelers. Even with additional public transportation opportunities in the project area, this alternative would not remove enough vehicles from US 19/US 19E to eliminate the need for additional capacity and other roadway improvements. Therefore, the Public Transportation Alternative was eliminated from further consideration.

The No-Build Alternative consists of not constructing the proposed improvements along US 19/US 19E. The No-Build Alternative does not add capacity or improve safety along US 19/US 19E. The No-Build Alternative was not eliminated from further consideration because it provides a baseline for comparison with the Build Alternative.

The Build Alternative has two roadway widening options identified as Alternates 1 and 2. The two alternates involve various degrees of widening US 19/US 19E from future I-26 (existing US 19-23) to SR 1186 near Micaville. Alternate 1 widens US 19/US 19E "symmetrically" about the centerline, regardless of deficiencies in design speed or vertical and horizontal curvature. Alternate 2 uses the "best fit" widening approach and considers design criteria and potential social and environmental impacts along US 19/US 19E.

Three typical sections are being considered for the US 19/US 19E improvement project. A four-lane divided curb and gutter section is being considered within Burnsville; it has a minimum right of way width of 150 feet (45 meters). Outside of Burnsville, two shoulder sections are being considered with a minimum right of way width of 200 feet (60 meters): a four-lane divided section and a five-lane undivided section. The typical sections are shown in Exhibits 3a through 3c.

#### **4. NCDOT Recommended Alternative**

The NCDOT is recommending Alternate 2 for the improvements proposed in this Environmental Assessment. Alternate 2 uses the "best-fit" approach for the proposed roadway improvements which minimizes social and environmental impacts throughout the length of the project.

#### **5. Coordination**

The following federal, state, and local agencies were consulted during the preparation of this Environmental Assessment:

US Army Corps of Engineers – Asheville Regulatory Field Office

US Fish and Wildlife Service – Asheville Field Office  
US Environmental Protection Agency  
Tennessee Valley Authority  
NC Department of Administration, NC State Clearinghouse  
NC Department of Public Instruction  
NC Department of Cultural Resources - SHPO  
NC Department of Environment and Natural Resources  
    NC Wildlife Resources Commission  
    Division of Water Quality  
    Division of Soil and Water Conservation  
    Division of Forest Resources  
    Division of Land Resources  
    Division of Parks and Recreation  
Madison County  
Yancey County  
Land of Sky Regional Council of Governments (Madison County)  
Region D Council of Governments (Yancey County)

**6. Summary of Beneficial and Adverse Environmental Impacts**

The proposed project will add traffic capacity and improve safety along US 19/US 19E between future I-26 and Micaville. The US 19/US 19E improvement project will enhance the most important transportation facility between Madison and Yancey Counties in northwestern North Carolina.

Table 1 contains a comparative summary of the quantifiable impacts associated with the two build alternates. The impacts associated with the proposed project are described in detail in Section III of this document.

**7. Actions Required By Other Agencies**

Constructing the proposed action will result in impacts to surface waters and jurisdictional wetlands. In accordance with Section 404 of the Clean Water Act (33 U.S.C. 1344), an Individual Permit will be required from the US Army Corps of Engineers. The NCDOT will consult with appropriate agencies in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401). NCDOT will implement erosion and sedimentation control measures, as specified by NCDOT's "Design Standards in Sensitive Watersheds" (15A NCAC 04B.0024).

A Tennessee Valley Authority (TVA) Section 26a permit is required for all construction or development involving streams or floodplains in the Tennessee River drainage basin. This project will be reviewed under Section 26a of the TVA Act. The final bridge plans, hydraulic analysis of the effects of the widened structures on the 100-year flood elevation, and notice of compliance with the Historic Preservation Act of 1966 will be forwarded to TVA for approval under Section 26a. The TVA is a cooperating agency for this project.



**TABLE 1  
COMPARATIVE SUMMARY**

Category	Units	Alternate 1 Symmetric	Alternate 2 Best Fit (recommended)
Alternate Length	miles (kilometers)	21.0 (33.6)	20.8 (33.4)
Residential Relocations	total	59	56
	minority	0	0
Business Relocations	total	33	29
	minority	0	0
Non-Profit Relocations	total	5	4
Potential Hazardous Mat. Sites	each	15	13
Wetlands	acres (hectares)	0.16 (0.06)	0.16 (0.06)
Stream Impacts	Linear feet (meters)	49,692 (15,150)	38,789 (11,826)
Noise	impacted properties	96	98
Air Quality 1-Hour	carbon monoxide (ppm)	3.7 ppm	3.7 ppm
Construction Cost	dollars	\$96,750,000	\$107,900,000
Right of Way Cost	dollars	\$13,995,000	\$12,104,400
Wetland /Stream Mitigation Cost	dollars	\$12,431,000	\$9,705,000
Total Cost	dollars	\$123,176,000	\$129,709,400

ppm = parts per million

National Ambient 1-hour Air Quality Standards: 35 ppm

\* This is the most recent construction cost estimate for Alternate 2

\*\* This is the most recent total cost estimate for Alternate 2

The proposed project will also require a Section 401 Water Quality General Certification from the North Carolina Department of Environment and Natural Resources, Division of Water Quality. Section 401 of the Clean Water Act requires that the state issue or deny water certification for any federally permitted or licensed activity that may result in a discharge to Waters of the United States. Section 401 Certification allows surface waters to be temporarily impacted for the duration of the construction or other land manipulation.

### 8. Other Major Actions

The following projects are located in the general vicinity of the proposed US19/US 19E Improvement Project:

1. Construction of I-26 (TIP Project Number A-10) is underway at the western terminus of the US 19/US 19E improvement project. The interchange between US 19-23 and future I-26 is open to southbound traffic.
2. NC 208 improvements are included in the NCDOT Draft 2002-2008 TIP under Project Number R-2426. The proposed project is located approximately 19 miles (30 kilometers) west of the US 19/US 19E improvement project. Improvements to two-lane NC 208 extend from US 25-70 to the Tennessee State line. The NCDOT 2002-2008 TIP has right of way acquisition beginning in FY 2007 and construction after FY 2008.

3. US 19E improvements identified as TIP Project Number R-2519B begin at the eastern terminus of R-2519A and continue eastward to an existing multilane section west of Spruce Pine. The proposed improvements are approximately 8 miles (13 kilometers) in length and widen US 19E to a multilane facility. Right of way acquisition is scheduled to begin in FY 2006 and construction in FY 2008.

**9. Additional Information**

Additional information concerning the assessment can be obtained by contacting the Project Development and Environmental Analysis Branch.

William D. Gilmore, P. E., Manager  
North Carolina Department of Transportation  
Project Development and Environmental Analysis Branch  
1548 Mail Service Center, Raleigh, North Carolina 27699-1548  
Telephone 919-733-3141

One option is to provide a 4-lane section with a 4.8-meter (16-foot) raised grassed median. The 4-lane section will have shoulders in areas outside of the Burnsville corporate limits and curb and gutter within the limits. See **Figures 2a and 2b** for sketches of these cross sections.

A second option is to provide a 5-lane section with a 4.8-meter (16-foot) center lane containing a 1.2-meter (4-foot) monolithic island to control turns across traffic lanes. Curb and gutter treatment will be provided within the Burnsville corporate limits and shoulders will be constructed outside the corporate limits. See **Figures 3a and 3b** for sketches of these cross sections.

The North Carolina Department of Transportation will study several ways to implement the road widening including symmetric widening and an option that transitions between asymmetric and symmetric widening.

#### CURRENT PROJECT STATUS:

Planning and environmental studies for the proposed improvements are in progress. A State Environmental Assessment (SEA) is currently scheduled to be completed in January, 1999. The SEA will address impacts the proposed roadway widening may have on the human and natural environment and will include a recommendation for the project. Input received from the public will be included in the decision making process for a recommendation.

## PUBLIC INVOLVEMENT AND THE PROJECT PLANNING PROCESS

### Project Planning

Planning and Environmental studies for this highway project will comply with the North Carolina Environmental Policy Act (SEPA). The type of document published for this project will be a State Environmental Assessment (SEA). This document will fully discuss the purpose and need for the proposed improvements, evaluate alternatives, and analyze the project's impacts on both the human and natural environment. Some topics which the document will address include:

- Efficiency and safety of travel
- Neighborhood and community impacts
- Relocation of homes and businesses
- Economy of project area
- Historic properties and sites
- Wetlands
- Endangered species
- Wildlife and plant communities
- Water quality
- Floodplains
- Farmland and land use plans of project area
- Hazardous materials involvement
- Traffic noise and air quality

If no significant impacts to the human or natural environment are expected after field studies have been completed, the SEA will be followed by a State Finding of No Significant Impact (SFONSI). The current schedule calls for the SEA to be completed in January, 1999 and the SFONSI to be completed in September, 1999.

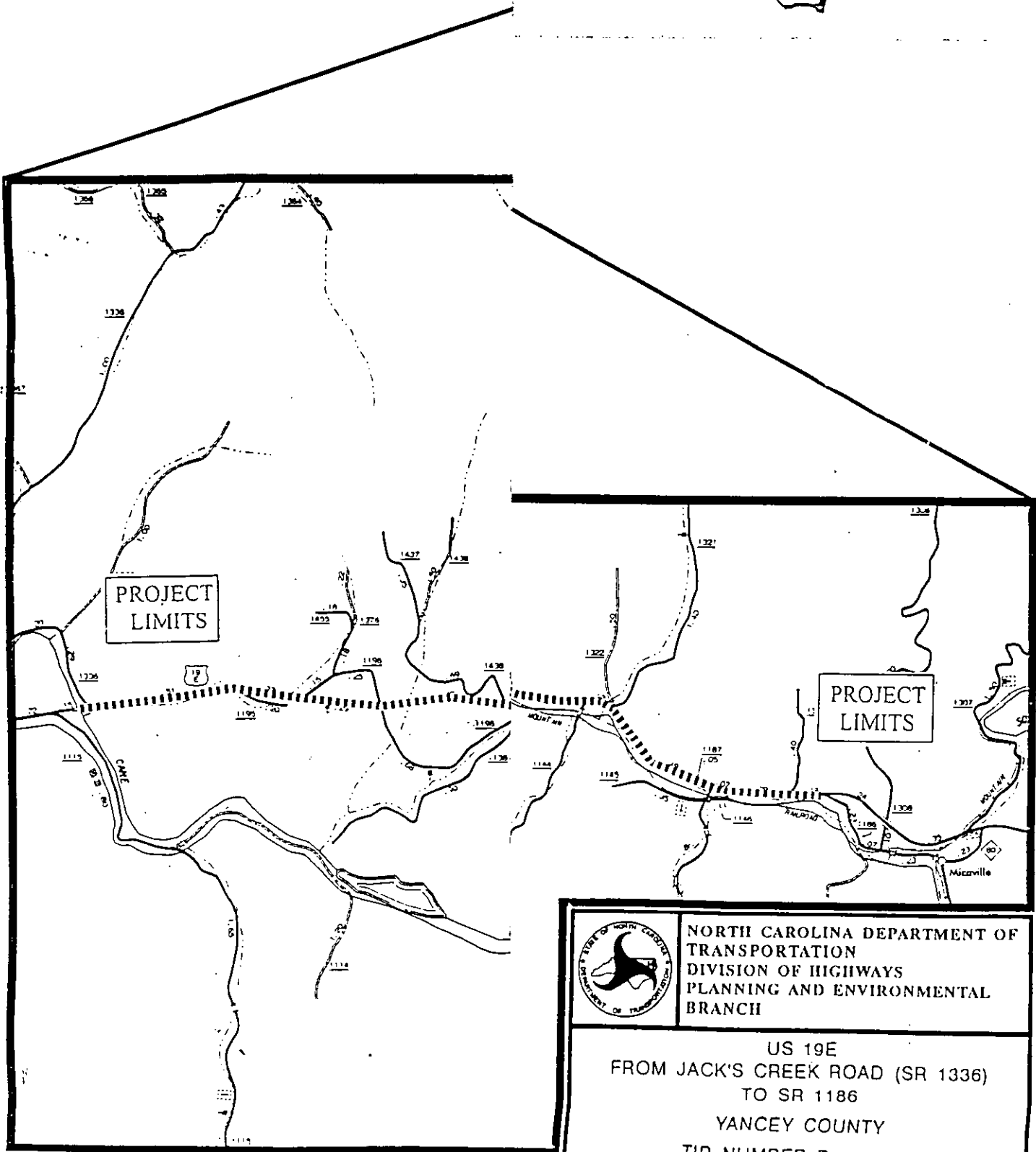
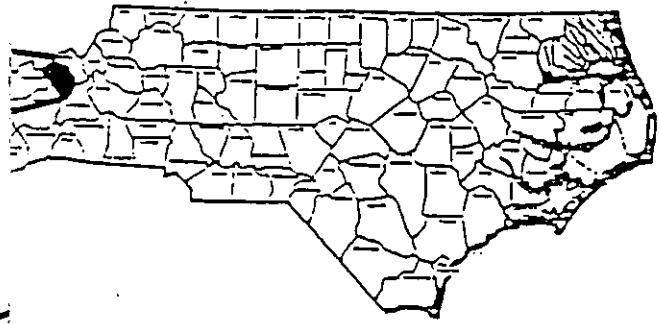
### Public Involvement In Project Planning

Public involvement is an integral part of NCDOT's project planning process. The concerns of citizens and interest groups are always considered during project planning studies. Often, additional project alternatives are studied, or existing alternatives changed, based on comments received from the public.

## Opportunities for Public Involvement

NCDOT provides a number of opportunities for citizen and interest group participation during project planning. Some of these opportunities are listed below:

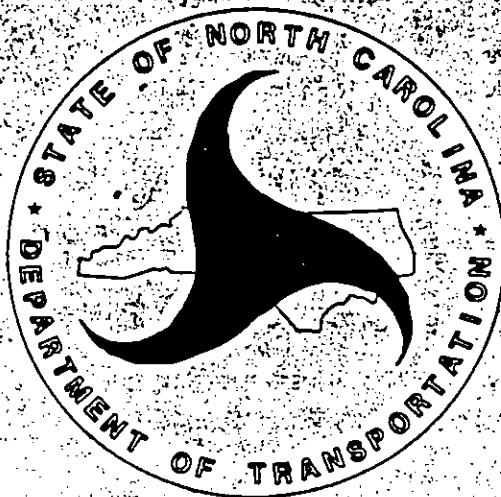
- |                                       |  |
|---------------------------------------|--|
| SCOPING LETTER                        | Published in N. C. Environmental Bulletin. This letter notifies agencies and groups on the State Clearinghouse mailing list that a project study has been initiated and solicits comments from them.   |
| CITIZENS<br>INFORMATIONAL<br>WORKSHOP | Informal meeting with the public. NCDOT staff conducts these workshops to speak one-on-one with citizens about projects. Comment sheets are provided for citizens to write down their questions, comments, and concerns. The number of workshops scheduled for a project depends on the scope and anticipated impact of the project.   |
| DOCUMENT<br>DISTRIBUTION              | Copies of environmental documents are submitted to the State Clearinghouse for distribution and a notice is published in the N. C. Environmental Bulletin. Upon request, NCDOT will provide copies of the document to the public. Copies are available for public viewing at NCDOT offices in Raleigh, Division offices, the State Clearinghouse Office, local government offices, and local public libraries. |
| PUBLIC HEARING                        | One or more formal public hearings for the public record are held. Format typically involves a short presentation followed by an opportunity for citizens to comment.  |
| CITIZEN LETTER                        | Citizens are encouraged to write NCDOT and provide information and express concerns regarding proposed improvements. Correspondence from citizens and interest groups is considered during the course of the planning study and is included in the project file.   |



	<b>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANNING AND ENVIRONMENTAL BRANCH</b>
<b>US 19E FROM JACK'S CREEK ROAD (SR 1336) TO SR 1186 YANCEY COUNTY TIP NUMBER R-2519 A</b>	
VICINITY MAP <span style="float: right;">FIGURE 1</span>	

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North Carolina Department of Transportation  
Planning and Environmental Branch



US 19 E IMPROVEMENTS  
FROM SR 1336 (JACK'S CREEK ROAD)  
TO SR 1186

YANCEY COUNTY  
TIP PROJECT R-2519A

FEBRUARY 5, 1998

Citizens Informational Workshop

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## CITIZENS INFORMATIONAL WORKSHOP


US 19 E  
From SR 1336 (Jack's Creek Road) to SR 1186  
Burnsville  
Yancey County  
State Project Number 6.909001T  
TIP Number R-2519 A

### PURPOSE OF THE CITIZENS INFORMATIONAL WORKSHOP:

This workshop is being held to review preliminary alternatives for widening US 19 E to a multilane facility from Jack's Creek Road to SR 1186 (see **Figure 1** for a map showing the project location). The length of the proposed project is approximately 11.6 kilometers (6.6 miles). If you have comments or suggestions about the proposed improvements described in this handout, please inform a representative of the North Carolina Department of Transportation (NCDOT). We have provided a comment sheet upon which you may write your questions or concerns. We will keep a record of your comments and fully consider your suggestions concerning the proposed US 19 E widening during the project study.

The Division of Highways realizes that individuals living close to a proposed project want to be informed of the possible effects of the project on their homes and businesses. However, exact information is not available at this stage of the planning process. Additional planning studies and design work will be performed before the actual alignment and right of way limits are established. More detailed information will be available at the public hearing to be held at a later date. The purpose of this workshop is to gather and consider your input *before* final planning and design decisions are made.

Written comments on this project may be left with NCDOT representatives at the Citizens Informational Workshop or submitted through the mail. If additional information is needed or you would like to submit comments after the workshop, please address your requests and comments to:



Mr. H. Franklin Vick, P. E., Manager  
Planning and Environmental Branch  
Division of Highways  
North Carolina Department of Transportation  
Post Office Box 25201  
Raleigh, North Carolina 27611

A summary regarding NCDOT's public involvement and project planning process is attached for your information.



PROJECT PURPOSE AND NEED:

The existing roadway cross section in the project area is two lanes on the outskirts of Burnsville, widening to three lanes within the Burnsville corporate limits. US 19 E currently serves approximately 17,500 vehicles per day and experiences traffic congestion in the morning and evening hours. The proposed multilane widening will increase traffic capacity and improve safety for local travelers.

The proposed multilane improvements to the road, combined with other proposed projects, will also provide benefits to regional travelers on US 19. Two additional widening projects are expected to be implemented in the future including R-2519 B and R-2518. Project R-2519 B recommends improving US 19 E east of Burnsville to a multilane facility from SR 1186 to Spruce Pine, a distance of 13.3 kilometers (8.2 miles). A schedule for implementing these improvements has not been specified. Project R-2518 recommends improving US 19 west of Burnsville to a multilane facility from US 23 in Madison County to Jack's Creek Road in Yancey County, a distance of 22.9 kilometers (14.2 miles). Construction of this project is scheduled to begin in year 2003. When implemented, Projects R-2518, R-2519 A, and R-2519 B will improve regional access between Asheville and Boone on US 19, the primary east-west roadway through Yancey County.

PROJECT SCHEDULE AND COST:

The estimated schedule and cost for project R-2519 A follows:

<b>Project Stage</b>	<b>TIP Schedule</b>	<b>Estimated Cost</b>
Right of Way Acquisition	May 2000	\$ 1,000,000
Construction	May 2001	<u>\$20,000,000</u>
	<b>Total Estimated Cost</b>	<b>\$21,000,000</b>

**Note:** These estimates of schedule and cost are preliminary, and subject to change as further planning and design studies are completed.

CROSS SECTION CONSIDERATIONS AND WIDENING OPTIONS:

Several combinations of cross sections have been considered as options for widening US 19 E in the Burnsville area. The cross sections presented at this workshop are those that preserve the traffic carrying capability of US 19 E while minimizing right of way requirements.

### Citizens Informational Workshop Comment Sheet (Continued)

Was the project adequately explained to you? Yes \_\_\_\_\_ No \_\_\_\_\_ Were NCDOT  
representatives understandable and clear in their explanations? Yes \_\_\_\_\_ No \_\_\_\_\_  
Please Explain \_\_\_\_\_  
\_\_\_\_\_

Were NCDOT representatives courteous and helpful? Yes \_\_\_\_\_ No \_\_\_\_\_  
Please Explain \_\_\_\_\_  
\_\_\_\_\_

Were display maps and handouts easy to read and understand? Yes \_\_\_\_\_ No \_\_\_\_\_  
Please Explain \_\_\_\_\_  
\_\_\_\_\_

How might we better present proposed projects and address citizen's concerns in future  
informational workshops? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

How did you hear about this meeting today? \_\_\_\_\_  
\_\_\_\_\_

Do you feel that the workshop was adequately advertised? Yes \_\_\_\_\_ No \_\_\_\_\_  
Please explain \_\_\_\_\_  
\_\_\_\_\_

Based on the information provided, were all substantial questions answered?  
Yes \_\_\_\_\_ No \_\_\_\_\_ Please Explain \_\_\_\_\_  
\_\_\_\_\_

What was the most helpful aspect about the workshop today? What was the least helpful aspect  
about it? \_\_\_\_\_  
\_\_\_\_\_

Please indicate any additional comments or suggestions regarding our public involvement  
process: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Citizens Informational Workshop  
Comment Sheet**

**Proposed US 19 Improvements,  
From Future I-26 (Existing US 19-23)  
To SR 1336  
Madison and Yancey Counties  
T.I.P. Project R-2518**

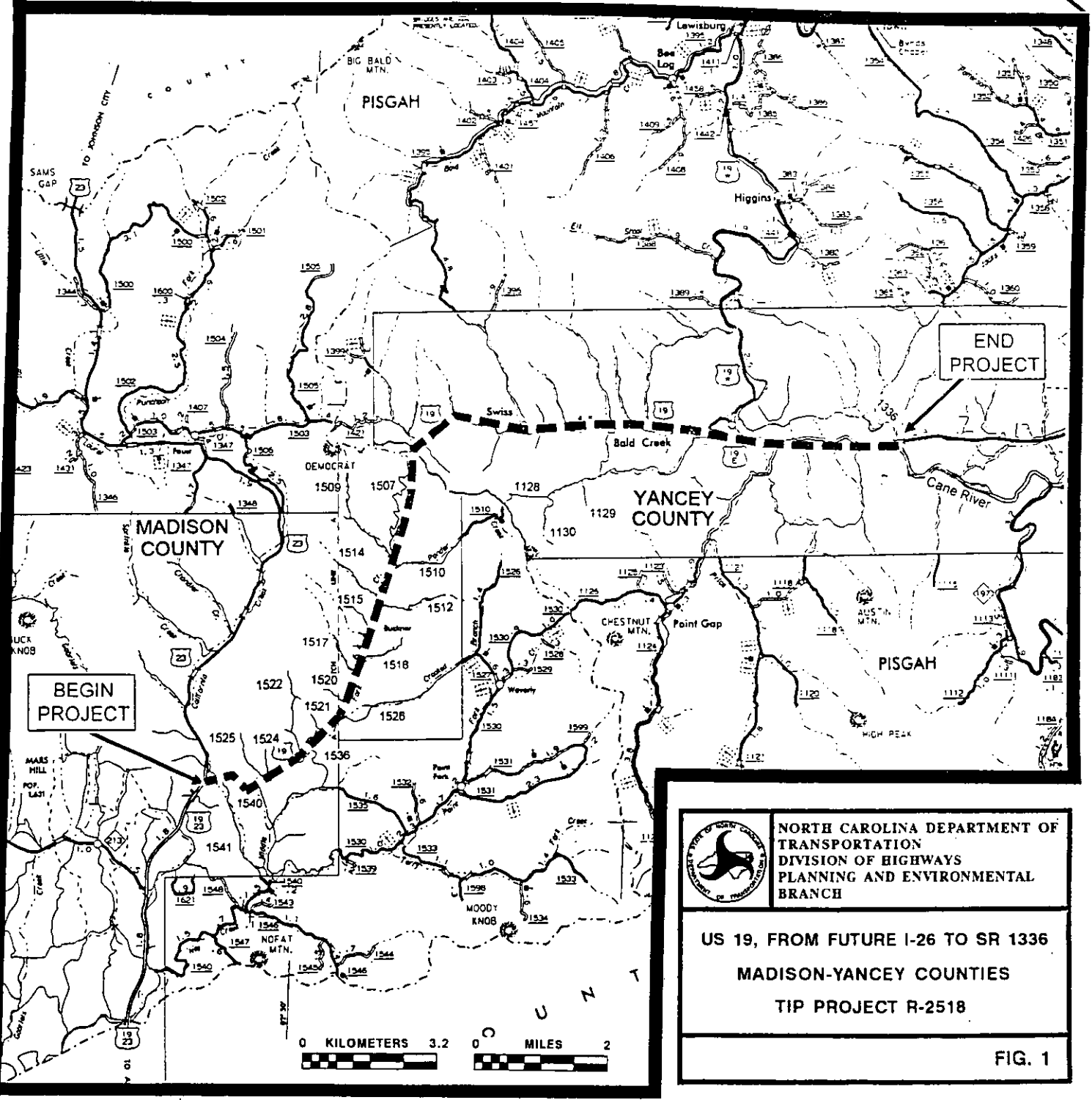
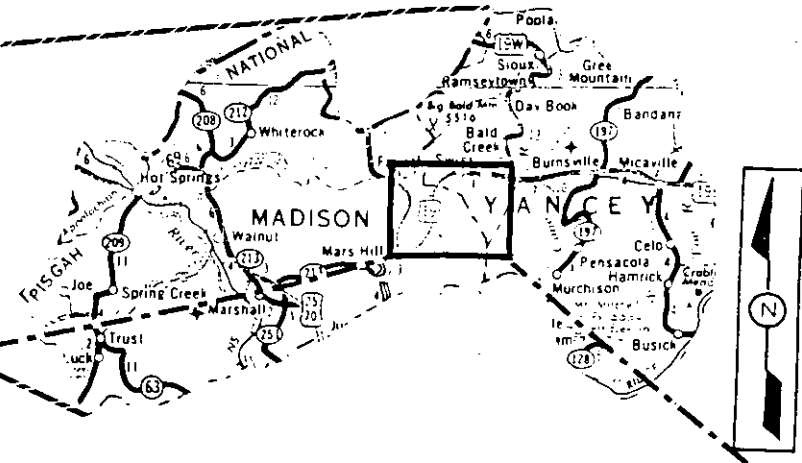
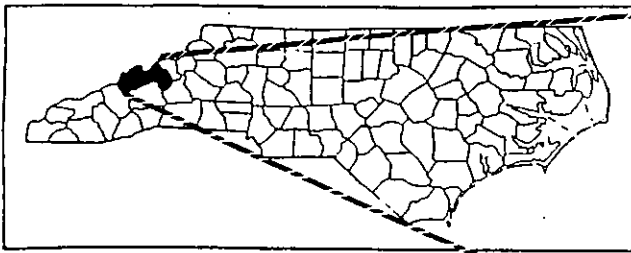
**February 5, 1998**


Name: \_\_\_\_\_  
(Please print)

Address: \_\_\_\_\_  
(Please print)

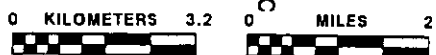
Comments, Concerns, and/or Questions Regarding T.I.P. Project R-2518:

Additional comments can be sent to Mr. H. Franklin Vick, P. E., Manager of the Planning and Environmental Branch, North Carolina Department of Transportation, P. O. Box 25201, Raleigh, North Carolina 27611.




**NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PLANNING AND ENVIRONMENTAL  
BRANCH**

**US 19, FROM FUTURE I-26 TO SR 1336  
MADISON-YANCEY COUNTIES  
TIP PROJECT R-2518**



**FIG. 1**

### Opportunities For Public Involvement

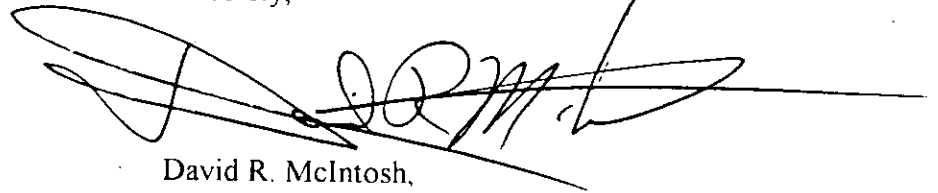
NCDOT provides a number of opportunities for citizen and interest group participation during project planning. Some of these opportunities are listed below:

- |                                       |   |
|---------------------------------------|---|
| SCOPING LETTER                        | Published in N. C. Environmental Bulletin. This letter notifies agencies and groups on the State Clearinghouse mailing list that a project study has been initiated and solicits comments from them.  |
| CITIZENS<br>INFORMATIONAL<br>WORKSHOP | Informal meeting with the public. NCDOT staff conduct these workshops to speak one-on-one with citizens about projects. Comment sheets are provided for citizens to write down their questions, comments, and concerns. The number of workshops scheduled for a project depends on the scope and anticipated impact of the project.   |
| DOCUMENT<br>DISTRIBUTION              | Copies of environmental documents are submitted to the State Clearinghouse for distribution and a notice is published in the N.C. Environmental Bulletin. Upon request, NCDOT will provide copies of the document to the public. Copies are available for public viewing at NCDOT Raleigh and Division offices; the State Clearinghouse office; local government offices, including the local council of government office; and local public libraries. |
| PUBLIC HEARING                        | One or more formal public hearings for the public record are held. Format typically involves a short presentation followed by an opportunity for citizens to comment.   |
| CITIZENS LETTERS                      | Citizens are encouraged to write NCDOT and provide information and express their concerns regarding proposed improvements. Correspondence from citizens and interest groups is considered during the course of the planning study and are included in the project file.   |

Thank you for your time and consideration of our recommendations. The attractiveness of Burnsville and Yancey County is extremely important for local residents as well as the growth of tourism in our area. The Commissioners fully support this effort by the NCDOT in making these much needed improvements to US 19 and at the same time protecting and enhancing the integrity and uniqueness of our beautiful county and town.

Please keep me informed as developments are made in the design of the new facility. The Yancey County Board of Commissioners and county officials are eager to be involved in this effort and stand ready to provide any information you and your staff may need. Thank you for your efforts to improve the transportation needs of Yancey County.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. R. McIntosh', is written over a horizontal line. The signature is stylized and cursive.

David R. McIntosh,  
Chairman

Cc: Board of Commissioners  
Town of Burnsville, Mayor and Town Council  
Gordon Myers, NCDOT Division 13 Board Member  
Norris Tolson, Secretary, NCDOT  
Lubin Prevatt, Assistant Manager, NCDOT Planning and Environmental  
Richard Davis, Assistant Manager, NCDOT Planning and Environmental  
Brian Yamamoto, Project Engineer, NCDOT Planning and Environmental  
Charles Cox, Project Engineer, NCDOT Planning and Environmental  
Bill Smart, NCDOT Division 13 Engineer  
Yancey County Economic Development Commission  
Yancey County Chamber of Commerce

DRM/nrb

"Where Industry and Nature Work Hand in Hand"

Telephone  
(704) 682-7722

**YANCEY COUNTY ECONOMIC DEVELOPMENT COMMISSION**

P.O. Box 246, Burnsville, N.C. 28714

June 2, 1998

Mr. H. Franklin Vick, P.E.  
Planning and Environmental Branch  
NC Department of Transportation  
PO Box 25201  
Raleigh, NC 27611-5201

**RE: US 19 Improvements from future I-26 to SR 1336 at Cane River (TIP R-2518)  
and US 19-E Improvements from SR 1336 to SR 1186 (TIP R-2519A)**

Dear Mr. Vick

I am writing on behalf of the Yancey County Economic Development Commission regarding the future improvements to US 19 in Yancey County. The Yancey County EDC would like to notify the North Carolina Department of Transportation of its full support for the planned improvements to US 19 through Yancey County and the Town of Burnsville.

It is imperative that every precaution must be taken in maintaining the beautiful town and county in which we live. The Yancey County EDC desires that every effort be utilized by the NCDOT in providing an attractive, scenic, and safe roadway throughout Yancey County.

This letter will be followed by another that will highlight the key areas that should be addressed in designing this improved facility. The Commission fully supports this effort by the NCDOT in making these much needed improvements and at the same time protecting and enhancing the integrity of our beautiful county and town.


Please keep me informed as you progress through the planning process. The Commission and county officials want to be involved in this effort. If you need further information do not hesitate to contact acting director of the Yancey EDC, Charles Aldridge, or myself. Thank you for your efforts in improving the transportation needs of Yancey County.

Sincerely,



Wanda Proffitt,  
Chairman

Cc: Board of Commissioners  
Town of Burnsville, Mayor and Town Council  
Gordon Myers, NCDOT Division 13 Board Member  
Norris Tolson, Secretary, NCDOT  
Lubin Prevatt, Assistant Manager, NCDOT Planning and Environmental  
Richard Davis, Assistant Manager, NCDOT Planning and Environmental



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**YANCEY COUNTY ECONOMIC DEVELOPMENT COMMISSION**

P.O. Box 246, Burnsville, N.C. 28714

June 2, 1998

Mr. H. Franklin Vick, P.E.  
Planning and Environmental Branch  
NC Department of Transportation  
PO Box 25201  
Raleigh, NC 27611-5201

**RE: US 19-E Improvements from SR 1336 to SR 1186 (TIP R-2519A) and US 19  
Improvements from future I-26 to SR 2336 at Cane River (TIP R-2518)**

Dear Mr. Vick:

Thank you for allowing the Yancey County Economic Development Commission to provide input regarding the planned improvements to US 19 through Yancey County and the Town of Burnsville. It is imperative that every precaution be taken in maintaining the beautiful town and county in which we live. With that in mind the Yancey County EDC desires that every effort be utilized by the North Carolina Department of Transportation in providing an attractive, scenic, and safe roadway throughout Yancey County.

As the planning for the improved roadway is underway, the Yancey County EDC would like to stress that these improvements should beautify and enhance the environment through the project area. After careful consideration of what the county, town, and citizens desire, we would like to make recommendations regarding the following aspects: median cross section (landscaping), curb and guttering with sidewalks, pedestrian overpass, bicycle path, and street illumination.

**MEDIAN**

First of all, we would like to stress the importance of providing an aesthetically pleasing cross section through the corporate limits of the Town of Burnsville. The section of roadway is not more than 1.5 miles in length and it is absolutely critical that this section be given significant care and attention. Keep in mind the growth of tourism in Yancey County and the impact beauty plays in developing that role.





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## **YANCEY COUNTY ECONOMIC DEVELOPMENT COMMISSION**

P.O. Box 246, Burnsville, N.C. 28714

This is a momentous opportunity for the town and county and we want to ensure that the finished product is something we can be proud of for years to come. We have seen many examples of the DOT's work, which would be a perfect fit for this section of roadway. The closest example to us is in Asheville; Broadway Avenue by UNCA toward downtown Asheville. This is a marvelous stretch of roadway; four-lanes complete with a narrow grassed median with trees, shrubs and curb and guttering. This is a terrific example of what US 19-E through Burnsville can be and is certainly what the section should be.

### **SIDEWALKS, CURB AND GUTTERING, BICYCLE PATH**


There is substantial pedestrian and bicycle use on US 19-E within the project area. There is a tremendous need to include sidewalks with curb and guttering throughout the section within the Burnsville corporate limits. There are three major shopping centers, numerous restaurants, businesses, as well as residential neighborhoods along the corridor that receive pedestrian traffic. To improve the safety of all who will use this roadway, sidewalks throughout the corporate limits are necessary. We want to emphasize and promote the downtown and greater Burnsville area as a viable community. With the assistance of the NCDOT, this can become a reality.

Bicycle usage is also significant and the need for extra width on roadway lanes or paved shoulders for cyclists is important. Wider lanes or paved shoulders for bicycle traffic will provide a great opportunity for cyclists to "share the road" with motor vehicles.

### **PEDESTRIAN WALKWAY FROM DOWNTOWN OVER 19-E**

Currently, crossing US 19-E from the downtown area to the Yancey Commons Shopping Center is extremely dangerous. This is located at the intersection of US 19-E and South Main Street. The expansion of this facility to more lanes will obviously create greater danger to pedestrians (primarily elderly and children) trying to cross the busy highway. The EDC would like to see an attractive pedestrian overpass or a subway constructed to facilitate pedestrian traffic from downtown to this primary shopping center.

This pedestrian facility would be used a great deal on a regular basis and would be extremely beneficial during the annual Mount Mitchell Crafts Fair and other events that are held on the Town Square in downtown Burnsville. There are thousands of visitors from throughout the southeast and nation who attend the crafts fair and other events. Again, we would stress the importance of making our community more pedestrian friendly.



"Where Industry and Nature Work Hand in Hand"

Telephone  
(704) 682-7722

**YANCEY COUNTY ECONOMIC DEVELOPMENT COMMISSION**

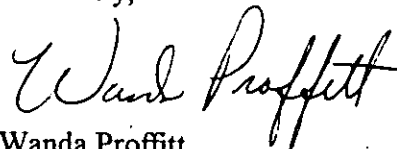
P.O. Box 246, Burnsville, N.C. 28714

**STREET ILLUMINATION**

Street illumination is a concern that has been expressed to board members. The section within the corporate limits, if illuminated, would improve visibility and increase safety. Thank you for your time and consideration of our recommendations. The attractiveness of Burnsville and Yancey County is extremely important for local residents as well as the growth of tourism in our area. The EDC fully supports this effort by the NCDOT in making these much needed improvements to US 19 and at the same time protecting and enhancing the integrity and uniqueness of our beautiful county and town.

Please keep me informed as developments are made in the design of the new facility. The Yancey County Board Economic Development Commission and county officials are eager to be involved in this effort and stand ready to provide any information you and your staff may need. Thank you for your efforts to improve the transportation needs of Yancey County.

Sincerely,



Wanda Proffitt,  
Chairman

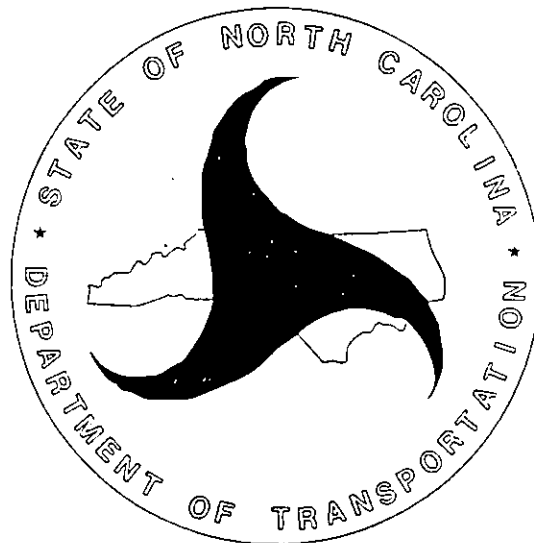
Cc: Board of Commissioners  
Town of Burnsville, Mayor and Town Council  
Gordon Myers, NCDOT Division 13 Board Member  
Norris Tolson, Secretary, NCDOT  
Lubin Prevatt, Assistant Manager, NCDOT Planning and Environmental  
Richard Davis, Assistant Manager, NCDOT Planning and Environmental  
Brian Yamamoto, Project Engineer, NCDOT Planning and Environmental  
Charles Cox, Project Engineer, NCDOT Planning and Environmental  
Bill Smart, NCDOT Division 13 Engineer  
Yancey County Chamber of Commerce

# APPENDIX 4

Citizens Informational Workshop  
Handout

---

North Carolina Department of Transportation  
Planning and Environmental Branch



US 19 IMPROVEMENTS  
FROM FUTURE I-26  
(EXISTING US 19-23)  
TO SR 1336

MADISON-YANCEY COUNTIES  
TIP PROJECT R-2518

FEBRUARY 5, 1998

Citizens Informational Workshop

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## **CITIZENS INFORMATIONAL WORKSHOP**

### **PROPOSED US 19 IMPROVEMENTS, FROM FUTURE I-26 (EXISTING US 19-23) TO SR 1336 AT CANE RIVER MADISON AND YANCEY COUNTIES T.I.P. PROJECT R-2518**

#### **Purpose of Citizens Informational Workshop**

The purpose of this Workshop is to involve the public in the project planning process, and more specifically, to review preliminary alternatives for widening US 19 in Madison and Yancey Counties. If you have comments or suggestions about the proposed improvements described in this handout, please let a representative of the North Carolina Department of Transportation (NCDOT) know. We have provided a comment sheet at the back of this handout on which you can write your questions or concerns so that we can document and fully consider your ideas, comments, and suggestions.

The NCDOT realizes individuals living close to a proposed project want to be informed of the possible effects of the project on their homes and businesses. However, exact information is not available at this stage of the planning process. Additional design work is necessary before the actual right-of-way limits can be established. More detailed information will be available at a later date.

#### **General Description of Project**

NCDOT's 1998-2004 Transportation Improvement Program (TIP) includes the improvements to US 19 from the future I-26 (existing US 19-23) east of Mars Hill in Madison County to SR 1336 at Cane River in Yancey County (see Figure 1). The total length of the project is 22.2 kilometers (13.8 miles).

#### **Purpose of Project**

The general purpose of the project is to improve both the capacity of the existing facility and accessibility within the region. Currently, widening of the existing roadway to a multi-lane facility will be pursued as an option to fulfill the needs of the area. Consideration will be given to new location segments where the existing alignment does not meet current design standards.

In conjunction with this project, two other projects will also provide benefits to regional travelers. R-2519A and R-2519B will improve US 19 from Cane River in Yancey County to Spruce Pine in Mitchell County. These projects, along with R-2518, will improve regional access between Asheville and Boone on US 19, the primary east-west roadway through Yancey County.

**Alternatives**

In addition to a "no build" alternative, two widening alternatives will be considered for improvements to US 19:

- Symmetrical widening
- Combination of symmetrical, north side, and south side widening

**Roadway Typical Sections**

- Four-lane divided shoulder facility with 4.0-meter (16-foot) raised grassed median (see Figure 2)
- Five-lane shoulder facility with 4.0-meter (16-foot) center turning lane (see Figure 3)

**Project Schedule and Cost**

The project has been divided into two parts: Section A begins at the Future I-26 (existing US 19-23) and ends at the Madison-Yancey County line. Section B begins at the county line and ends at SR 1336 at Cane River. The schedule for right of way acquisition and construction for the proposed project, as well as current cost estimates based on preliminary design, are summarized below:

	SECTION A	SECTION B	TOTAL
Right of Way Acquisition	Fiscal Year 2000	Fiscal Year 2003	
Construction	Fiscal Year 2003	Fiscal Year 2005	
Right of Way Cost	\$2,200,000	\$3,000,000	\$5,200,000
Construction Cost	\$26,900,000	\$31,100,000	\$58,000,000
	<b>TOTAL PROJECT COST: \$63,200,000</b>		

**Anticipated Right of Way Impacts**

The existing right of way along US 19 is approximately 30 meters (100 feet) in Madison County and varies in Yancey County. The proposed improvements to US 19 will require an approximate right of way width ranging from 60 to 120 meters (200 to 400 feet) and additional permanent easements. The widening may necessitate the relocation of residences or businesses in some areas of the project. However, until both environmental studies and preliminary design are completed, specific right of way impacts to individual properties cannot be determined. Anticipated impacts to individual properties will be presented at the public hearing.

### **Current Project Status**

Currently, planning and environmental studies for the proposed improvements are in progress. A State Environmental Assessment (SEA) document for the project is anticipated to be completed in the summer of 1998; this SEA will address the impact that the proposed highway project may have on the natural and human environment and will include a recommended alternative for the project. The input from the general public will be included in the decision making process for a recommendation. A public hearing is anticipated to be held in the fall of 1998; a recommendation for the project will be shown at that time.

### **For More Information**

Written comments on this project may be left with NCDOT representatives at the Citizens Informational Workshop or submitted through the mail. If you would like to submit comments after the Citizens Informational Workshop, please address your requests and comments to:

Mr. H. Franklin Vick, P. E., Manager  
Planning and Environmental Branch  
North Carolina Department of Transportation  
Post Office Box 25201  
Raleigh, North Carolina 27611

For additional questions regarding the project, please contact Charles R. Cox, P.E., Project Planning Engineer, at (919)733-7844, Ext. 222, e-mail: [ccox@mail.dot.state.nc.us](mailto:ccox@mail.dot.state.nc.us).

For more information about the NCDOT, please visit our website at:  
[www.doh.dot.state.nc.us](http://www.doh.dot.state.nc.us).

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Widen US 19 from future I-26 in Madison County to SR 1186 in Yancey County

On July 7, 2000, representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (SHPO)

reviewed the subject project and agreed

there are no effects on the National Register-listed property/properties located within the project's area of potential effect and listed on the reverse.

there are no effects on the National Register-eligible property/properties located within the project's area of potential effect and listed on the reverse.

there is an effect on the National Register-listed property/properties located within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.

there is an effect on the National Register-eligible property/properties located within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Mary Pope  
Representative, NCDOT

7-7-00  
Date

N/A  
FHWA, for the Division Administrator, or other Federal Agency

Date

April Montgomery  
Representative, SHPO

7/11/00  
Date

[Signature]  
State Historic Preservation Officer

[Date]  
Date



Properties within the area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

- Otto Buckner House (DE) No effect for Alts. 1&2
- Sam Byrd House (DE) No effect for Alts. 1&2
- Bald Creek School & Gymnasium (DE) No effect for Alts. 1&2
- Captain E.E. Neill House (DE) No effect for Alts. 1&2

**The above properties are not affected by the project as long as NCDOT does no work outside the existing Right of Way and no temporary construction easements are needed within the historic properties' respective boundaries.**

Properties within the area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe the effect.

- Briggs Ray House (DE) **ADVERSE EFFECT** for Alts. 1&2
- Wilkes HensleyHouse (DE) **ADVERSE EFFECT** for Alts. 1&2
- Horton Hill Cemetery (DE) **NO ADVERSE EFFECT** for Alts. 1&2 with the condition that NCDOT provide SHPO the proposed access plans regarding the cemetery for their comment. These plans should be provided prior to the completion of the environmental document.

Reason(s) why the effect is not adverse (if applicable).

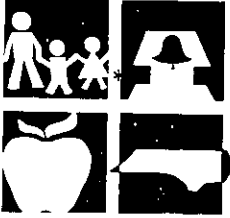
Horton Hill Cemetery (DE) **NO ADVERSE EFFECT** for Alts. 1&2 because no land is being acquired (for Right of Way or easements) from the historic boundary

Initialed:

NCDOT MPJ

FHWA N/A

SHPO Am



# Public Schools of North Carolina

State Board of Education  
Phillip J. Kirk, Jr., Chairman  
<http://www.dpi.state.nc.us>

Department of Public Instruction  
Michael E. Ward, State Superintendent



November 27, 1997

## MEMORANDUM

**TO:** Mr. H. Franklin Vick, NC Department of Transportation

**FROM:** Gerald H. Knott, Section Chief, School Planning *Gerald H. Knott*

**SUBJECT:** US 19, from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, State Project No. 6.869005T, TIP ID No. R-2518

Enclosed is the response from Madison County Schools to our impact inquiry.

/ed  
Enclosure

# ***MADISON COUNTY SCHOOLS***

2 Blannahassett Island Road, Marshall NC 28753-9006  
Telephone: 704-649-9276, Fax: 704-649-9334

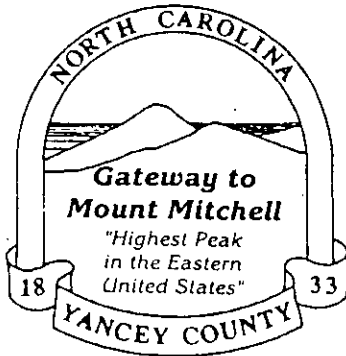
Sue Cantrell  
Superintendent

NOV 26 1997

TO: Mr. Gerald H. Knott, Section Chief School Planning  
FROM: Woody Ammons, Director Auxiliary Services 7014  
DATE: November 17, 1997  
SUBJECT: Future Improvement Program on US 19

In reviewing the information from your office concerning the Transportation Improvement Program, you need to be informed that our bus routes in Madison County would include every side road off US 19, as well as US 19 itself. We would need to continue usage of these roads.

Thank you for your attention to this matter.



April 2, 1998

**James K. Pipes III**

County Manager

David R. McIntosh, *Chairman*

Randy Ollis, *Commissioner*

John Renfro, *Commissioner*

## Office of the County Manager

County Courthouse, Room 11 • Burnsville, NC 28714

PHONE (704) 682-3971 • FAX (704) 682-4301 • email: [kpipes@yancey.main.nc.us](mailto:kpipes@yancey.main.nc.us)

Mr. H. Franklin Vick, P.E.  
Planning and Environmental Branch  
NC Department of Transportation  
PO Box 25201  
Raleigh, NC 27611-5201

RE: US 19E improvements in Yancey County from SR 1336 to SR 1186,  
TIP No. R-2519-A



Dear Mr. Vick:

I am writing in response to your March 4, 1998 letter regarding the widening of US 19E in Yancey County and request for information on potential environmental impacts of the project. Yancey County appreciates the opportunity to comment on the environmental implications of this project.

At the beginning of the project, with the intersection of SR 1336 (Jack's Creek Road) and US 19E, the Cane River is adjacent to the project area. This river is home to native trout and various other aquatic life. Normal DOT precautions regarding sedimentation into the river must be strictly followed. In addition, the project area is not in a watershed.

In addition to Cane River, numerous small creeks and streams are located throughout the project area. Streams are the only environmental aspects to note. There will obviously be a need for some tree removal but should be minimal. No special permits will be required from Yancey County. The county does not have county-wide zoning, however, the Town of Burnsville does.

Yancey County officials want to stress the importance that there be some sort of median greenway throughout the project area. The proposed median through the Burnsville section could benefit from ornamental shrubbery. This would add a natural slowing effect for the speed of traffic.

If the County Manager, Mr. Kelly Pipes, or I may be of further assistance, please call.

Sincerely,

Nathan R. Bennett,  
County Planner



RESOLUTION IN FAVOR OF WIDENING  
U. S. HIGHWAY 19E THROUGH YANCEY COUNTY

---

WHEREAS, U. S. Highway 19-E currently traverses Yancey County for a distance of approximately twenty (20) miles, from its Westernmost boundary with Madison County to its Easternmost boundary with Mitchell County; and

WHEREAS, at this point in time, no portion of U.S. Highway 19-E as it traverses Yancey County has been widened to more than two lanes of traffic, with the exception of certain turning lanes near school grounds and in the immediate vicinity of the Town of Burnsville; and

WHEREAS, due to the increased number of motor vehicles traveling within Yancey County, and particularly the congestion of traffic at certain times of the day caused by the great number of people traveling to and from their homes and places of employment, it has become imperative that Highway 19-E be widened as soon as possible to accommodate four lanes of traffic from the bridge at Cane River on the West side of Burnsville, to the intersection of Highway 80 South on the East side of Burnsville; and

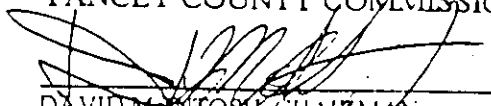
WHEREAS, widening Highway 19-E from the Cane River Bridge to Highway 80 South would alleviate the congestion caused by the number of cars traveling East toward Burnsville Elementary School, East Yancey Middle School, and jobs located in Mitchell and McDowell Counties; and would also alleviate the congestion caused by the number of cars traveling West toward Cane River Middle School, Mountain Heritage High School, and jobs located in Madison and Buncombe Counties; and


WHEREAS, the safety of motorists is of greater importance than is the issue of traffic congestion. Due to the greater volume of traffic using Highway 19-E, the number of motor vehicle accidents requiring ambulance and other emergency services has increased by more than twenty percent (20%) during the past two years, with many of these accidents being fatal head-on collisions. Widening Highway-19E to four lanes would contribute greatly to the safety of motorists in Yancey County.

NOW, THEREFORE, be it RESOLVED by the Board of County Commissioners that they support fully any plans to widen Highway 19-E to four-lane status, and particularly request that the North Carolina Division of Highways consider undertaking a plan as soon as feasible to widen said Highway 19-E for a distance of approximately ten (10) miles from the Cane River Bridge located West of the town of Burnsville to the intersection of Highway 80 South located East of the town of Burnsville.

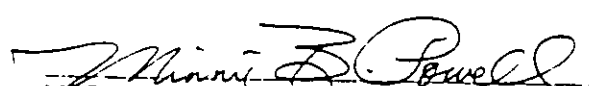
ADOPTED this the 13<sup>th</sup> day of May, 1997.

YANCEY COUNTY COMMISSIONERS

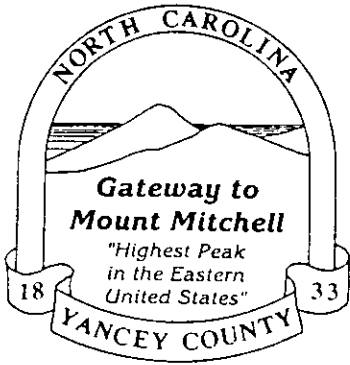
  
DAVID MENTOSH, CHAIRMAN

  
JOHN RENFRO, MEMBER

  
RANDY OLLIS, MEMBER

  
MINNIE B. POWELL, CLERK TO THE BOARD

COUNTY SEAL



David R. McIntosh  
Chairman

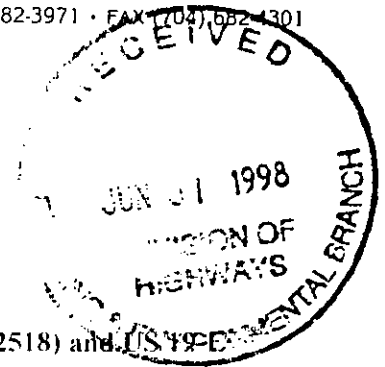
Randy Ollis  
Commissioner

John Renfro  
Commissioner

## Office of County Commissioners

County Courthouse, Room 11 • Burnsville, NC 28714 • PHONE (704) 682-3971 • FAX (704) 682-4301

May 21, 1998



Mr. H. Franklin Vick, P.E.  
Planning and Environmental Branch  
NC Department of Transportation  
PO Box 25201  
Raleigh, NC 27611-5201

RE: US 19 Improvements from future I-26 to SR 1336 at Cane River (TIP R-2518) and  
Improvements from SR 1336 to SR 1186 (TIP R-2519A)

Dear Mr. Vick:

I am writing on behalf of the Yancey County Board of Commissioners regarding the future improvements to US 19 in Yancey County. The Yancey County Board of Commissioners would like to notify the North Carolina Department of Transportation of its full support for the planned improvements to US 19 through Yancey County and the Town of Burnsville.

It is imperative that every precaution must be taken in maintaining the beautiful town and county in which we live. The Board of Commissioners desires that every effort be utilized by the NCDOT in providing an attractive, scenic, and safe roadway throughout Yancey County.

This letter will be followed by another that will highlight key areas that should be addressed in designing this improved facility. The Commissioners fully support this effort by the NCDOT in making these much needed improvements and at the same time protecting and enhancing the integrity of our beautiful county and town.

Please keep me informed as you progress through the planning process. The Commissioners and county officials want to be involved in this effort. If you need further information do not hesitate to contact the Yancey County Manager, Mr. Kelly Pipes, the County Planner, Mr. Nathan Bennett, or myself. Thank you for your efforts in improving the transportation needs of Yancey County.

Cordially,

David R. McIntosh,  
Chairman

Cc: Board of Commissioners  
Town of Burnsville, Mayor and Town Council  
Gordon Myers, NCDOT Division 13 Board Member  
Norris Tolson, Secretary, NCDOT  
Lubin Prevatt, Assistant Manager, NCDOT Planning and Environmental  
Richard Davis, Assistant Manager, NCDOT Planning and Environmental

DRM/nrb





David R. McIntosh  
Chairman

Randy Ollis  
Commissioner

John Renfro  
Commissioner

## Office of County Commissioners

County Courthouse, Room 11 • Burnsville, NC 28714 • PHONE (704) 682-3971 • FAX (704) 682-4301

May 21, 1998



Mr. H. Franklin Vick, P.E.  
Planning and Environmental Branch  
NC Department of Transportation  
PO Box 25201  
Raleigh, NC 27611-5201

**RE: US 19-E Improvements from SR 1336 to SR 1186 (TIP R-2519A) and US 19 Improvements from future I-26 to SR 1336 at Cane River (TIP R-2518)**

Dear Mr. Vick:

Thank you for allowing the Yancey County Board of Commissioners to provide input regarding the planned improvements to US 19 through Yancey County and the Town of Burnsville. It is imperative that every precaution be taken in maintaining the beautiful town and county in which we live. With that in mind, the Board of Commissioners desires that every effort be utilized by the North Carolina Department of Transportation in providing an attractive, scenic, and safe roadway throughout Yancey County.

As the planning for the improved roadway is underway, the Board of Commissioners would like to stress that these improvements should beautify and enhance the environment throughout the project area. After careful consideration of what the Commissioners, county officials, and citizens desire, we would like to make recommendations regarding the following aspects: median cross section (landscaping), curb and guttering with sidewalks, pedestrian overpass, bicycle path, and street illumination.

### MEDIAN

First of all, we would like to stress the importance of providing an aesthetically pleasing cross section through the corporate limits of the Town of Burnsville. This section of roadway is not more than 1.5 miles in length and it is absolutely critical that this section be given significant care and attention. Keep in mind the growth of tourism in Yancey County and the impact beauty plays in developing that role.

This is a momentous opportunity for the town and county and we want to ensure that the finished product is something we can be proud of for years to come. We have seen many examples of DOT's work which would be a perfect fit for this section of roadway. The closest example to us is in Asheville; Broadway Avenue by UNCA toward downtown Asheville. This is a marvelous stretch of roadway; four-lanes complete with a narrow grassed median with trees, shrubs and curb and guttering. This is a terrific example of what US 19-E through Burnsville can be and is certainly what the section should be.

### **SIDEWALKS, CURB AND GUTTERING, BICYCLE PATH**

There is substantial pedestrian and bicycle use on US 19-E within the project area. There is a tremendous need to include sidewalks with curb and guttering throughout the section within the Burnsville corporate limits. There are three major shopping centers, numerous restaurants, businesses, as well as residential neighborhoods along the corridor that receive pedestrian traffic. To improve the safety of all who will use this roadway, sidewalks throughout the corporate limits are necessary. We want to emphasize and promote the downtown and greater Burnsville area as a viable community. With the assistance of the NCDOT this can become a reality.

Bicycle usage is also significant and the need for extra width on roadway lanes or paved shoulders for cyclists is important. Wider lanes or paved shoulders for bicycle traffic will provide a great opportunity for cyclists to "share the road" with motor vehicles.

### **PEDESTRIAN WALKWAY FROM DOWNTOWN OVER 19-E**

Currently, crossing US 19-E from the downtown area to the Yancey Commons Shopping Center is extremely dangerous. This is located at the intersection of US 19-E and South Main Street. The expansion of the facility to more lanes will obviously create greater danger to pedestrians (primarily elderly and children) trying to cross the busy highway. The Commissioners would like to see an attractive pedestrian overpass or a subway constructed to facilitate pedestrian traffic from downtown to this primary shopping center.

This pedestrian facility would be used a great deal on a regular basis and would be extremely beneficial during the annual Mount Mitchell Crafts Fair and other events that are held on the Town Square in downtown Burnsville. There are thousands of visitors from throughout the southeast and nation who attend the crafts fair and other events. Again, we would stress the importance of making our community more pedestrian friendly.

### **STREET ILLUMINATION**

Street illumination is a concern that has been expressed to Board members. The section within the corporate limits, if illuminated, would improve visibility and increase safety.



☒ North Carolina Wildlife Resources Commission ☒

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391  
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Melba McGee, Office of Legislative and Intergovernmental Affairs  
Department of Environment and Natural Resources

FROM: Mark S. Davis, Mountain Region Coordinator *Mark S. Davis*  
Habitat Conservation Program

DATE: March 26, 1998

SUBJECT: State Clearinghouse Project No. 98-0553. North Carolina Department of Transportation (NCDOT) proposed improvements to US 19E, from SR 1336 (Jack's Creek Road) to SR 1186, Burnsville, Yancey County, State Project No. 6.909001T, TIP No. R-2519A.

This memorandum responds to a request by you for our comments regarding impacts on fish and wildlife resources resulting from the subject project. The North Carolina Wildlife Resources Commission (NCWRC) has reviewed the proposed project, and our comments are provided in accordance with provisions of the North Carolina Environmental Policy Act (G.S. 113A-1 et seq., as amended; 1NCAC 25).

The proposed work involves the widening of the existing two-lane section of US 19E to a multi-lane facility from SR 1336 to SR 1186 in Yancey County, a distance of 6.6 miles. In addition, a 0.6 mile extension from SR 1186 eastward to NC 80 is being considered. The NCWRC prefers improvement of existing roadways over construction of new highway corridors and supports such an alternative for this project. Primary impacts to fish and wildlife resources involve direct loss of wetland and upland habitat, sedimentation of aquatic habitat from highway construction, and fragmentation of upland forested habitat in the project area. Potential impacts to rare, threatened, or endangered species are a major concern. Species such as the Appalachian elktoe (*Alasmidonta raveneliana*) and striped shiner (*Luxilus chrysocephalus*) are known to occur in the Bald Creek and Cane River areas of the project. Other species such as the blotchside logperch (*Percina burtoni*) and the olive darter (*Percina squamata*) are known to occur in the South Toe River downstream of US 19E. Small populations of rainbow trout also exist in Bald Creek and the Cane River. The South Toe River supports brown trout, smallmouth bass, and rock bass. In addition to direct habitat loss from highway construction, secondary habitat loss will occur as commercial development follows improvement of the highway corridor. Secondary project impacts should be addressed in the environmental document.

In addition to the specific concerns mentioned above, the NCWRC offers the following list of general recommendations and informational needs:

1. Description of fishery and wildlife resources within the project area, including a listing of federally or state designated threatened, endangered, or special concern species. When practicable, potential borrow areas to be used for project construction should be included in the inventories. A listing of designated animal and plant species can be developed through consultation with:  

The Natural Heritage Program  
N.C. Division of Parks and Recreation  
P.O. Box 27687  
Raleigh, N.C. 27611  
(919) 715-8703
2. Description of any streams or wetlands affected by the project.
3. Project map identifying wetland areas. Identification of wetlands may be accomplished through coordination with the U.S. Army Corps of Engineers (COE). If the COE is not consulted, the person delineating wetlands should be identified and criteria listed.
4. Description of project activities that will occur within wetlands, such as fill or channel alteration. Acreages of wetlands impacted by alternative project designs should be listed.
5. Description of project site and non-wetland vegetative communities.
6. The extent to which the project will result in loss, degradation, or fragmentation of wildlife habitat (wetlands and uplands).
7. Any measures proposed to avoid or reduce impacts of the project or to mitigate unavoidable habitat losses.
8. A discussion of the probable impacts on natural resources which will result from secondary development facilitated by the improved highway facility.

It is the policy of the NCWRC that impacts to wetlands be avoided. Non-wetland and non-riparian alternatives should be examined during design. Where wetland losses are unavoidable, the NCWRC will recommend mitigation of the losses. Because Yancey County is recognized as a "trout water county" by the COE, the NCWRC will review any nationwide or general 404 permits for this project.

Thank you for the opportunity to provide input in the planning stages for this project. If I can further assist your office, please contact me at (704) 452-2546 or Mr. Chris Goudreau at (828) 652-4360.

cc: Mr. H. Franklin Vick, P.E., NCDOT  
Mr. Mark Cantrell, U. S. Fish and Wildlife Service  
Mr. David Cox, Highway Coordinator, NCWRC  
Mr. Chris Goudreau, District 8 Biologist, NCWRC

**INTERGOVERNMENTAL REVIEW – PROJECT COMMENTS**

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input checked="" type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit- whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input checked="" type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100, 2Q.0300, 2H.0600)	N/A	60 days
<input type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900		
<input type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.	N/A	60 days (90 days)
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (land Quality Sect.) At least 30 days before beginning activity. A fee of \$30 for the first acre and \$2000 for each additional acre or part must accompany the plan.		20 days (30 days)
<input type="checkbox"/>	The Sedimentation Pollution control Act of 1973 must be addressed with respect to the referenced Local Ordinance.		(30 days)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR. Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input checked="" type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF SOIL AND WATER CONSERVATION



MEMORANDUM

March 17, 1998

TO: Melba McGee

FROM: David Harrison *DCH*

SUBJECT: US 19E, From SR 1336 (Jack's Creek Road) to SR 1186,  
Burnsville. Yancey County -- Project #98-0553.

The proposed project involves widening the existing two-lane facility to a multi-lane facility for a distance of approximately 6.6 miles. A 0.6 mile extension from SR 1186 to NC 80 is also being considered.

The Environmental Assessment should include information on the amount and location of Prime or Important Farmland that will be impacted. Alternatives that reduce impacts to Prime or Important Farmland soils are preferred. A listing of these soils in North Carolina is available through the MLRA Team Leader, North Carolina State Office, Natural Resources Conservation Service, USDA, 4405 Bland Road, Suite 205, Raleigh, N.C. 27609, (919) 873-2905.

The Prime Farmland designation is not limited to land currently being cultivated. It is intended to identify the best soils that can be used as farmland without regard to the present vegetative cover. Only areas that are already built-up or within city limits are exempted from consideration.

DH/tl

NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF PARKS AND RECREATION



JAMES B. HUNT JR.  
GOVERNOR

WAYNE MCDEVITT  
SECRETARY

DR. PHILIP K. MCKNELLY  
DIRECTOR

April 1, 1998

MEMORANDUM

TO: Melba McGee

FROM: Stephen Hall 517

SUBJECT: Scoping -- US 19E Improvements, Burnsville to Micaville

REFERENCE: 98-0553

The Natural Heritage Program database contains records for striped shiner (*Luxilus chrysocephalus*), state listed as Threatened, from the reach of the Cane next to the western terminus of the proposed project. This species, and other aquatic organisms, are adversely affected by siltation. We therefore recommend that all best management practices be followed for the control of erosion and sedimentation, particularly near the Cane River or any of its tributary streams. We further recommend that all concrete used in this project be fully cured before being allowed to come into contact with the water.

State of North Carolina  
Department of Environment  
and Natural Resources  
Division of Water Quality

James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary  
A. Preston Howard, Jr., P.E., Director



April 23, 1998

MEMORANDUM

TO: Melba McGee, DEHNR SEPA Coordinator  
FROM: Mary Kiesau, DWQ SEPA Coordinator *MK*  
RE: Comments on DOT Scoping, DENR# 98-0553, DWQ# 12000  
US 19E Widening, from SR 1336 to SR 1186  
Yancey County

The Division of Water Quality (DWQ) requests that the following topics be discussed in the EA document:

- A. Identify the streams potentially impacted by the project. The current stream classifications and use support ratings for these streams should be included. This information is available from DWQ through the following contacts:  
  
Liz Kovasckitz - Classifications - 919-733-5083, ext. 572  
Carol Metz - Use Support Ratings - 919-733-5083, ext. 562
- B. Identify the linear feet of stream channelization/relocations. If the original stream banks were vegetated, it is requested that the channelized/relocated stream banks be revegetated.
- C. Identify the number and locations of all proposed stream crossings.
- D. Will permanent spill catch basins be utilized? DWQ requests that these catch basins be placed at all water supply stream crossings. Identify the responsible party for maintenance.
- E. Identify the stormwater controls (permanent and temporary) that will be used.
- F. Please ensure that sediment and erosion control measures are not placed in wetlands.
- G. Wetland Impacts
  - i) Identify the federal manual used for identifying and delineating jurisdictional wetlands.
  - ii) Have wetlands been avoided as much as possible?
  - iii) Have wetland impacts been minimized?
  - iv) Mitigation measures to compensate for habitat losses.
  - v) Wetland impacts by plant communities affected.



- vi) Quality of wetlands impacted.
  - vii) Total wetland impacts.
  - viii) List the 401 General Certification numbers requested from DWQ.
- H. Borrow/waste areas should avoid wetlands to the maximum extent practicable. Prior to the approval of any borrow/waste site in a wetland, the contractor shall obtain a 401 Certification from DWQ.
- I. Please provide a conceptual wetland mitigation plan to help the environmental review. The mitigation plan may state the following:
- 1. Compensatory mitigation will be considered only after wetland impacts have been avoided and minimized to the maximum extent possible.
  - 2. On-site, in-kind mitigation is the preferred method of mitigation. In-kind mitigation within the same watershed is preferred over out-of-kind mitigation.
  - 3. Mitigation should be in the following order: restoration, creation, enhancement, and lastly preservation.
- J. The EA should discuss in detail project alternatives that alleviate traffic problems without road widening, such as mass transit and traffic congestion management techniques.
- K. The North Carolina Environmental Policy Act (SEPA) requires that the EA for this project evaluate all direct, indirect and cumulative impacts on the environment. It is the relationship between transportation projects and their impacts to changes in land uses that the EA should focus its indirect impacts section. This section of the EA should discuss the known relationship between road widening and inducements for urban development along the project right-of-way. The EA must further address the long-term environmental impacts of this road project, including the potential indirect impacts of the induced urban development on all aspects of the environment. To address this issue, the EA should answer the following questions -
- i) What is the estimated traffic projections for the project corridor (and what land use figures were used in this estimate)?
  - ii) Will this project provide additional traffic handling capacity and/or improved traffic safety and control features to existing roads, such as turn lanes and traffic signs and signals?
  - iii) Are any cross streets in the project area projected to see additional traffic flows due to the proposed project? If so, how will land uses along these secondary roads be influenced by the project?
  - iv) How does this project comply with local governments' land use and metropolitan transportation plans?
  - v) Will this project provide new or improved access to vacant parcels of land in the road right-of-way?
  - vi) Will these once less-developable parcels become more likely to develop into urban uses with the provision of public road access, adequate road frontage or traffic safety and control features from the project?
  - vii) Will this widened road serve as an inducement to additional urban development in the project right-of-way, given the provision of additional traffic handling capacities, and the existence (or likelihood of existence in the future), of other essential public infrastructure improvements (e.g. sewer, water and electricity) in the area? To what degree will this widening encourage further urbanization of this corridor?

- viii) If inducement for urban development is predicted as a result of the road improvements, these impacts should be defined in the EA and should be considered indirect impacts of the transportation project.
- ix) What measures have DOT and the local governments in the project area agreed to in order to effectively manage development potential along the road right-of-way to reduce the potential indirect land use changes and environmental impacts?
- x) What environmental resources could be affected by the identified urban development that will be allowed or encouraged by the road improvements? What degree of impact to these resources will be anticipated? What impacts may be significant in nature? Specific to the regulatory authority of DWQ, the EA should discuss the types and severity of point and non-point source water quality impacts anticipated from this additional development.
- xi) What regulations are currently in place at the local government level that would address these significant potential indirect environmental impacts?
- xii) The EA should discuss these impacts (and others that are applicable to the individual project), and quantify them when possible. In addition to reporting on the types and significance of each direct and indirect impact of the project, the EA should define how DOT (with their authorities and resources) and affected local governments (with land use control in the project area) are planning to avoid, reduce or mitigate these impacts to a level of insignificance. The SEPA rules and statutes require that prior to issuance of a FONSI, any identified significant environmental impacts in an EA be avoided, minimized or mitigated to a level less than significant. Therefore, the EA should document how the indirect effects of urban growth are not going to significantly impact water quality and all other environmental concerns resulting from this proposed project, or a FONSI should not be issued.

- L. The following discussion is meant to help explain the direct and indirect impacts issue in terms of water quality. All of these issues, as applicable to the specifics of the project, should be discussed in a DOT EA:

In evaluating the direct water quality effects of a transportation improvement project, typical concerns involve wetland, aquatic habitat and stream impacts from construction, the current quality of the waters and ecosystem of the streams and rivers to be affected by construction activities, the potential effect of spills and run-off from the road on water quality, how that might effect overall stream health and the other users of that water, etc. An indirect impact of a transportation project may include increases in development in the vicinity of the road widening, if the project will be providing new or improved access to future growth areas that are currently undeveloped. One typical impact of increased development might include increasing amounts of urban stormwater in the project service area. Land-disturbing activities associated with road construction and land development may also result in increased stream sedimentation. And over the longer term, development features such as increased impervious surface areas and stormwater drainage systems will only exacerbate water quality problems. Predictable impacts could include more rapid and erosive stream flow in the creek, loss of aquatic habitat and more efficient delivery of pollutants (such as fertilizers, pesticides, sediment and automobile byproducts) to the stream. These impacts could be of special concern if the project is proposed in an area with state and federally endangered species or if the waters are high quality or nutrient sensitive.

- M. DWQ is also concerned about secondary wetland impacts. For DWQ to concur with an alternative in the mountains or the piedmont, DOT will need to commit to full control of access to the wetland parcels or DOT to purchase these parcels for wetland mitigation.
- N. Please note that a 401 Water Quality Certification cannot be issued until the conditions of NCAC 15A: 01C.0402 (Limitations on Actions During NCEPA Process) are met. This regulation prevents DWQ from issuing the 401 Certification until a FONSI or Record of Decision (ROD) (for and EIS) has been issued by the Department requiring the document. It is recommended that if the 401 Certification application is submitted for review prior to the sign off, the applicant states that the 401 should not be issued until the applicant informs DWQ that the FONSI or ROD has been signed off by the Department.

Written concurrence of 401 Water Quality Certification may be required for this project. Applications requesting coverage under our General Certification 14 or General Permit 31 (with wetland impact) will require written concurrence. Please be aware that 401 Certification may be denied if wetland or water impacts have not been avoided and minimized to the maximum extent practicable.

Please have the applicant call Cyndi Bell at 919-733-1786 if they have any questions on these comments.

*mek*  
*mts*:980553; US 19E Scoping

cc: Cyndi Bell - DWQ- Wetlands/401 Unit (DOT)



## North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary

Division of Archives and History  
Jeffrey J. Crow, Director

December 12, 1997

### MEMORANDUM

TO: H. Franklin Vick, P.E., Manager  
Planning and Environmental Branch  
Division of Highways  
Department of Transportation

FROM: David Brook *David Brook*  
Deputy State Historic Preservation Officer

SUBJECT: US 19 from future I-26 to SR 1336,  
Madison and Yancey Counties, R-2518,  
State Project No. 6.869005T, 98-E-4220-  
0316

We have received information concerning the above project from the State Clearinghouse.

We have conducted a search of our maps and files and have located the following structures of historical or architectural importance within the general area of the project:

Wilkes Hensley House, north side of NC 19, 0.2 mile east of junction with SR 1391, Bald Creek

Edwards House, intersection of SR 1391 and NC 19, Bald Creek

House, north side of NC 19, 0.1 mile west of junction with SR 1134, Bald Creek vicinity

House and Barn, north side of NC 19 at junction with SR 1394, Swiss vicinity

Bald Creek High School, west side of SR 1134 at junction with NC 19, Bald Creek

C. W. Burton House, south side of NC 19, 0.1 mile west of junction with SR 1135 (behind Bald Creek Elementary School), Bald Creek

There are no National Register-listed properties within the project's area of potential effect.



H. F. Vick  
December 12, 1997, Page 2

There are several known archaeological sites located adjacent to US 19 in Madison County. There are no known recorded archaeological sites within the project boundaries. However, the project area has never been systematically surveyed to determine the location or significance of archaeological resources. We also note that an archaeological survey was conducted along the US 19 route in Yancey County in 1981. We recommend that the North Carolina Department of Transportation and State Historic Preservation Office archaeologists reevaluate this survey to determine if new survey work is required in Yancey County.

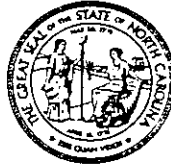
We recommend that a comprehensive survey be conducted by an experienced archaeologist to identify the presence and significance of archaeological remains that may be damaged or destroyed by the proposed project. Potential effects on unknown resources should be assessed prior to the initiation of construction activities.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:slw

cc: B. Church  
T. Padgett  
Army Corps of Engineers, Asheville  
State Clearinghouse



## North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary  
April 6, 1998

Division of Archives and History  
Jeffrey J. Crow, Director

### MEMORANDUM

TO: H. Franklin Vick, P.E., Manager  
Planning and Environmental Branch  
Division of Highways  
Department of Transportation

FROM: David Brook *David Brook*  
Deputy State Historic Preservation Officer

SUBJECT: Improve US 19E from SR 1336 to SR  
1186, Yancey County, R-2519A, State  
Project 6.909001T, 98-E-4220-0553

We have received information concerning the above project from the State Clearinghouse.

We have conducted a search of our maps and files and have located the following structure of historical or architectural importance within the general area of the project:

House (YC 59), west side of SR 1142, 0.3 mile south of junction with US 19E, Burnsville vicinity.

In addition, four properties in Burnsville are listed in the National Register of Historic Places:

(former) Citizens Bank Building, Town Square, Burnsville

John Wesley McElroy House, 11 Academy House, Burnsville

Nu-Wray Inn, Town Square, Burnsville

Yancey County Courthouse, Burnsville

While we note that this project is to be state funded, the potential for federal permits may require further consultation and compliance with Section 106 of the National Historic Preservation Act.

There are no known archaeological sites within the proposed project area. Based on our present knowledge of the area, it is unlikely that any archaeological resources which may be eligible for inclusion in the National Register of Historic

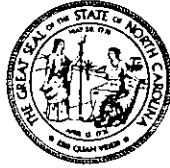


Places will be affected by the project construction. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

These comments are made in accord with G.S. 121-12(a) and Executive Order XVI. If you have any questions regarding them, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:slw

cc: ✓ State Clearinghouse  
B. Church  
T. Padgett



North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor
Betty Ray McCain, Secretary
April 6, 1998

Division of Archives and History
Jeffrey J. Crow, Director

MEMORANDUM

TO: H. Franklin Vick, P.E., Manager
Planning and Environmental Branch
Division of Highways
Department of Transportation
FROM: David Brook
Deputy State Historic Preservation Officer
SUBJECT: Improve US 19E from SR 1336 to SR
1186, Yancey County, R-2519A, State
Project 6.909001T, 98-E-4220-0553



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John Wesley McElroy House, 11 Academy House, Burnsville
Nu-Wray Inn, Town Square, Burnsville
Yancey County Courthouse, Burnsville

While we note that this project is to be state funded, the potential for federal permits may require further consultation and compliance with Section 106 of the National Historic Preservation Act.

There are no known archaeological sites within the proposed project area. Based on our present knowledge of the area, it is unlikely that any archaeological resources which may be eligible for inclusion in the National Register of Historic





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DB:slw

cc: State Clearinghouse  
B. Church  
T. Padgett



North Carolina Department of Cultural Resources

State Historic Preservation Office

David L. S. Brook, Administrator

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary

Division of Archives and History  
Jeffrey J. Crow, Director

April 4, 2000

MEMORANDUM

TO: William D. Gilmore, P.E., Manager  
Project Development and Environmental Analysis Branch  
Division of Highways  
Department of Transportation

FROM: David Brook *David Brook*  
Deputy State Historic Preservation Officer

SUBJECT: US 19 from US 23 to SR 1336 at Cane River, R-2518, Madison, Yancey County,  
GS-97-0075

Thank you for your letter of January 21, 2000, transmitting the archaeological survey report by Megan O'Connell, Nora Sheehan, and Lee Tippett concerning the above project.

We apologize for the delay in our review.

This is a very good report. During the survey, twelve new sites and nine previously recorded sites were evaluated. Fifteen of the sites are judged to be not eligible for listing in the National Register of Historic Places. Six of the sites are recommended for further evaluation to determine their National Register eligibility: 31MD351/351, 31MD353/353, 31MD355, 31MD359, 31MD360, and 31YC43. We concur with these recommendations. We request that a map be added to the report that clearly shows the site and shovel test locations.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:scb

cc: Tom Padgett

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount St., Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919) 733-4763 • 733-8653
ARCHAEOLOGY	421 N. Blount St., Raleigh NC	4619 Mail Service Center, Raleigh NC 27699-4619	(919) 733-7342 • 715-2671
RESTORATION	515 N. Blount St., Raleigh NC	4613 Mail Service Center, Raleigh NC 27699-4613	(919) 733-6547 • 715-4801
SURVEY & PLANNING	515 N. Blount St., Raleigh NC	4618 Mail Service Center, Raleigh NC 27699-4618	(919) 733-6545 • 715-4801



North Carolina Department of Cultural Resources

State Historic Preservation Office

David L. S. Brook, Administrator

James B. Hunt Jr., Governor
Betty Ray McCain, Secretary

Division of Archives and History
Jeffrey J. Crow, Director

June 9, 2000

MEMORANDUM

TO: William D. Gilmore, P.E., Manager
Project Development and Environmental Analysis Branch
Division of Highways
Department of Transportation

FROM: David Brook
Deputy State Historic Preservation Officer

SUBJECT: Widening of US 19E from SR 1336 to SR 1186 with a Proposed Extension from SR 1186 to NC 80, TIP No. R-2519A. ER 00-9416

Thank you for your letter of April 4, 2000, transmitting the survey report by Debbie Curtis Toole of The Jaeger Company concerning the above project.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following properties are eligible for the National Register of Historic Places under the criterion cited:

Horton Hill Cemetery is eligible for listing in the National Register of Historic Places under Criterion A for ethnic heritage as it represents the establishment of African-American communities in the period following the Civil War in Yancey County. The Cemetery is also eligible under Criterion Consideration D as it derives its primary significance from association with historic events, primarily the settlement of the area by an African-American community of which few other resources remain. We concur with the boundaries as noted in page 25 of the report.

R.C. & Zora Hise House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics on an early twentieth-century Craftsman bungalow in Yancey County. We concur with the boundaries as noted on page 28 of the report.

Table with 4 columns: Administration, Location, Mailing Address, Telephone/Fax. Rows include ADMINISTRATION, ARCHAEOLOGY, RESTORATION, and SURVEY & PLANNING.

page 2

Micaville Historic District is eligible for listing in the National Register of Historic Places under Criterion A for Community Planning and Development and for Commerce. The district represents the establishment of Micaville in the late nineteenth century as a mining town and the town's subsequent growth and prosperity as a mining and lumbering center after the coming of the railroad in 1910-1911. The district is also eligible under Criterion C for Architecture as a collection of early to mid-twentieth century commercial and residential structures constructed during the town's most significant period of growth. We concur with the boundaries as noted on page 31 of the report.

The following properties were determined not eligible for listing in the National Register of Historic Places:

Higgins Farm at Riverside  
Everett Lee & Bessie Austin Ball House  
R.W. Wilson House  
Windom Store  
Laws-Hall House

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:scb

cc: B. Church  
N. Graf



North Carolina Department of Cultural Resources

State Historic Preservation Office

David L. S. Brook, Administrator

James B. Hunt Jr., Governor
Betty Ray McCain, Secretary

Division of Archives and History
Jeffrey J. Crow, Director

June 9, 2000

MEMORANDUM

TO: William D. Gilmore, P.E., Manager
Project Development and Environmental Analysis Branch
Division of Highways
Department of Transportation

FROM: David Brook (signature)
Deputy State Historic Preservation Officer

SUBJECT: Widening of US 19 from Future I-26 (Existing US 19-23) in Madison County to SR 1336 at the Cane River in Yancey County. TIP No. R-2519 & R-2518, ER 00-8698

Thank you for your letter of April 4, 2000, transmitting the survey report by Debbie Curtis Toole of The Jaeger Company concerning the above project.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following eligible for the National Register of Historic Places under the criterion cited:

Porter & Ollie Briggs Ray House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of and early Craftsman bungalow in rural east Madison County. We concur with the boundaries as noted in page 33 of the report.

Otto Buckner House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of and early Craftsman bungalow in rural east Madison County. We concur with the boundaries as noted in page 36 of the report.

Sam Byrd House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it is representative of the application of the asymmetry and varied wall surfaces of the Queen Anne style to the traditional I-house form. We concur with the boundaries as noted in page 40 of the report.

Bald Creek School & Gymnasium is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it is representative of the types of civic construction projects built by the federal government's Works Progress Administration (WPA) program during the 1930s. We concur with the boundaries as noted on page 43 of the report.

Table with 4 columns: Location, Mailing Address, Telephone/Fax, and a row of administrative categories (ADMINISTRATION, ARCHAEOLOGY, RESTORATION, SURVEY & PLANNING).

page 2

Captain E.E. Neill House is eligible for listing in the National Register of Historic Places under Criterion C for Architecture as it embodies all of the distinctive characteristics of a two-story single-pile plan house in the region. We concur with the boundaries as noted in page 46 of the report.

Wilkes Hensley House is eligible for listing in the National Register of Historic Places under Criterion A for Agriculture as it embodies all of the distinctive characteristics on a late nineteenth to early twentieth-century agricultural complex in Yancey County. We concur with the boundaries as noted on page 49 of the report.

The following properties were determined not eligible for listing in the National Register of Historic Places:

Burley Tobacco Barn, No. 6  
William E. Buckner House, No. 23  
Bacchus & Evelyn McPeters House, No. 28  
House, No. 62  
C.W. Burton House, No. 71  
Edwards House, No. 82  
Burley Tobacco Barn, No. 86

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:scb

cc: B. Church  
N. Graf

going to significantly impact the environment, including water quality. If significant impacts are unresolved, a FONSI cannot be issued and an Environmental Impact Statement (EIS) should be prepared.

- J. The following discussion is meant to help explain the direct and indirect impacts issue in terms of water quality. All of these issues, as applicable to the specifics of the project, should be discussed in a DOT environmental document:

In evaluating the direct water quality effects of a transportation improvement project, typical concerns involve wetland, aquatic habitat and stream impacts from construction, the current quality of the waters and ecosystem of the streams and rivers to be affected by construction activities, the potential effect of spills and run-off from the road on water quality, how that might effect overall stream health and the other users of that water, etc.

An indirect impact analysis of a transportation project should evaluate increases in development in the vicinity of the road project if the project will be providing new or improved access to future growth areas that are currently undeveloped. Indirect water quality impacts of induced development might include: increases in ground and surface water withdrawals to supply water for development; increases in wastewater collection and treatment capacity, potentially including increases in surface water discharges; and, increases in amounts of urban stormwater in the project service area and along connector streets that experience increases in land development due to the project. Land-disturbing activities associated with road construction and land development may also result in increased stream sedimentation and secondary wetland impacts. And over the longer term, development features such as increased impervious surface areas and stormwater drainage systems will only exacerbate water quality problems. Predictable impacts could include more rapid and erosive stream flow in creeks and streams, loss of aquatic habitat and wetlands and more efficient delivery of pollutants (such as fertilizers, pesticides, sediment and automobile byproducts) to surface waters. These impacts could be of special concern if the project is proposed in an area with state and federally endangered species or if the waters are high quality, nutrient sensitive, or used for public water supply.

- K. Please note that a 401 Water Quality Certification cannot be issued until the conditions of NCAC 15A: 01C.0402 (Limitations on Actions During NCEPA Process) are met. This regulation prevents DWQ from issuing the 401 Certification until a FONSI or Record of Decision (ROD) (for and EIS) has been issued by the Department requiring the document. It is recommended that if the 401 Certification application is submitted for review prior to the sign off, the applicant states that the 401 should **not** be issued until the applicant informs DWQ that the FONSI or ROD has been signed off by the Department.

Written concurrence of 401 Water Quality Certification may be required for this project. Applications requesting coverage under our General Certification 14 or General Permit 31 (with wetland impact) will require written concurrence. Please be aware that 401 Certification may be denied if wetland or water impacts have not been avoided and minimized to the maximum extent practicable.

98-0316 DOT Scoping  
December 1, 1997  
Page 5

Please have the applicant give me a call at 919-733-5083, ext. 567 if they have any questions on these comments.

*mls:\980316 DOT Scoping- widening*

cc: Cyndi Bell - DWQ - Non-Discharge Branch, Wetlands/401 Unit



State of North Carolina  
Department of Environment,  
Health and Natural Resources  
Division of Soil and Water Conservation



James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary  
C. Dewey Botts, Director

MEMORANDUM

November 10, 1997

TO: Melba McGee

FROM: David Harrison

A handwritten signature in dark ink, appearing to read 'DH' with a flourish.

SUBJECT: Improvements for US 19 from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, NC

The proposed project involves improving the capacity of the existing road and accessibility within the region. Widening of the road and some relocation of segments will be considered.

The Environmental Assessment should include information on the amount and location of Prime or Important Farmland that will be impacted. Alternatives that reduce impacts to Prime or Important Farmland soils are preferred. A listing of these soils in North Carolina is available through the MLRA Team Leader, North Carolina State Office, Natural Resources Conservation Service, USDA, 4405 Bland Road, Suite 205, Raleigh, N.C. 27609, (919) 873-2905.


The Prime Farmland designation is not limited to land currently being cultivated. It is intended to identify the best soils that can be used as farmland without regard to the present vegetative cover. Only areas that are already built-up or within city limits are exempted from consideration.

DH/tl

November 10, 1997  
Clayton, NC

**MEMORANDUM**

TO: Melba McGee, Office of Leg. Affairs

FROM: Don H. Robbins, Staff Forester 

SUBJECT: DOT EA Scoping for Improvements to US 19, From Future I-26 to SR 1336 at Cane River in Madison and Yancey Counties

PROJECT: #98-0316 and TIP #R-2518

DUE DATE: 12-1-97

We have reviewed the above subject scoping document of 10-30-97 and have the following comments concerning potential impacts to woodland:

Woodland will be impacted by this project.

Type of Information that we would like to see in this Environmental Document to Address Impacts to Woodland - The following should be addressed for each alternative or project.

1. The total forest land acreage by types and merchantability aspects that would be taken out of forest production or removed as a result of new right-of-way purchases, easements and all construction activities. Emphasis needs to be directed towards reducing impacts, whenever possible to the following types of woodland in the following order of priority -
  - a. High site index productive land that is currently under active forest management.
  - b. Productive forested wetlands.
  - c. Lower site index productive land that is currently under active forest management.
  - d. Unique or unusual forest ecosystems.
  - e. Unmanaged, fully stocked woodland.
  - f. Unmanaged, cutover rural woodland.
  - g. Urban woodland.
2. The productivity of the forest soils as indicated by the soil series that would be involved within the proposed project.
3. The impact upon existing greenways within the area of the proposed project.
4. The provisions that the contractor will take to sell any merchantable timber or woody material that is to be removed. Emphasis should be on selling all wood products first, including energy chips. If wood products cannot be sold, then efforts should be made to haul the material off or run through a tub grinder and turned into mulch. This practice is encouraged to accomplish the following -

- a. Minimize the need for piling and burning debris during construction.
  - b. To reduce the danger of escaped fires and smoke on nearby highways.
  - c. Reduce smoke management problems to the traveling public, towns and cities.
  - d. Reduce smoke particles which can cause more fog to cover the highway when fog may not have formed otherwise.
5. Woodland, Land Clearing and Open Burning - If any open burning is needed, the contractor should comply with all laws and regulations pertaining to debris burning. The regulation of open fires are covered under G.S. 113-60.21 thru 113-60.31 all inclusive. Land clearing contractors should make particular note of G.S. 113-60.23 High Hazard Counties requiring a special permit from our local county rangers and 113-60.24 for Open Burning in Non-High Hazard Counties requiring a regular burning permit from our local burning permit agents.
- Madison and Yancey counties are non-high hazard counties and G.S. 113-60.24 would apply. Certain conditions may exist at the time that would prevent the issuance of this permit. Also there may be other local requirements such as most cities do not now allow any burning and some counties now have a burning ordinance that would take precedence.
6. The provisions that the contractor will take during the construction phase to prevent erosion, sedimentation and construction damage to forest land outside the right-of-way and construction limits. Trees outside the construction limits should be protected from construction activities to avoid:
- a. Skinning of tree trunks by machinery.
  - b. Soil compaction and root exposure or injury by heavy equipment.
  - c. Adding layers of fill dirt over the root systems of trees, a practice that impairs root aeration.
  - d. Accidental spilling of petroleum products or other damaging substances over the root systems of trees.

Efforts should be made to address the above items and to reduce impacts to woodland. We would hope that the improvements would have the least impact to forest and related resources in that area.

pc: Mike Thompson, Warren Boyette - CO  
Tommy Thompson - R3  
Keith Jenkins - D1  
File

James B. Hunt, Jr., Governor  
Jonathan B. Howes, Secretary



WATER QUALITY SECTION

November 13, 1997

**MEMORANDUM**

TO: Melba McGee  
Environmental Coordinator  
Office of Legislative & Intergovernmental Affairs

FROM: Roy M. Davis, Regional Supervisor *RMD*  
Division of Water Quality

SUBJECT: Project #98-E-0316  
U.S. 19  
Madison & Yancey Counties  
State Project Number 6.86900ST

Existing US 19 crosses or parallels numerous streams. Presuming that this project lays over the existing right-of-way, the North Carolina Department of Transportation (DOT) will want to take precautions to comply, with the requirements of the Environmental Management Commissions 401 Water Quality Certification Regulation and U.S. Army Corps of Engineers Dredge and Fill Program. Effected streams and wetlands will require some type of mitigation. Representatives of the DOT should contact Mr. Mike Parker in the Division of Water Quality's Asheville Regional Office at 704/251-6208 to discuss this project during the planning stage.

xc: John Dorney  
Wanda Frazier  
Max Haner  
Mike Parker

State of North Carolina  
Department of Environment, Health, and Natural Resources

Reviewing Office: <i>ARO</i>	
Project Number: <i>98E-0316</i>	Due Date: <i>12-1-97</i>

INTERGOVERNMENTAL REVIEW — PROJECT COMMENTS

After review of this project it has been determined that the EHNR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law.

Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form.

All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/> Permit to construct & operate wastewater treatment facilities, sewer system extensions, & sewer systems not discharging into state surface waters	Application 90 days before begin construction or award of construction contracts On-site inspection. Post-application technical conference usual	30 days (90 days)
<input type="checkbox"/> NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES Reply time. 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/> Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/> Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input checked="" type="checkbox"/> Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filing may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/> Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15A NCAC 21H.0600	N/A	60 days (90 days)
<input type="checkbox"/> Any open burning associated with subject proposal must be in compliance with 15A NCAC 2D.0520		
<input type="checkbox"/> Demolition or renovations of structures containing asbestos material must be in compliance with 15A NCAC 2D.0525 which requires notification and removal prior to demolition Contact Asbestos Control Group 919-733-0820	N/A	60 days (90 days)
<input type="checkbox"/> Complex Source Permit required under 15A NCAC 2D.0800		
<input type="checkbox"/> The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Sect.) at least 30 days before beginning activity. A fee of \$30 for the first acre and \$20.00 for each additional acre or part must accompany the plan.		20 days (30 days)
<input type="checkbox"/> The Sedimentation Pollution Control Act of 1973 must be addressed with respect to the referenced Local Ordinance:		(30 days)
<input type="checkbox"/> Mining Permit	On-site inspection usual. Surety bond filed with EHNR. Bond amount varies with type mine and number of acres of affected land. Any area mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/> North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/> Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground cleaning activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/> Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/> Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to EHNR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with EHNR running to State of N.C. conditional that any well opened by drill operator shall, upon abandonment, be plugged according to EHNR rules and regulations.	10 days (N/A)
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with EHNR at least 10 days prior to issue of permit Application by letter. No standard application form.	10 days (N/A)
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15-20 days (N/A)
<input checked="" type="checkbox"/>	401 Water Quality Certification	N/A	60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application	55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monuments need to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687, Raleigh, N.C. 27611		
<input type="checkbox"/>	Abandonment of any wells, if required, must be in accordance with Title 15A, Subchapter 2C.0100		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
<input type="checkbox"/>	Other comments (attach additional pages as necessary, being certain to cite comment authority)		

#### REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

- |  |  |
|--|--|
| <input type="checkbox"/> Asheville Regional Office<br>59 Woodfin Place<br>Asheville, NC 28801<br>(704) 251-6208                            | <input type="checkbox"/> Fayetteville Regional Office<br>Suite 714 Wachovia Building<br>Fayetteville, NC 28301<br>(919) 486-1541 |
| <input type="checkbox"/> Mooresville Regional Office<br>919 North Main Street, P.O. Box 950<br>Mooresville, NC 28115<br>(704) 663-1699     | <input type="checkbox"/> Raleigh Regional Office<br>3800 Barrett Drive, Suite 101<br>Raleigh, NC 27609<br>(919) 733-2314         |
| <input type="checkbox"/> Washington Regional Office<br>1424 Carolina Avenue<br>Washington, NC 27889<br>(919) 946-6481                      | <input type="checkbox"/> Wilmington Regional Office<br>127 Cardinal Drive Extension<br>Wilmington, NC 28405<br>(919) 395-3900    |
| <input type="checkbox"/> Winston-Salem Regional Office<br>8025 North Point Blvd.<br>Suite 100<br>Winston-Salem, NC 27106<br>(919) 896-7007 |  |



James B. Hunt, Jr., Governor  
Jonathan B. Howes, Secretary  
Charles H. Gardner, P.G., P.E.  
Director and State Geologist

PROJECT REVIEW COMMENTS

Project Number: 98-E-0316 County: Madison / Yancey  
Project Name: US 19, from Future 1-26 TO SR 1336

NC Office of State Planning - Geodetic Survey

This project will impact 30 geodetic survey markers. N.C. Geodetic Survey should be contacted prior to construction at P.O. Box 27687, Raleigh, N.C. 27611 (919) 733-3836. Intentional destruction of a geodetic monument is a violation of N.C. General Statute 102-4.

This project will have no impact on geodetic survey markers.

Other (comments attached)

For more information contact the N.C. Office of State Planning, Geodetic Survey Office at 919/733-3836.

Amy Walker  
Reviewer

11/6/97  
Date

Erosion and Sedimentation Control

No comment

This project will require approval of an erosion and sedimentation control plan prior to beginning any land-disturbing activity if more than one (1) acre will be disturbed.

If an environmental document is required to satisfy Environmental Policy Act (SEPA) requirements, the document must be submitted as part of the erosion and sedimentation control plan.

If any portion of the project is located within a High Quality Water Zone (HQW), as classified by the Division of Environmental Management, increased design standards for sediment and erosion control will apply.

The erosion and sedimentation control plan required for this project should be prepared by the Department of Transportation under the erosion control program delegation to the Division of Highways from the North Carolina Sedimentation Control Commission.

Other (comments attached)

For more information contact the Land Quality Section at 919/733-4574.

David Ward  
Reviewer

11/7/97  
Date

Geological Survey Section  
(919) 733-2423  
FAX: (919) 733-0900

Land Quality Section  
(919) 733-4574  
FAX: 733-2876

Geodetic Survey Section  
(919) 733-3836  
FAX: 733-4407

NORTH CAROLINA STATE CLEARINGHOUSE

DEPARTMENT OF ADMINISTRATION

INTERGOVERNMENTAL REVIEW

STATE NUMBER: 98-E-4220-0316

DATE RECEIVED: 10/31/1997

AGENCY RESPONSE: 12/08/1997

REVIEW CLOSED: 12/12/1997

Clearinghouse Coordinator, Region D  
Region D Council of Governments  
PO Box 1820  
Boone NC

REVIEW DISTRIBUTION

Dept. of Agriculture  
Dept. of Crime Cont./ Public Safety  
Dept. of Cultural Resources  
Dept. of Env. Health, & Natural Res  
Land of Sky Regional Council  
Region D Council of Governments

Post-It™ brand fax transmittal memo 7671 # of pages 1

To: <i>Chrys Baggett</i>	From: <i>Rita Henderson</i>
Co.	Cc.
Dept.	Phone #
Fax #	Fax #

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation

TYPE: State Environmental Policy Act

ERD: Scoping

DESC: Proposed Improvements to US 19 from Future I-26 to SR 1336 at Cane River; Madison and Yancey Counties; TIP #R-2518

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date. If additional review time is needed, please contact this office at (919)733-7232.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:

- NO COMMENT
- COMMENTS ATTACHED

SIGNED BY:

*Rita Henderson*

DATE:

*12/10/97*



### REQUEST FOR REVIEW

Please review the attached notification and indicate your response. If your agency requires additional information, contact applicant directly or call Region D Council of Governments' Clearinghouse. Please submit your response to the address below the due date indicated.

Phone: (704) 265-5434

SCH Number 98-E-4220-0316 Date 11/26/97 Response Date 12/08/97

**Please Sign and Return  
This Page Only To:**

Region D Council of Governments  
Clearinghouse Coordinator  
P.O. Box 1820  
Boone, NC 28607

Reviewers:

Tom Storie-Town of Burnsville  
Randy Ollis-Interim, Yancey County Manager

Response: This agency has reviewed the notification and offers the following recommendation: (Check appropriate response/more than one can be checked)

No Comment

Favorable. The project is in agreement with the goals and objectives of this agency's programs.

Unfavorable. The project is not in agreement with the goals and objectives of this agency's programs.

Potential Problem (s). Identify:

Comments:

Reviewed by 

Name: TOM STORIE

Agency: TOWN OF BURNSVILLE Date: 12-2-97



# Land-of-Sky Regional Council

Buncombe • Henderson • Madison • Transylvania Counties

## Regional Clearinghouse

### N. C. Intergovernmental Review Process Review and Comment Form

The Land-of-Sky Regional Council has received the attached information about a proposal which could affect your jurisdiction.

If you need more information, contact the applicant directly.

If you wish to comment on this proposed action, complete this form and return it with your comments to this office by 12/68/97. Comments received after this date cannot be included in our response to the State Clearinghouse.

If you need additional time in order to obtain more information about the application or to formulate your comments, please call Jean Sluder at 704/251-6622 as soon as possible. An extension of the review period may be possible.

A NOTE to Reviewers - Projects with a "C" in the State Application Identifier (below) is a funding proposal review. Comments should focus on the acceptability or unacceptability of the project. Projects with an "E" in the identifier are environmental or site reviews. Comments for these projects should focus on the adequacy of the environmental document or site selection process.

If no comment is received by the above date, it will be assumed you have no comments regarding this proposal.

State Application Identifier # 98-E-4220-0316 Regional # 11-98

Commenter's Name JAMES A CRANE Title Commissioner

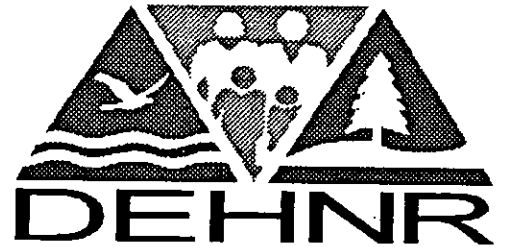
Representing Madison County  
(Local Government)

Address 807579 MARSHALL NC 28753

Phone 704 649 2854 Date 11-17-97

Comment (or attach): This project will be an asset to Madison and Yancey Counties. It will open up this area for tourist and make this area accessible to industry. Very much in favor of upgrading road

State of North Carolina  
Department of Environment,  
Health and Natural Resources  
Division of Parks and Recreation



November 10, 1997

James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary  
Dr. Philip K. McKnelly, Director

**MEMORANDUM**

TO: Brian Yamamoto,  
Planning and Environmental Branch, NC DOT

FROM: Stephen Hall *SH*

SUBJECT: Review of Scoping Sheets, US 19E, Yancey County

REFERENCE: TIP R-2519E

The Natural Heritage Program database does not contain records for rare species or significant natural areas within the immediate vicinity of the proposed highway improvements. However, the reach of the Cane River located just south of the project study area has been identified as part of the Cane River Aquatic Habitat. This reach also possesses records for the striped shiner (*Luxilus chrysocephalus*), which is state-listed as Threatened.

Given the large amount of land disturbance that this project will involve, there is a substantial risk of siltation-related impacts on the striped shiner as well as other sensitive aquatic organisms living within the Cane River Aquatic Habitat. We therefore strongly recommend that all best management practices be followed for the control of erosion and sedimentation.

sph

Stream: Little Ivy Creek (mile 0.7)

Stream code: 6617 - 1

Receiving Stream:

Stream code:

Ecoregion: Blue Ridge

Drainage Area above sample location(sq. mi.): 45.9

River Drainage: French Broad River

Sample location: Lotus Designs

Coordinate: . ° : N

. ° : W

Map number: 142

Elevation (ft. MSL): 1980

Quad number: 191-SE

HUC: NC-06010105-110

Date: 06/25/97

State: North Carolina

County: Madison

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Camptostoma anomalum</i>	39	25
Whitetail shiner	<i>Cyprinella galactura</i>	126	19
Warpaint shiner	<i>Luxilus coccogenis</i>	101	3
River chub	<i>Nocomis micropogon</i>	132	81
Bigeye chub	<i>Notropis amblops</i>	80	
Tennessee shiner	<i>Notropis leuciodus</i>	187	21
Telescope shiner	<i>Notropis telescopus</i>	8	
Blacknose dace	<i>Rhinichthys atratulus</i>	1	
Northern hog sucker	<i>Hypentelium nigricans</i>	44	
Black redhorse	<i>Moxostoma duquesnei</i>	2	
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	2	1
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	2	2
Redbreast sunfish	<i>Lepomis auritus</i>	6	
Green sunfish	<i>Lepomis cyanellus</i>	2	
Smallmouth bass	<i>Micropterus dolomieu</i>	5	
Fantail darter	<i>Etheostoma flabellare</i>	12	
Swannanoa darter	<i>Etheostoma swannanoa</i>	10	
		759	152

\*Listed as threatened by NC

\*\* Listed as endangered by NC



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

March 20, 1998

Mr. Franklin H. Vick, P.E., Manager  
Planning and Environmental Branch  
Department of Transportation  
Post Office Box 25201  
Raleigh, North Carolina 27611-5201



Dear Mr. Vick:

U.S. 19E, FROM SR 1336 (JACK'S CREEK ROAD) TO NC 80, CANE RIVER, AND SOUTH TOE RIVER TRIBUTARIES, YANCEY COUNTY, NORTH CAROLINA, STATE PROJECT NO. 6.909001T, TIP NO. R-2519A

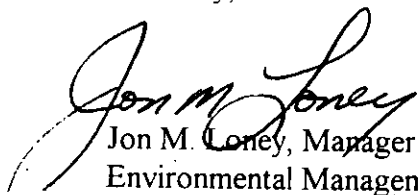
TVA has reviewed the scoping notice for the proposed multi-lane improvements to U.S. 19E across tributaries of the Cane River and South Toe River. The state-funded Environmental Assessment should note that approvals under Section 26a of the TVA Act may be required for bridges or culverts associated with the highway improvements.

Attached are fish collection records compiled by TVA field crews for the Cane River. These may provide helpful information in assessing environmental effects of bridges and culverts across streams in this area.

Please provide copies of the draft state-funded Environmental Assessment for review at the Knoxville address on this letter. In addition, following preparation of the EA, please send a copy of the FONSI and EA, along with a Section 26a application, to TVA Upper Holston Reservoir Land Management Office, First American Bank Building, Suite 218, 4105 Fort Henry Drive, Kingsport, Tennessee 37663, with a copy of the EA to me, in order to complete TVA's NEPA review.

Should you have any questions, please contact Harold M. Draper at (423) 632-6889 or [hmdraper@tva.gov](mailto:hmdraper@tva.gov).

Sincerely,

  
Jon M. Loney, Manager  
Environmental Management

Enclosure

# ATTACHMENT

## Fish Collection Records from the Cane River

Stream: Cane River (mile 21.0 )	Stream code: 1886 - 1
Receiving Stream:	Stream code:
Ecoregion: Blue Ridge	
Drainage Area above sample location(sq. mi.): 61.0	
River Drainage: Nolichucky River	
Sample location: Riverside	
Coordinate: . ° . N	. ° . W
Elevation (ft. MSL): 2500	Map number: 155
Date: 06/04/97	Quad number: 200-NE
	HUC: NC-06010108-070
	State: North Carolina
	County: Yancey

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Campostoma anomalum</i>	151	88
Whitetail shiner	<i>Cyprinella galactura</i>	256	100
Striped shiner*	<i>Luxilus chrysocephalus</i>	213	77
Warpaint shiner	<i>Luxilus coccogenis</i>	225	11
River chub	<i>Nocomis micropogon</i>	156	84
Tennessee shiner	<i>Notropis leuciodus</i>	15	
Saffron shiner	<i>Notropis rubricroceus</i>	91	
Mirror shiner	<i>Notropis spectrunculus</i>	84	
Telescope shiner	<i>Notropis telescopus</i>	108	33
Fatlips minnow	<i>Phenacobius crassilabrum</i>	9	1
Blacknose dace	<i>Rhinichthys atratulus</i>	5	
Longnose dace	<i>Rhinichthys cataractae</i>	9	1
Northern hog sucker	<i>Hypentelium nigricans</i>	9	
Black redhorse	<i>Moxostoma duquesnei</i>	4	
Flat bullhead	<i>Ameiurus platycephalus</i>	1	
Banded sculpin*	<i>Cottus carolinae</i>	2	
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	2	
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	1	
Redbreast sunfish	<i>Lepomis auritus</i>	16	
Greenside darter	<i>Etheostoma blennioides</i>	8	2
Greenfin darter	<i>Etheostoma chlorbranchium</i>	33	
Swannanoa darter	<i>Etheostoma swannanoa</i>	26	
Banded darter	<i>Etheostoma zonale</i>	18	1
Gilt darter	<i>Percina evides</i>	9	1
		1551	399

Stream: Cane River (mile 10.5 )

Stream code: 1886 - 2

Receiving Stream:

Stream code:

Ecoregion: Blue Ridge

Drainage Area above sample location(sq. mi.): 117.0

River Drainage: Nolichucky River

Sample location: Egypt-Ramsey

Coordinate: . ° . N

. ° . W

Map number: 156

Elevation (ft. MSL): 2260

Quad number: 200-NW

HUC: NC-06010108-080

Date: 08/07/97

State: North Carolina

County: Yancey

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Campostoma anomalum</i>	70	23
Whitetail shiner	<i>Cyprinella galactura</i>	79	2
Striped shiner *	<i>Luxilus chrysocephalus</i>	7	.
Warpaint shiner	<i>Luxilus coccogenis</i>	71	.
River chub	<i>Nocomis micropogon</i>	90	23
Tennessee shiner	<i>Notropis leuciodus</i>	41	.
Telescope shiner	<i>Notropis telescopus</i>	1	.
Fatlips minnow	<i>Phenacobius crassilabrum</i>	9	.
Northern hog sucker	<i>Hypentelium nigricans</i>	12	1
Black redhorse	<i>Moxostoma duquesnei</i>	6	.
Mottled sculpin	<i>Cottus bairdi</i>	4	.
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	1	.
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	1	.
Redbreast sunfish	<i>Lepomis auritus</i>	4	.
Smallmouth bass	<i>Micropterus dolomieu</i>	1	.
Greenside darter	<i>Etheostoma blennioides</i>	20	.
Greenfin darter	<i>Etheostoma chlorbranchium</i>	77	.
Banded darter	<i>Etheostoma zonale</i>	23	.
Gilt darter	<i>Percina evides</i>	18	.
		535	49

Stream: Cane River (mile 5.0) Stream code: 1886 - 3  
 Receiving Stream: Stream code:  
 Ecoregion: Blue Ridge  
 Drainage Area above sample location(sq. mi.): 145.0  
 River Drainage: Nolichucky River  
 Sample location: Ramseytown  
 Coordinate: . ° . N . ° . W Map number: 157  
 Elevation (ft. MSL): 2110 Quad number: 199-SE HUC: NC-06010108-090  
 Date: 08/06/97 State: North Carolina County: Yancey

Common name	Scientific name	count	
	<u>anomalies</u>		
Central stoneroller	<i>Campostoma anomalum</i>	384	58
Whitetail shiner	<i>Cyprinella galactura</i>	105	2
Striped shiner*	<i>Luxilus chrysocephalus</i>	3	2
Warpaint shiner	<i>Luxilus coccogenis</i>	59	
River chub	<i>Nocomis micropogon</i>	190	37
Bigeye chub	<i>Notropis amblops</i>	1	
Tennessee shiner	<i>Notropis leuciodus</i>	54	
Silver shiner	<i>Notropis photogenis</i>	13	
Rosyface shiner	<i>Notropis rubellus</i>	18	
Fatlips minnow	<i>Phenacobius crassilabrum</i>	4	
White sucker	<i>Catostomus commersoni</i>	1	
Northern hog sucker	<i>Hypentelium nigricans</i>	11	
Black redhorse	<i>Moxostoma duquesnei</i>	3	
Golden redhorse	<i>Moxostoma erythrurum</i>	1	
Stonecat**	<i>Noturus flavus</i>	1	
Mottled sculpin	<i>Cottus bairdi</i>	4	
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	14	
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	5	
Redbreast sunfish	<i>Lepomis auritus</i>	4	
Smallmouth bass	<i>Micropterus dolomieu</i>	6	
Sharphead darter*	<i>Etheostoma acuticeps</i>	17	
Greenside darter	<i>Etheostoma blennioides</i>	18	
Greenfin darter	<i>Etheostoma chlorbranchium</i>	47	
Banded darter	<i>Etheostoma zonale</i>	28	
Tangerine darter *	<i>Percina aurantiaca</i>	1	
Gilt darter	<i>Percina evides</i>	19	

1011

99

\*Listed as threatened by NC

\*\*Listed as endangered by NC





☒ North Carolina Wildlife Resources Commission ☒

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391  
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Melba McGee, Office of Legislative and Intergovernmental Affairs  
Department of Environment and Natural Resources

FROM: Mark S. Davis, Mountain Region Coordinator *Mark S. Davis*  
Habitat Conservation Program

DATE: November 19, 1997

SUBJECT: State Clearinghouse Project No. 98-E-0316, North Carolina Department of Transportation (NCDOT) proposed improvements to US 19, from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, State Project No. 6.869005T, TIP No. R-2518.

This memorandum responds to a request by you for our comments regarding impacts on fish and wildlife resources resulting from the subject project. The North Carolina Wildlife Resources Commission (NCWRC) has reviewed the proposed project, and our comments are provided in accordance with provisions of the North Carolina Environmental Policy Act (G.S. 113A-1 et seq., as amended; 1NCAC 25).

The proposed work involves the widening of the existing two-lane section of US 19, from future I-26 to SR 1336 at Cane River to a multi-lane facility. Consideration will be given to new location segments where existing alignment does not meet current design standards. The NCWRC prefers improvement of existing roadways over construction of new highway corridors and supports such an alternative for this project. Primary impacts to fish and wildlife resources involve direct loss of wetland and upland habitat, sedimentation of aquatic habitat from highway construction, and fragmentation of forested habitat blocks in the project area. Potential impacts to rare, threatened, or endangered species (Appalachian elktoe, *Alasmidonta raveneliana*) exists in the Cane River area of the project. In addition to direct habitat loss from highway construction, secondary habitat loss will occur as commercial development follows improvement of the highway corridor. Secondary project impacts should be addressed in the environmental document.

In addition to the specific concerns mentioned above, the NCWRC offers the following list of general recommendations and informational needs:

1. Description of fishery and wildlife resources within the project area, including a listing of federally or state designated threatened, endangered, or special concern species. When practicable, potential borrow areas to be used for project construction should be included in the inventories. A listing of designated animal and plant species can be developed through consultation with:

The Natural Heritage Program  
N.C. Division of Parks and Recreation  
P.O. Box 27687  
Raleigh, N.C. 27611  
(919) 733-4181

2. Description of any streams or wetlands affected by the project.
3. Project map identifying wetland areas. Identification of wetlands may be accomplished through coordination with the U.S. Army Corps of Engineers (COE). If the COE is not consulted, the person delineating wetlands should be identified and criteria listed.
4. Description of project activities that will occur within wetlands, such as fill or channel alteration. Acreages of wetlands impacted by alternative project designs should be listed.
5. Description of project site and non-wetland vegetative communities.
6. The extent to which the project will result in loss, degradation, or fragmentation of wildlife habitat (wetlands and uplands).
7. Any measures proposed to avoid or reduce impacts of the project or to mitigate unavoidable habitat losses.
8. A discussion of the probable impacts on natural resources which will result from secondary development facilitated by the improved highway facility.

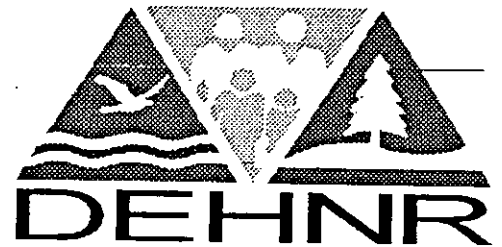
It is the policy of the NCWRC that impacts to wetlands be avoided. Non-wetland and non-riparian alternatives should be examined during design. Where wetland losses are unavoidable, the NCWRC will recommend mitigation of the losses. Because Madison and Yancey Counties are recognized as a "trout water counties" by the COE, the NCWRC will review any nationwide or general 404 permits for this project.

Thank you for the opportunity to provide input in the planning stages for this project. If I can further assist your office, please contact me at (704) 452-2546.

cc: Mr. Mark Cantrell, U. S. Fish and Wildlife Service  
Mr. David Cox, Highway Coordinator, NCWRC  
Mr. H. Franklin Vick, P.E., NCDOT

State of North Carolina  
Department of Environment,  
Health and Natural Resources  
Division of Parks and Recreation

James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary  
Dr. Philip K. McKnelly, Director



December 2, 1997

MEMORANDUM

TO: Melba McGee

FROM: Stephen Hall SA

SUBJECT: Scoping -- US 19 Improvements, Madison and Yancey Counties

REFERENCE: 98-E-0316

The reach of the Cane River that runs parallel to a portion of the proposed project has been identified as the Cane River Aquatic Habitat by the Natural Heritage Program. The striped shiner (*Luxilus chrysocephalus*), state listed as Threatened, has been recorded from several spots within this habitat.

Given the sensitivity of the Cane River, we strongly recommend that no new alignments be selected that would involve new bridge crossings or that would more closely encroach upon the floodplain of this river than does the current alignment.

State of North Carolina  
Department of Environment  
and Natural Resources  
Division of Water Quality

James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary  
A. Preston Howard, Jr., P.E., Director



December 1, 1997

MEMORANDUM

TO: Melba McGee; DENR SEPA Coordinator

FROM: Michelle Suverkubbe, DWQ SEPA Coordinator *ms*

RE: Comments on DOT Scoping #98-0316; WQS# 11852  
US 19 Widening from Future I-26 to SR 1336  
TIP R-2518; Madison and Yancey Counties

The Division of Water Quality (DWQ) requests that the following topics be discussed in the environmental document:

- A. Identify the streams potentially impacted by the project. The current stream classifications and use support ratings for these streams should be included. This information is available from DWQ through the following contacts:
- Liz Kovasckitz - Classifications - 919-733-5083, ext. 572  
Carol Metz - Use Support Ratings - 919-733-5083, ext. 562
- B. Identify the linear feet of stream channelization/relocations. If the original stream banks were vegetated, it is requested that the channelized/relocated stream banks be revegetated.
- C. Number and locations of all proposed stream crossings.
- D. Will permanent spill catch basins be utilized? DWQ requests that these catch basins be placed at all water supply stream crossings. Identify the responsible party for maintenance.
- E. Identify the stormwater controls (permanent and temporary) to be employed.
- F. The following wetlands information should be included in the EA, as appropriate:
1. Identify the federal manual used for identifying and delineating jurisdictional wetlands. If no wetlands are found, the EA should still include information on how this determination was made, including the methods used in surveying for their presence and the qualifications of the survey staff in delineating jurisdictional wetlands.
  2. If wetlands are to be impacted by the project, have they been avoided as much as possible? (Please ensure that sediment and erosion control measures are not placed in wetlands).

3. Have wetland impacts been minimized?
  4. Mitigation measures to compensate for habitat losses.
  5. Wetland impacts by plant communities affected.
  6. Quality of wetlands impacted.
  7. Total wetland impacts.
  8. List the 401 General Certification numbers requested from DWQ.
- G. If wetlands are anticipated to be impacted by the project, the following measures should be taken to reduce the impacts -
1. Wetland impacts should be avoided (including placement of sediment and erosion control structures / measures outside of wetlands). If this is not possible, alternatives that minimize wetland impacts should be chosen. Mitigation for unavoidable impacts will be required if impacts are greater than one acre.
  2. Borrow/waste areas should avoid wetlands to the maximum extent practicable. Prior to the approval of any borrow/waste site in a wetland, the contractor shall obtain a 401 Certification from DWQ.
  3. Please provide a conceptual wetland mitigation plan, if appropriate, to help the environmental review. The mitigation plan may state the following:
    - a. Compensatory mitigation will be considered only after wetland impacts have been avoided and minimized to the maximum extent possible.
    - b. On-site, in-kind mitigation is the preferred method of mitigation. In-kind mitigation within the same watershed is preferred over out-of-kind mitigation.
    - c. Mitigation should be in the following order: restoration, creation, enhancement, and lastly preservation.
- H. The EA should discuss (in detail) project alternatives that alleviate traffic problems without road widening construction, such as mass-transit and traffic congestion management techniques.
- I. The North Carolina Environmental Policy Act (SEPA) requires that the EA or EIS for this project evaluate all direct, indirect and cumulative impacts on the environment. It is the relationship between transportation projects and their impacts to changes in land uses that the environmental document should focus its indirect impacts section. This section of the document should discuss the known relationship between new or widened roads, highways and interchanges and resulting inducements for urban development along the project right-of-way, at interchanges and along connecting arterials. The EA must further address the long-term environmental impacts of this road project, including the potential indirect impacts of the induced urban development on all aspects of the environment.

To address this issue, the EA should answer the following questions -

- i) What is the estimated traffic projections for the project corridor, at interchanges and all connecting arterials (and what current and future land use figures were used in this estimate)?

- ii) Will this project provide additional traffic handling capacity and/or improved traffic safety and control features to connecting roads, such as turn lanes and traffic signs and signals?
- iii) How will traffic patterns and traffic quantities on cross streets (including planned interchanges) in the project corridor change due to the proposed project? How will land uses along these secondary roads be influenced by the access or increased traffic flow provided by this project?
- iv) How does this project comply with local governments' land use and metropolitan transportation plans?
- v) Will this project provide new or improved access to vacant or undeveloped parcels of land in the road right-of-way, at planned interchanges, or along connecting arterials?
- vi) Will these less-developable parcels become more likely to develop into urban uses with the provision of public road access, adequate road frontage or traffic safety and control features from the project?
- vii) Will this road widening serve as an inducement to additional urban development in the project right-of-way, given the provision of additional traffic handling capacities, and the existence (or likelihood of existence in the future), of other essential public infrastructure improvements (e.g. sewer, water and electricity) in the area? To what degree will this road widening encourage further urbanization of this corridor? To what degree will this bypass affect land uses in the areas to be bypassed?
- viii) If inducements for urban development are predicted as a result of the road improvements, these impacts should be defined in the environmental document and should be considered indirect impacts of the transportation project.
- ix) What measures have DOT and the local governments in the project area agreed to in order to restrict development potential along the road right-of-way, at interchanges and along connecting arterials to reduce the potential indirect land use changes and environmental impacts?
- x) What environmental resources could be affected by the identified urban development that will be allowed or encouraged by the road improvements? What degree of impact to these resources will be anticipated? What impacts may be significant in nature? Specific to the regulatory authority of DWQ, the EA should discuss the types and severity of point and non-point source water quality impacts anticipated from both the new road project and this additional development.
- xi) What regulations are currently in place at the local government level that would address these significant potential indirect environmental impacts?
- xii) The environmental document should discuss these environmental impacts (and others that are applicable to the individual project), and quantify them when possible. In addition to reporting on the types and significance of each direct and indirect impact of the project, the document should define how DOT (with their authorities and resources) and affected local governments (with land use control in the project area) are planning to avoid, reduce or mitigate these impacts to a level of insignificance.

For Environmental Assessments (EA's), the SEPA rules and statutes require that prior to issuance of a FONSI, any identified significant environmental impacts must be avoided, minimized or mitigated to a level less than significant, or a FONSI should not be issued. Therefore, an EA for this project should show how the indirect effects of the project, including those effects of urban development, are not

\*\*\*Incidental/migrant record - the species was observed outside of its normal range or habitat.

\*\*\*\*Historic record - obscure and incidental record.

<sup>1</sup>In the November 4, 1997, *Federal Register* (55822-55825), the northern population of the bog turtle (from New York south to Maryland) was listed as T (threatened), and the southern population (from Virginia south to Georgia) was listed as T(S/A) (threatened due to similarity of appearance). The T(S/A) designation bans the collection and interstate and international commercial trade of bog turtles from the southern population. The T(S/A) designation has no effect on land-management activities by private landowners in North Carolina, part of the southern population of the species.



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Asheville Field Office  
160 Zillicoa Street  
Asheville, North Carolina 28801

April 16, 1998

Asst.

Dr. David Robinson, Acting Manager  
Planning and Environmental Branch  
Division of Highways  
North Carolina Department of Transportation  
P.O. Box 25201  
Raleigh, North Carolina 27611-5201

Dear Dr. Robinson:

Subject: Scoping for proposed widening of US 19E from SR 1336 (Jack's Creek Road) to SR 1186, east of Burnsville, Yancey County, North Carolina, TIP Project R-2519A

You requested information regarding potential environmental impacts that could result from the subject project for your use in the preparation of an environmental assessment. The following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e), and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (Act).

According to information provided in your letter, this project will involve the widening of US 19E from SR 1336 at the Cane River to SR 1186 east of Burnsville, Yancey County, North Carolina. The project covers approximately 6.6 miles in length (11.6 kilometers). Two cross sections are being considered--a four-lane section with a 16-foot median and a five-lane section with a 16-foot center turn lane containing a concrete monolithic island. Curb and gutter treatments are planned within the City of Burnsville, and shoulders will be provided in other areas. A 0.6-mile extension from SR 1186 eastward to NC 80 is being considered as an addition to this project. According to the map attached with the scoping letter, the alignment will generally follow existing US 19E.

The enclosed pages identify federally protected endangered and threatened species known from Yancey County that may occur within the area of influence of this proposed action. Just as in our reply to the scoping announcement for R-2518, the Service notes the occurrence of an endangered mussel, the Appalachian elktoe (*Alasmidonta raveneliana*), in the Cane River. The legal responsibilities of a Federal agency or its designated non-Federal representative under



Section 7 of the Act are on file with the Federal Highway Administration. The enclosed pages also contain a list of species of Federal concern that are currently under status review by the Service which may occur in the project impact area. Species of Federal concern are not legally protected under the Act and are not subject to any of its provisions, including Section 7, unless they are formally proposed or listed as endangered or threatened. We are including these species in our response to give you advance notification. The presence or absence of these species in the project impact area should be addressed in any environmental document prepared for this project.

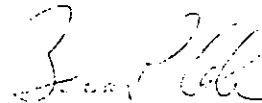
The Service considers this action sufficiently interrelated in time, space, and scope to TIP Project R-2518 that any environmental document should consider these two projects together. In fact, the North Carolina Department of Transportation (NCDOT) treated these interrelated projects together when it held a Citizens Informational Workshop for the two projects on February 5, 1998, at the Burnsville Town Hall. Both of the projects (R-2518 and R-2519A) are included in the 1998-2004 NCDOT Transportation Improvement Program (TIP). If any similar improvements for other segments of US 19E are on the horizon, they should be included as well. The Service's review of the environmental document would be greatly facilitated if the document contained the following information, if pertinent:

- (1) A complete analysis and comparison of the available alternatives (the build and no-build alternatives).
- (2) A description of the fishery and wildlife resources within existing and required additional rights-of-way and any areas, such as borrow areas, that may be affected directly or indirectly by the proposed road improvements.
- (3) Acreage and description of wetlands that will be filled as a result of the proposed road improvements. Wetlands affected by the proposed project should be mapped in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. We recommend contacting the U.S. Army Corps of Engineers, Asheville Regulatory Field Office, to determine the need for a Section 404 Clean Water Act permit (Telephone 828/271-4856).
- (4) Linear feet and description of any water courses that will be impacted as a result of the proposed project. Streams should be described using the Rosgen (1994, 1996) classification scheme.
- (5) Acreage of upland habitat, by community type (Schafale and Weakley 1990), that will be eliminated because of the proposed project.
- (6) Description of all expected secondary and cumulative environmental impacts associated with this proposed work.

- (7) An analysis of the crossing structures considered (i.e., spanning structures, culverts) and the rationale for choosing the preferred structure(s), especially with regard to avoiding or minimizing stream and wetland impacts.
- (8) A discussion about the extent to which the project will result in loss, degradation, or fragmentation of wildlife habitat from direct construction impacts and from secondary development impacts.
- (9) Mitigation measures that will be employed to avoid, eliminate, reduce, or compensate for habitat value losses associated with any phase of the proposed project. Describe any wildlife crossing provisions proposed for the project.

We appreciate the opportunity to provide these scoping comments and request that you continue to keep us informed as to the progress of this project. In any future correspondence concerning the project, please reference our Log Number 4-2-98-089.

Sincerely,



Brian P. Cole  
State Supervisor

Enclosure

cc:

Mr. Steve Lund, U.S. Army Corps of Engineers, Asheville Regulatory Field Office, 151 Patton Avenue, Room 143, Asheville, NC 28801-5006

Mr. Mark S. Davis, Mountain Region Coordinator, North Carolina Wildlife Resources Commission, Old Fish Hatchery, 20830 Great Smoky Mtn. Expressway, Waynesville, NC 28786

Ms. Kathy Matthews, U.S. Environmental Protection Agency, 61 Forsyth Street, Atlanta, GA 30303-3104

Ms. Cyndi Bell, North Carolina Department of Environment and Natural Resources, 4401 Reedy Creek Drive, Raleigh, NC 27607

**ENDANGERED, THREATENED, AND CANDIDATE SPECIES  
AND FEDERAL SPECIES OF CONCERN  
IN YANCEY COUNTY, NORTH CAROLINA**

This list was adapted from the North Carolina Natural Heritage Program's County Species List. It is a listing, for Yancey County, of North Carolina's federally listed and proposed endangered, threatened, and candidate species and Federal species of concern (for a complete list of rare species in the state, please contact the North Carolina Natural Heritage Program). Wherever critical habitat has been designated, a description of its location and constituent essential elements is also listed, by county. The information on this list is compiled from a variety of sources, including field surveys, museums and herbariums, literature, and personal communications. The North Carolina Natural Heritage Program's database is dynamic, with new records being added and old records being revised as new information is received. Please note that this list cannot be considered a definitive record of listed species and Federal species of concern, and it should not be considered a substitute for field surveys.

COMMON NAME	SCIENTIFIC NAME	STATUS
<b>YANCEY COUNTY</b>		
<b>Vertebrates</b>		
Bog turtle	<i>Clemmys muhlenbergii</i>	T(S/A) <sup>1</sup>
Olive-sided flycatcher	<i>Contopus borealis</i>	FSC
Virginia big-eared bat	<i>Corynorhinus (=Plecotus) townsendii virginianus</i>	Endangered
Hellbender	<i>Cryptobranchus alleganiensis</i>	FSC
Peregrine falcon	<i>Falco peregrinus</i>	Endangered
Eastern cougar	<i>Felis concolor cougar</i>	Endangered
Carolina northern flying squirrel	<i>Glaucomys sabrinus coloratus</i>	Endangered
Southern rock vole	<i>Microtus chrotorrhinus carolinensis</i>	FSC
Eastern small-footed myotis	<i>Myotis leibii</i>	FSC
Olive darter	<i>Percina squamata</i>	FSC
Appalachian cottontail	<i>Sylvilagus obscurus</i>	FSC
<b>Invertebrates</b>		
Appalachian elktoe	<i>Alasmidonta raveneliana</i>	Endangered
Fragile glyph	<i>Glyphyalinia clingmani</i>	FSC
Spruce-fir moss spider	<i>Microhexura montivaga</i>	Endangered
Roan supercoil	<i>Paravitrea varidens</i>	FSC*
Yancey sideswimmer	<i>Stygobromus carolinensis</i>	FSC*
<b>Vascular Plants</b>		
Fraser fir	<i>Abies fraseri</i>	FSC
Cain's reedgrass	<i>Calamagrostis cainii</i>	FSC
Mountain bittercress	<i>Cardamine clematitidis</i>	FSC
Glade spurge	<i>Euphorbia purpurea</i>	FSC
Spreading avens	<i>Geum radiatum</i>	Endangered
Roan Mountain bluet	<i>Houstonia montana (=Hedyotis purpurea var. montana)</i>	Endangered
Butternut	<i>Juglans cinerea</i>	FSC
Gray's lily	<i>Lilium grayi</i>	FSC
Carolina saxifrage	<i>Saxifraga caroliniana</i>	FSC

COMMON NAME	SCIENTIFIC NAME	STATUS
Mountain catchfly	<i>Silene ovata</i>	FSC
Virginia spiraea	<i>Spiraea virginiana</i>	Threatened
<b>Nonvascular Plants</b>		
A liverwort	<i>Bazzania nudicaulis</i>	FSC
Rock gnome lichen	<i>Gymnoderma lineare</i>	Endangered
Mount LeConte moss	<i>Leptohymenium sharpii</i>	FSC
A liverwort	<i>Plagiochila caduciloba</i>	FSC
A liverwort	<i>Plagiochila sharpii</i>	FSC
A liverwort	<i>Plagiochila sullivantii</i> var. <i>sullivantii</i>	FSC
A liverwort	<i>Sphenobolopsis pearsonii</i>	FSC

**KEY:**

Status	Definition
Endangered	A taxon "in danger of extinction throughout all or a significant portion of its range."
Threatened	A taxon "likely to become endangered within the foreseeable future throughout all or a significant portion of its range."
FSC	A Federal species of concern--a species that may or may not be listed in the future (formerly C2 candidate species or species under consideration for listing for which there is insufficient information to support listing).
T(S/A)	Threatened due to similarity of appearance (e.g., American alligator)--a species that is threatened due to similarity of appearance with other rare species and is listed for its protection. These species are not biologically endangered or threatened and are not subject to Section 7 consultation.

Species with 1, 2, 3, or 4 asterisks behind them indicate historic, obscure, or incidental records.

\*Historic record - the species was last observed in the county more than 50 years ago.

\*\*Obscure record - the date and/or location of observation is uncertain.

\*\*\*Incidental/migrant record - the species was observed outside of its normal range or habitat.

\*\*\*\*Historic record - obscure and incidental record.

<sup>1</sup>In the November 4, 1997, *Federal Register* (55822-55825), the northern population of the bog turtle (from New York south to Maryland) was listed as T (threatened); and the southern population (from Virginia south to Georgia) was listed as T(S/A) (threatened due to similarity of appearance). The T(S/A) designation bans the collection and interstate and international commercial trade of bog turtles from the southern population. The T(S/A) designation has no effect on land-management activities by private landowners in North Carolina, part of the southern population of the species.



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

December 15, 1997



Mr. H. Franklin Vick, PE  
Manager  
Planning and Environmental Branch  
North Carolina Division of Highways  
Post Office Box 25201  
Raleigh, North Carolina 27611-5201

Dear Mr. Vick:

US 19, FROM FUTURE I-26 TO SR 1336 AT CANE RIVER, STATE PROJECT NO. 6.869005T, TIP NO. R-2518, FRENCH BROAD AND NOLICHUCKY RIVER TRIBUTARIES, MADISON AND YANCEY COUNTIES, NORTH CAROLINA

TVA has reviewed the scoping notice for the proposed multi-lane improvements to U.S. 19 and US 19E across tributaries of the French Broad and Cane Rivers. Approvals under Section 26a of the TVA Act may be required for bridges or culverts associated with the highway improvements.

Please provide copies of the draft state-funded Environmental Assessment for review at the Knoxville address on this letter. In addition, following preparation of the Environmental Assessment (EA), please send a copy of the Finding of No Significant Impact and EA, along with a Section 26a application, to TVA Cherokee-Douglas Reservoir Land Management Office, 2611 West Andrew Johnson Highway, Morristown, Tennessee 37814-3295, with a copy of the EA to me, in order to complete TVA's NEPA review.

Should you have any questions, please contact Harold M. Draper at (423) 632-6889 or [hmdraper@tva.gov](mailto:hmdraper@tva.gov).

Sincerely,

Jon M. Loney, Manager  
Environmental Management

# ATTACHMENT

## Fish Collection Records from the Cane River and Ivy Creek

Stream: Cane River (mile 21.0)	Stream code: 1886 - 1
Receiving Stream:	Stream code:
Ecoregion: Blue Ridge	
Drainage Area above sample location(sq. mi.): 61.0	
River Drainage: Nolichucky River	
Sample location: Riverside	
Coordinate: . . . N	. . . W
Elevation (ft. MSL): 2500	Map number: 155
Date: 06/04/97	Quad number: 200-NE
	HUC: NC-06010108-070
	State: North Carolina
	County: Yancey

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Campostoma anomalum</i>	151	88
Whitetail shiner	<i>Cyprinella galactura</i>	356	100
Striped shiner*	<i>Luxilus chrysocephalus</i>	213	77
Warpaint shiner	<i>Luxilus coccogenis</i>	225	11
River chub	<i>Nocomis micropogon</i>	156	84
Tennessee shiner	<i>Notropis leuciodus</i>	15	
Saffron shiner	<i>Notropis rubricroceus</i>	91	
Mirror shiner	<i>Notropis spectrunculus</i>	84	
Telescope shiner	<i>Notropis telescopus</i>	108	33
Fatlips minnow	<i>Phenacobius crassilabrum</i>	9	1
Blacknose dace	<i>Rhinichthys atratulus</i>	5	
Longnose dace	<i>Rhinichthys cataractae</i>	9	1
Northern hog sucker	<i>Hypentelium nigricans</i>	9	
Black redbhorse	<i>Moxostoma duquesnei</i>	4	
Flat bullhead	<i>Ameiurus platycephalus</i>	1	
Banded sculpin*	<i>Cottus carolinae</i>	2	
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	2	
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	1	
Redbreast sunfish	<i>Lepomis auritus</i>	16	
Greenside darter	<i>Etheostoma blennioides</i>	8	2
Greenfin darter	<i>Etheostoma chlorbranchium</i>	33	
Swannanoa darter	<i>Etheostoma swannanoa</i>	26	
Banded darter	<i>Etheostoma zonale</i>	18	1
Gilt darter	<i>Percina evides</i>	9	1
		1551	399

Stream: Cane River (mile 10.5 )

Stream code: 1886 - 2

Receiving Stream:

Stream code:

Ecoregion: Blue Ridge

Drainage Area above sample location(sq. mi.): 117.0

River Drainage: Nolichucky River

Sample location: Egypt-Ramsey

Coordinate: . ° . N

. ° . W

Map number: 156

Elevation (ft. MSL): 2260

Quad number: 200-NW

HUC: NC-06010108-080

Date: 08/07/97

State: North Carolina

County: Yancey

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Campostoma anomalum</i>	70	23
Whitetail shiner	<i>Cyprinella galactura</i>	79	2
Striped shiner *	<i>Luxilus chrysocephalus</i>	7	.
Warpaint shiner	<i>Luxilus coccogenis</i>	71	.
River chub	<i>Nocomis micropogon</i>	90	23
Tennessee shiner	<i>Notropis leuciodus</i>	41	.
Telescope shiner	<i>Notropis telescopus</i>	1	.
Fatlips minnow	<i>Phenacobius crassilabrum</i>	9	.
Northern hog sucker	<i>Hypentelium nigricans</i>	12	1
Black redhorse	<i>Moxostoma duquesnei</i>	6	.
Mottled sculpin	<i>Cottus bairdi</i>	4	.
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	1	.
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	1	.
Redbreast sunfish	<i>Lepomis auritus</i>	4	.
Smallmouth bass	<i>Micropterus dolomieu</i>	1	.
Greenside darter	<i>Etheostoma blennioides</i>	20	.
Greenfin darter	<i>Etheostoma chlorbranchium</i>	77	.
Banded darter	<i>Etheostoma zonale</i>	23	.
Gilt darter	<i>Percina evides</i>	18	.
		535	49

Stream: Cane River (mile 5.0 )

Stream code: 1886 - 3

Receiving Stream:

Stream code:

Ecoregion: Blue Ridge

Drainage Area above sample location(sq. mi.): 145.0

River Drainage: Nolichucky River

Sample location: Ramseytown

Coordinate: . ° . . N

. ° . . W

Map number: 157

Elevation (ft. MSL): 2110

Quad number: 199-SE

HUC: NC-06010108-090

Date: 08/06/97

State: North Carolina

County: Yancey

Common name	Scientific name	count	anomalies
Central stoneroller	<i>Campostoma anomalum</i>	384	58
Whitetail shiner	<i>Cyprinella galactura</i>	105	2
Striped shiner*	<i>Luxilus chrysocephalus</i>	3	2
Warpaint shiner	<i>Luxilus coccogenis</i>	59	
River chub	<i>Nocomis micropogon</i>	190	37
Bigeye chub	<i>Notropis amblops</i>	1	
Tennessee shiner	<i>Notropis leuciodus</i>	54	
Silver shiner	<i>Notropis photogenis</i>	13	
Rosyface shiner	<i>Notropis rubellus</i>	18	
Fatlips minnow	<i>Phenacobius crassilabrum</i>	4	
White sucker	<i>Catostomus commersoni</i>	1	
Northern hog sucker	<i>Hypentelium nigricans</i>	11	
Black redhorse	<i>Moxostoma duquesnei</i>	3	
Golden redhorse	<i>Moxostoma erythrurum</i>	1	
Stonecat**	<i>Noturus flavus</i>	1	
Mottled sculpin	<i>Cottus bairdi</i>	4	
Rock bass(< 5 in.)	<i>Ambloplites rupestris</i>	14	
Rock bass(>= 5 in.)	<i>Ambloplites rupestris</i>	5	
Redbreast sunfish	<i>Lepomis auritus</i>	4	
Smallmouth bass	<i>Micropterus dolomieu</i>	6	
Sharphead darter*	<i>Etheostoma acuticeps</i>	17	
Greenside darter	<i>Etheostoma blennioides</i>	18	
Greenfin darter	<i>Etheostoma chlorbranchium</i>	47	
Banded darter	<i>Etheostoma zonale</i>	28	
Tangerine darter *	<i>Percina aurantiaca</i>	1	
Gilt darter	<i>Percina evides</i>	19	
		1011	99



**U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT, COMMENTS ON:**

"US 19E, from SR 1336 (Jack's Creek Road) to SR 1186, Burnsville, Yancey County, State Project No. 6.909001T, TIP No. R-2519A" (Regulatory Division Action I.D. No. 199830706).

**1. FLOOD PLAINS: POC - Bobby L. Willis, Planning Services Section, at (910) 251-4728**

The proposed improvements are located in Yancey County and the jurisdictional limits of the town of Burnsville, both of which are participants in the National Flood Insurance Program (NFIP). Based on a review of several panels of the April 1984 Yancey County Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) of the same date, the floodways and/or flood plains of the following streams may be affected by the proposed improvements: Cane River, Little Crabtree Creek, and tributary to Pine Swamp Creek. Cane River and Little Crabtree Creek are detailed study streams with 100-year flood elevations determined and floodways defined, and the tributary of Pine Swamp Creek is an approximately mapped stream. It appears that the Potential Extension being considered will also impact the flood plain and floodway of Little Crabtree Creek.

From a review of the April 1984 Town of Burnsville FIRM and FBFM, it appears that the roadway crosses Little Crabtree Creek, Pine Swamp Branch, and a tributary to each of these two streams. Little Crabtree Creek is a detailed stream, while the others are approximately mapped. For the detailed stream impacts, we refer you to the Federal Emergency Management Agency's (FEMA's) "Procedures for 'No Rise' Certification for Proposed Developments in Regulatory Floodways", copies of which have been provided previously to your office. The project should be designed to meet the requirements of the NFIP, administered by FEMA, and be in compliance with all local ordinances. Specific questions pertaining to community flood plain regulations or developments should be referred to the local building officials.

We would like to note that Yancey County is within the planning jurisdiction of the U.S. Army Corps of Engineers, Nashville District and the Tennessee Valley Authority (TVA) with respect to any construction or development involving the flood plains. The Nashville District does not currently have projects that would be affected by this proposed project. Mr. Larry Blazek may be contacted at (615) 736-5948 for further information and comments from the Nashville District. Flood plain concerns are normally addressed within the TVA Section 26a permitting process. A 26a permit is required for all construction or development involving streams or flood plains in the Tennessee River drainage basin. Mr. Roger Milstead at (615) 632-6115 should be contacted for information on the TVA 26a permitting process.

**U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT, COMMENTS ON:**

"US 19E, from SR 1336 (Jack's Creek Road) to SR 1186, Burnsville, Yancey County, State Project No. 6.909001T, TIP No. R-2519A" (Regulatory Division Action I.D. No. 199830706).

**2. WATERS AND WETLANDS: POC - Steven Lund, Asheville Field Office, Regulatory Division, at (704) 271-4857**

This widening and relocation project has the potential to impact significant amounts of trout water streams and their tributaries in the drainage basin of the South Toe River. Stream and wetland crossings as well as channel relocations would require Department of the Army permit authorization under Section 404 of the Clean Water Act of 1977, as amended. The Environmental Assessment (EA) should quantify impacts to wetlands and stream channels and should include descriptive information on affected wetland types, stream channel classifications and aquatic resources. A description of the proposed hydraulic structures for stream crossings should be included. Hydraulic structures should be designed to allow the continued movement of indigenous aquatic species. Crossing points should avoid wetlands and be as perpendicular to the channel as practicable. Lengthy longitudinal stream encroachments should be avoided by employing asymmetrical widening and the use of innovative cross-sectional designs such as split medians and lane terracing. We recommend that DOT resolve endangered species and cultural resource issues in the environmental assessment process to avoid permitting delays. The EA should explore potential compensatory mitigation options in the vicinity of the project. A plan to provide compensatory mitigation for unavoidable impacts to streams and wetlands should also accompany any permit application. If the proposed work would generate substantial quantities of waste material, the EA should identify potential disposal sites that would avoid impacts to areas under our jurisdiction. The potential for road cuts to expose acidic rock should also be investigated.

We recommend, for purposes of the environmental documentation, that TIP Projects R-2518 and R-2519A be combined. These are segments of the same road; the projects have similar design and impact considerations; and they have the same TIP schedules. Mitigation strategies should also be combined for these two projects.

Questions related to Department of the Army permits may be directed to Mr. Lund.



DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS

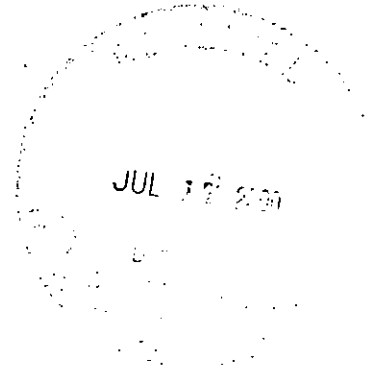
P.O. BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

IN REPLY REFER TO

July 13, 2000

Regulatory Division

Action ID. 199830705, TIP Nos. R-2518, R-2519A



Mr. William D. Gilmore, Manager  
Project Development and Environmental Analysis Branch  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Mr. Gilmore:

This is in response to the memorandum of March 29, 2000 from Mr. Bryan Kluchar of your staff requesting our concurrence with the Purpose and Need Statement and the Alternatives Description for the proposed widening of US Highways 19 and 19E from the future Interstate 26 east of Mars Hill to SR 1186 at Micaville, Madison and Yancy Counties, North Carolina, TIP Nos. R-2518 and R-2519A. This information has been prepared in anticipation of a planned State Environmental Assessment that will address impacts from both TIP projects.

A meeting of the project team, consisting of representatives of the Corps of Engineers, US Fish and Wildlife Service, Environmental Protection Agency, Tennessee Valley Authority, NC Wildlife Resources Commission, NC Department of Cultural Resources, NC Department of Environment and Natural Resources and the NC Department of Transportation, was held on March 8, 2000. Based on the results of this meeting and the information contained in the referenced memorandum, the project team has concurred with the purpose and need and the alternatives identified for detailed study (Concurrence Points 1 and 2, NEPA/404 Merger Process).

Concerning the alternatives identified for detailed study, it is our understanding that Alternate c., a Combination of Alternates 1 and 2, could combine the "best fit" approach with utilization of the current centerline of the road thereby eliminating any or all of the four potential relocation sections. It is also our understanding that the various designs for the 18 sections of the two projects could be combined in any number of ways to minimize impacts provided that the sections transition properly.

During the development of design alternatives, impacts to waters and wetlands should be minimized to the maximum extent practicable by minimizing median widths, fill slopes and culvert lengths. Low flow channels should be maintained through culverted stream crossings and all culverts should provide for the continued movement of indigenous aquatic life. Channel relocations should be accomplished utilizing natural stream channel design in order to maintain natural dimension, pattern, profile, substrate and riparian vegetation.

If you have any questions, please contact Mr. Steven Lund, Asheville Regulatory Field Office, at telephone (828) 271-4857.

Sincerely,



E. David Franklin  
Chief, NCDOT Team

Copy furnished:

Ms. Marella Buncick  
US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, North Carolina 28801

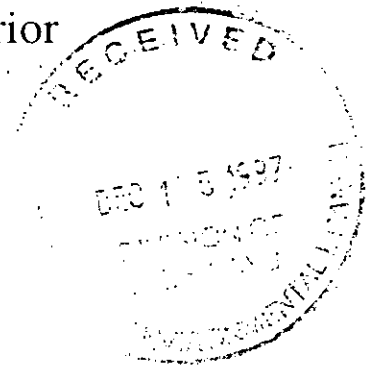


# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Asheville Field Office  
160 Zillicoa Street  
Asheville, North Carolina 28801

December 12, 1996



Mr. H. Franklin Vick, P.E., Manager  
Planning and Environmental Branch  
Division of Highways  
North Carolina Department of Transportation  
P.O. Box 25201  
Raleigh, North Carolina 27611-5201

Dear Mr. Vick:

Subject: Scoping for proposed widening of US 19 from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, North Carolina, TIP Project R-2518

You requested information regarding potential environmental impacts that could result from the subject project for your use in the preparation of an environmental assessment. The following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e), and Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (Act).

According to information provided in your letter, this project will involve the widening of US 19 from future I-26 to SR 1336 at Cane River west of Burnsville. Consideration will be given to a new location where the existing alignment does not meet current design standards.

The enclosed page identifies federally protected endangered and threatened species known from Madison and Yancey Counties that may occur within the area of influence of this proposed action. Of particular note is the known occurrence of an endangered mussel, the Appalachian elktoe (*Alasmidonta raveneliana*), in the Cane River. The legal responsibilities of a Federal agency or its designated non-Federal representative under Section 7 of the Act are on file with the Federal Highway Administration. The enclosed page also contains a list of species of Federal concern that are currently under status review by the Service which may occur in the project impact area. Species of Federal concern are not legally protected under the Act and are not subject to any of its provisions, including Section 7, unless they are formally proposed or listed

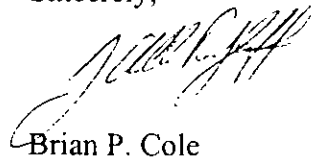
as endangered or threatened. We are including these species in our response to give you advance notification. The presence or absence of these species in the project impact area should be addressed in any environmental document prepared for this project.

The Service's review of the environmental document would be greatly facilitated if the document contained the following information, if pertinent:

- (1) A complete analysis and comparison of the available alternatives (the build and no-build alternatives).
- (2) A description of the fishery and wildlife resources within existing and required additional rights-of-way and any areas, such as borrow areas, that may be affected directly or indirectly by the proposed road improvements.
- (3) Acreage and description of wetlands that will be filled as a result of the proposed road improvements. Wetlands affected by the proposed project should be mapped in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. We recommend contacting the U.S. Army Corps of Engineers, Asheville Regulatory Field Office, to determine the need for a Section 404 Clean Water Act permit (telephone 704/271-4856).
- (4) Linear feet of any water courses that will be relocated as a result of the proposed project.
- (5) Acreage of upland habitat, by cover type, that will be eliminated because of the proposed project.
- (6) Description of all expected secondary and cumulative environmental impacts associated with this proposed work.
- (7) An analysis of the crossing structures considered (i.e., spanning structure, culverts) and the rationale for choosing the preferred structure(s).
- (8) A discussion about the extent to which the project will result in loss, degradation, or fragmentation of wildlife habitat from direct construction impacts and from secondary development impacts.
- (9) Mitigation measures that will be employed to avoid, eliminate, reduce, or compensate for habitat value losses associated with any of the proposed project.

We appreciate the opportunity to provide these scoping comments and request that you continue to keep us informed as to the progress of this project. In any future correspondence concerning the project, please reference our Log Number 4-2-98-030.

Sincerely,



Brian P. Cole  
State Supervisor

Enclosure

cc:

Mr. Steve Lund, U.S. Army Corps of Engineers, Asheville Regulatory Field Office, 151 Patton Avenue, Room 143, Asheville, NC 28801-5006

Mr. Mark S. Davis, Mountain Region Coordinator, North Carolina Wildlife Resources Commission, Old Fish Hatchery, 20830 Great Smoky Mtn. Expressway, Waynesville, NC 28786

## ENDANGERED, THREATENED, AND CANDIDATE SPECIES AND FEDERAL SPECIES OF CONCERN IN NORTH CAROLINA

This list was adapted from the North Carolina Natural Heritage Program's County Species List. It is a listing, by county, of North Carolina's federally listed and proposed endangered, threatened, and candidate species and Federal species of concern (for a complete list of rare species in the state, please contact the North Carolina Natural Heritage Program). Wherever critical habitat has been designated, a description of its location and constituent essential elements is also listed, by county. The information on this list is compiled from a variety of sources, including field surveys, museums and herbariums, literature, and personal communications. The North Carolina Natural Heritage Program's database is dynamic, with new records being added and old records being revised as new information is received. Please note that this list cannot be considered a definitive record of listed species and Federal species of concern, and it should not be considered a substitute for field surveys.

COMMON NAME	SCIENTIFIC NAME	STATUS
<b>MADISON COUNTY</b>		
<b>Vertebrates</b>		
Lake sturgeon	<i>Acipenser fulvescens</i>	FSC
Rafinesque's big-eared bat	<i>Corynorhinus (=Plecotus) rafinesquii</i>	FSC*
Hellbender	<i>Cryptobranchus alleganiensis</i>	FSC
Spotfin chub	<i>Hybopsis monacha</i>	Threatened*
Peregrine falcon	<i>Falco peregrinus</i>	Endangered
Olive darter	<i>Percina squamata</i>	FSC
Paddlefish	<i>Polyodon spathula</i>	FSC
<b>Invertebrates</b>		
Sculpted supercoil	<i>Paravitrea ternaria</i>	FSC
<b>Vascular Plants</b>		
Piratebush	<i>Buckleya distichophylla</i>	FSC
Glade spurge	<i>Euphorbia purpurea</i>	FSC
Butternut	<i>Juglans cinerea</i>	FSC
Carolina saxifrage	<i>Saxifraga caroliniana</i>	FSC
Mountain catchfly	<i>Silene ovata</i>	FSC
<b>YANCEY COUNTY</b>		
<b>Vertebrates</b>		
Bog turtle	<i>Clemmys muhlenbergii</i>	T(S/A) <sup>1</sup>
Olive-sided flycatcher	<i>Contopus borealis</i>	FSC
Virginia big-eared bat	<i>Corynorhinus (=Plecotus) townsendii virginianus</i>	Endangered
Hellbender	<i>Cryptobranchus alleganiensis</i>	FSC
Peregrine falcon	<i>Falco peregrinus</i>	Endangered
Eastern cougar	<i>Felis concolor cougar</i>	Endangered
Carolina northern flying squirrel	<i>Glaucomys sabrinus coloratus</i>	Endangered
Southern rock vole	<i>Microtus chrotorrhinus carolinensis</i>	FSC
Eastern small-footed myotis	<i>Myotis leibii</i>	FSC



COMMON NAME	SCIENTIFIC NAME	STATUS
Olive darter	<i>Percina squamata</i>	FSC
Appalachian cottontail	<i>Sylvilagus obscurus</i>	FSC
<b>Invertebrates</b>		
Appalachian elktoe	<i>Alasmidonta raveneliana</i>	Endangered
Fragile glyph	<i>Glyphyalinia clingmani</i>	FSC
Spruce-fir moss spider	<i>Microhexura montivaga</i>	Endangered
Roan supercoil	<i>Paravitrea varidens</i>	FSC*
Yancey sideswimmer	<i>Stygobromus carolinensis</i>	FSC*
<b>Vascular Plants</b>		
Fraser fir	<i>Abies fraseri</i>	FSC
Cain's reedgrass	<i>Calamagrostis cainii</i>	FSC
Mountain bittercress	<i>Cardamine clematitidis</i>	FSC
Glade spurge	<i>Euphorbia purpurea</i>	FSC
Spreading avens	<i>Geum radiatum</i>	Endangered
Roan Mountain bluet	<i>Houstonia montana</i> (= <i>Hedyotis purpurea</i> var. <i>montana</i> )	Endangered
Butternut	<i>Juglans cinerea</i>	FSC
Gray's lily	<i>Lilium grayi</i>	FSC
Carolina saxifrage	<i>Saxifraga caroliniana</i>	FSC
Mountain catchfly	<i>Silene ovata</i>	FSC
Virginia spiraea	<i>Spiraea virginiana</i>	Threatened
<b>Nonvascular Plants</b>		
A liverwort	<i>Bazzania nudicaulis</i>	FSC
Rock gnome lichen	<i>Gymnoderma lineare</i>	Endangered
Mount LeConte moss	<i>Leptohymenium sharpii</i>	FSC
A liverwort	<i>Plagiochila caduciloba</i>	FSC
A liverwort	<i>Plagiochila sharpii</i>	FSC
A liverwort	<i>Plagiochila sullivantii</i> var. <i>sullivantii</i>	FSC
A liverwort	<i>Sphenolobopsis pearsonii</i>	FSC

**KEY:**

Status	Definition
Endangered	A taxon "in danger of extinction throughout all or a significant portion of its range."
Threatened	A taxon "likely to become endangered within the foreseeable future throughout all or a significant portion of its range."
FSC	A Federal species of concern--a species that may or may not be listed in the future (formerly C2 candidate species or species under consideration for listing for which there is insufficient information to support listing).
T(S/A)	Threatened due to similarity of appearance (e.g., American alligator)--a species that is threatened due to similarity of appearance with other rare species and is listed for its protection. These species are not biologically endangered or threatened and are not subject to Section 7 consultation.

Species with 1, 2, 3, or 4 asterisks behind them indicate historic, obscure, or incidental records.

\*Historic record - the species was last observed in the county more than 50 years ago.

\*\*Obscure record - the date and/or location of observation is uncertain.

TABLE N3b  
 AMBIENT NOISE LEVELS (Leq)  
 US 19 E, Yancey County, TIP # R-2519A

SITE	LOCATION	DESCRIPTION	NOISE LEVEL (dBA)
1	US 19 @ Messiah of the Mountains Lutheran Church	Gravel	69.8
2	US 19 @ Mini Storage Business	Paved	69.2
3	US 19 @ Slagle Office Complex	Grassy	67.3
4	US 19 @ Pisgah National Forest Office	Grass	69.8
5	US 19 @ M&H Chevrolet-Buick Dealership	Grassy	65.1
6	US 19 Just East of SR 1438 @ Closed Car Lot	Grassy	69.3

NOTE: The ambient noise level sites were measured at 15 meters from the center of the nearest lane of traffic.

TABLE N4.1a

FHWA NOISE ABATEMENT CRITERIA SUMMARY  
 US 19, Madison/Yancey County, TIP # R-2518

Alt. 1 (Symmetrical)

DESCRIPTION	MAXIMUM PREDICTED Leq NOISE LEVELS (dBA)				MAXIMUM CONTOUR DISTANCES	APPROXIMATE # OF IMPACTED RECEPTORS ACCORDING TO TITLE 23 CFR PART 772					
	15m		60m			A	B	C	D	E	
	30m	60m	72 dBA	67 dBA							
1 - From I-26 to SR 1524	72.6	68.5	63		24.4	44	0	3	0	0	0
2 - From SR 1524 to SR 1526	71.9	67.8	62.3		22.4	41	0	3	0	0	0
3 - From SR 1526 to 820 m North of SR 1509	71.7	67.6	62.1		21.6	40.1	0	6	0	0	0
4 - From 820 m N. of SR 1509 to 480 m N. of SR 1421	71.4	67.2	61.7		20.4	38.6	0	0	0	0	0
5 - From 480 m N. of SR 1421 to SR 1446	71.4	67.2	61.7		20.4	38.6	0	3	0	0	0
6 - From SR 1446 to SR 1391	71.9	67.8	62.2		22.4	40.9	0	4	0	0	0
7 - From SR 1391 SR 1132/SR 1454	72.4	68.3	62.8		23.8	43.1	0	0	0	0	0
8 - From SR 1132/SR 1454 to SR 1336	74.9	70.8	65.3		32.3	56.1	0	11	0	0	0
TOTALS ---->						0	30	0	0	0	0

1. 15m, 30m, and 60m distances are measured from the center of nearest travel lane.  
 2. 72 dBA and 67 dBA contour distances are measured from the center of proposed roadway.

TABLE N4.1b  
 FHWA NOISE ABATEMENT CRITERIA SUMMARY  
 TIP #R-2519, US 19 E, Yancey County  
 Alternate # 1 (Symmetrical)

DESCRIPTION	MAXIMUM PREDICTED Leq NOISE LEVELS (dBA)			MAXIMUM CONTOUR DISTANCES		APPROXIMATE # OF IMPACTED RECEPTORS ACCORDING TO TITLE 23 CFR PART 772				
	15m	30m	60m	72 dBA	67 dBA	A	B	C	D	E
1. From SR 1336 to SR 1428	74.7	70.6	65	31.4	54.6	0	13	0	0	0
2. From SR 1428 to South Main Street	69.8	65.7	60.2	15.9	31.8	0	2	0	0	0
3. From South Main Street to NC 197/SR 1429	70.8	66.7	61.2	18.5	36.3	0	1	0	0	0
4. From NC 197/SR 1429 to Burnsville City Limits	70.5	66.4	60.8	17.7	34.9	0	1	0	0	0
5. From Burnsville City Limits to NC 197	71.2	67.1	61.6	19.8	38.2	0	0	1	0	0
6. From NC 197 to SR 1427	74.3	70.1	64.6	29.7	52.1	0	11	4	0	0
7. From SR 1427 to SR 1323	73.5	69.4	63.9	27.1	48.4	0	14	4	0	0
8. From SR 1323 to SR 1186	73.5	69.4	63.9	27.1	48.4	0	10	1	0	0
9. From SR 1186 to NC 80	71.4	67.3	61.7	20.5	38.9	0	4	0	0	0
TOTALS --->						0	56	10	0	0

1. 15m, 30m, and 60m distances are measured from the center of nearest travel lane.  
 2. 72 dBA and 67 dBA contour distances are measured from the center of proposed roadway.

TABLE N4.2a

FHWA NOISE ABATEMENT CRITERIA SUMMARY  
 US 19, Madison/Yancey County, TIP # R-2518  
 Alt. 2 (Best Fit)

DESCRIPTION	MAXIMUM PREDICTED Leq NOISE LEVELS (dBA)			MAXIMUM CONTOUR DISTANCES	APPROXIMATE # OF IMPACTED RECEPTORS ACCORDING TO TITLE 23 CFR PART 772					
	15m	30m	60m		A	B	C	D	E	
	72 dBA				67 dBA					
1 - From I-26 to SR 1524	72.6	68.5	63	24.4	44	0	1	0	0	0
2 - From SR 1524 to SR 1526	71.9	67.8	62.3	22.4	41	0	1	0	0	0
3 - From SR 1526 to 820 m North of SR 1509	71.7	67.6	62.1	21.6	40.1	0	4	0	0	0
4 - From 820 m N. of SR 1509 to 480 m N. of SR 1421	71.4	67.2	61.7	20.4	38.6	0	0	0	0	0
5 - From 480 m N. of SR 1421 to SR 1446	71.4	67.2	61.7	20.4	38.6	0	2	0	0	0
6 - From SR 1446 to SR 1391	71.9	67.8	62.2	22.4	40.9	0	3	0	0	0
7 - From SR 1391 SR 1132/SR 1454	72.4	68.3	62.8	23.8	43.1	0	2	0	0	0
8 - From SR 1132/SR 1454 to SR 1336	74.9	70.8	65.3	32.3	56.1	0	12	0	0	0
TOTALS ---->					0	25	0	0	0	0

1. 15m, 30m, and 60m distances are measured from the center of nearest travel lane.  
 2. 72 dBA and 67 dBA contour distances are measured from the center of proposed roadway.

TABLE N4.2b  
 FHWA NOISE ABATEMENT CRITERIA SUMMARY  
 TIP #R-2519, US 19 E, Yancey County  
 Alternate # 2 (Best Fit)

DESCRIPTION	MAXIMUM PREDICTED Leq NOISE LEVELS (dBA)			MAXIMUM CONTOUR DISTANCES		APPROXIMATE # OF IMPACTED RECEPTORS ACCORDING TO TITLE 23 CFR PART 772				
	15m	30m	60m	72 dBA	67 dBA	A	B	C	D	E
1. From SR 1336 to SR 1428	74.7	70.6	65	31.4	54.6	0	17	0	0	0
2. From SR 1428 to South Main Street	69.8	65.7	60.2	15.9	31.8	0	2	0	0	0
3. From South Main Street to NC 197/SR 1429	70.8	66.7	61.2	18.5	36.3	0	1	0	0	0
4. From NC 197/SR 1429 to Burnsville City Limits	70.5	66.4	60.8	17.7	34.9	0	1	2	0	0
5. From Burnsville City Limits to NC 197	71.2	67.1	61.6	19.8	38.2	0	0	1	0	0
6. From NC 197 to SR 1427	74.3	70.1	64.6	29.7	52.1	0	10	5	0	0
7. From SR 1427 to SR 1323	73.5	69.4	63.9	27.1	48.4	0	13	7	0	0
8. From SR 1323 to SR 1186	73.5	69.4	63.9	27.1	48.4	0	8	0	0	0
9. From SR 1186 to NC 80	71.4	67.3	61.7	20.5	38.9	0	6	0	0	0
TOTALS --->						0	58	15	0	0

1. 15m, 30m, and 60m distances are measured from the center of nearest travel lane.  
 2. 72 dBA and 67 dBA contour distances are measured from the center of proposed roadway.

**TABLE N5.1a**  
**TRAFFIC NOISE LEVEL INCREASE SUMMARY**  
**TIP # R-2518, US 19, Madison/Yancey County**  
**Alt. 1 (Symmetrical)**

DESCRIPTION	RECEPTOR EXTERIOR NOISE LEVEL INCREASE							SUBSTANTIAL NOISE LEVEL INCREASE "1"	IMPACTS DUE TO BOTH CRITERIA "2"
	<=0	1-4	5-9	10-14	15-19	20-24	>=25		
1 - From I-26 to SR 1524	0	0	5	0	0	0	0	0	0
2 - From SR 1524 to SR 1526	0	0	3	0	0	0	0	0	0
3 - From SR 1526 to 820 m North of SR 1509	0	0	10	0	0	0	0	0	0
4 - From 820 m N. of SR 1509 to 480 m N. of SR 1421	0	0	0	0	0	0	0	0	0
5 - From 480 m N. of SR 1421 to SR 1446	0	6	0	0	0	0	0	0	0
6 - From SR 1446 to SR 1391	0	12	0	0	0	0	0	0	0
7 - From SR 1391 SR 1132/SR 1454	0	0	5	0	0	0	0	0	0
8 - From SR 1132/SR 1454 to SR 1336	0	0	20	0	0	0	0	0	0
TOTALS -->	0	18	43	0	0	0	0	0	0

"1" As defined by only a substantial increase (See bottom of TABLE N2).  
"2" As defined by both criteria in TABLE N2.

TABLE N5.1b  
**TRAFFIC NOISE LEVEL INCREASE SUMMARY**  
 TIP # R-2519A, US 19 E, Yancey County  
 Alternate # 1 (Symmetrical)

DESCRIPTION	RECEPTOR EXTERIOR NOISE LEVEL INCREASES							SUBSTANTIAL NOISE LEVEL INCREASE "1"	IMPACTS DUE TO BOTH CRITERIA "2"
	<=0	1-4	5-9	10-14	15-19	20-24	>=25		
1. From SR 1336 to SR 1428	0	0	24	0	0	0	0	0	0
2. From SR 1428 to South Main Street	0	0	24	0	0	0	0	0	0
3. From South Main Street to NC 197/SR 1429	0	16	0	0	0	0	0	0	0
4. From NC 197/SR 1429 to Burnsville City Limits	0	13	0	0	0	0	0	0	0
5. From Burnsville City Limits to NC 197	0	4	0	0	0	0	0	0	0
6. From NC 197 to SR 1427	0	0	19	0	0	0	0	0	0
7. From SR 1427 to SR 1323	0	0	27	0	0	0	0	0	0
8. From SR 1323 to SR 1186	0	0	14	0	0	0	0	0	0
9. From SR 1186 to NC 80	0	8	0	0	0	0	0	0	0
<b>TOTALS ---&gt;</b>	<b>0</b>	<b>41</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

"1" As defined by only a substantial increase (See bottom of TABLE N2).  
 "2" As defined by both criteria in TABLE N2.



**TABLE N5.2a**  
**TRAFFIC NOISE LEVEL INCREASE SUMMARY**  
**TIP # R-2518, US 19, Madison/Yancey County**  
**Alt. 2 (Best Fit)**

DESCRIPTION	RECEPTOR EXTERIOR NOISE LEVEL INCREASE							SUBSTANTIAL NOISE LEVEL INCREASE "1"	IMPACTS DUE TO BOTH CRITERIA "2"
	<=0	1-4	5-9	10-14	15-19	20-24	>=25		
1 - From I-26 to SR 1524	7	0	2	0	0	0	0	0	0
2 - From SR 1524 to SR 1526	0	1	2	0	0	0	0	0	0
3 - From SR 1526 to 820 m North of SR 1509	0	0	8	2	0	0	0	2	1
4 - From 820 m N. of SR 1509 to 480 m N. of SR 1421	0	0	0	0	0	0	0	0	0
5 - From 480 m N. of SR 1421 to SR 1446	0	6	1	0	0	0	0	0	0
6 - From SR 1446 to SR 1391	0	10	3	0	0	0	0	0	0
7 - From SR 1391 SR 1132/SR 1454	0	7	2	0	0	0	0	0	0
8 - From SR 1132/SR 1454 to SR 1336	0	0	22	0	0	0	0	0	0
<b>TOTALS ----&gt;</b>	<b>7</b>	<b>24</b>	<b>40</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>

"1" As defined by only a substantial increase (See bottom of TABLE N2).

"2" As defined by both criteria in TABLE N2.

TABLE N5.2b

TRAFFIC NOISE LEVEL INCREASE SUMMARY  
 TIP # R-2519A, US 19 E, Yancey County  
 Alternate # 2 (Best Fit)

DESCRIPTION	RECEPTOR EXTERIOR NOISE LEVEL INCREASES							SUBSTANTIAL NOISE LEVEL INCREASE "1"	IMPACTS DUE TO BOTH CRITERIA "2"
	<=0	1-4	5-9	10-14	15-19	20-24	>=25		
1. From SR 1336 to SR 1428	0	0	28	0	0	0	0	0	0
2. From SR 1428 to South Main Street	0	0	23	0	0	0	0	0	0
3. From South Main Street to NC 197/SR 1429	0	16	0	0	0	0	0	0	0
4. From NC 197/SR 1429 to Burnsville City Limits	5	7	0	0	0	0	0	0	0
5. From Burnsville City Limits to NC 197	0	4	0	0	0	0	0	0	0
6. From NC 197 to SR 1427	0	0	19	0	0	0	0	0	0
7. From SR 1427 to SR 1323	0	0	28	0	0	0	0	0	0
8. From SR 1323 to SR 1186	0	2	9	0	0	0	0	0	0
9. From SR 1186 to NC 80	0	9	2	0	0	0	0	0	0
TOTALS --->	5	38	109	0	0	0	0	0	0

"1" As defined by only a substantial increase (See bottom of TABLE N2).

"2" As defined by both criteria in TABLE N2.

# APPENDIX 3

Comments Received from Federal,  
State, and Local Agencies

DEC 11 2000



North Carolina General Assembly  
 House of Representatives  
 State Legislative Building  
 Raleigh, 27601-1096

REPRESENTATIVE MITCH GILLESPIE  
 49TH DISTRICT

OFFICE ADDRESS: 1201 LEGISLATIVE BUILDING  
 RALEIGH, NC 27601-1096

TELEPHONE: (919) 733-5987  
 (919) 733-6668 FAX

HOME ADDRESS: 163 LAKE TAHOMA ROAD  
 MARION, NC 28752  
 (828) 724-9995

## COMMITTEES:

AGING  
 APPROPRIATIONS/EDUCATION  
 EDUCATION/COMMUNITY COLLEGES  
 ENVIRONMENT & NATURAL RESOURCES  
 STATE PARKS & PROPERTY  
 TRANSPORTATION

December 7, 2000

NC Department of Transportation  
 PO Box 25201  
 Raleigh, NC 27611-5201

Attention: Secretary David McCoy

Dear Secretary McCoy:

The Highway 19 widening project through Yancey County is in the early planning stages. That is why I am writing to you about pedestrian travel and a bike path along Highway 19 in the city limits of Burnsville.

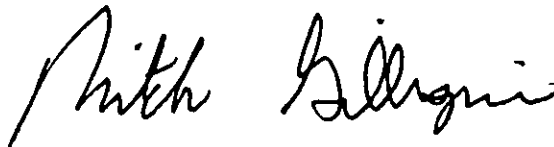
We have a chance to improve traffic problems while at the same time provide good pedestrian traffic and retain our unique small town community spirit. Our Town officials, Chamber of Commerce, County officials and others are working to improve Yancey County through a grant for land use planning.



McCoy Letter  
December 7, 2000  
Page 2

Also included in the scope of this plan is a study of downtown revitalization. We would also like to request that the Department of Bicycle and Pedestrian Program work with us concerning sidewalks, bicycle paths and pedestrian overpasses along the new Highway 19 project. Please advise us of the possibility of these projects.

Sincerely

A handwritten signature in black ink that reads "Mitch Gillespie". The signature is written in a cursive style with a large, prominent "M" and "G".

Mitch Gillespie

MG/jw

cc: Mr. Dan Martin, Division Engineer  
Mr. Curtis Yates, Director, Bicycle and Pedestrian Program



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

May 13, 1998



Planning Services Section

Mr. Richard B. Davis, P.E., Assistant Manager  
Planning and Environmental Branch  
North Carolina Division of Highways  
Post Office Box 25201  
Raleigh, North Carolina 27611-5201

Dear Mr. Davis:

This is in response to your letter of October 30, 1997, requesting comments on "US 19, from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, State Project No. 6.869005T, TIP ID No. R-2518" (Regulatory Division Action I.D. No. 199830705).

Our comments are enclosed. We appreciate the opportunity to comment on this project. If we can be of further assistance, please contact us.

Sincerely,

C. E. Shuford, Jr., P.E.  
Chief, Technical Services Division

Enclosure

Copies Furnished (with incoming correspondence):

Mr. Roger Milstead  
River System Operations  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

Mr. Larry Blazek (CEORN-EP-H-M)  
U.S. Army Engineer District, Nashville  
Post Office Box 1070  
Nashville, Tennessee 37202-1070

**U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT, COMMENTS ON:**

"US 19, from future I-26 to SR 1336 at Cane River, Madison and Yancey Counties, State Project No. 6.869005T, TIP ID No. R-2518" (Regulatory Division Action I.D. No. 199830705)

**1. FLOOD PLAINS: POC - Bobby L. Willis, Planning Services Section, at (910) 251-4728**

Both Madison and Yancey Counties are participants in the National Flood Insurance Program (NFIP). Based on a review of Panels 100 and 175 of the September 1982 Madison County Flood Insurance Rate Map (FIRM), it appears that the existing roadway crosses California Creek and Middle Fork, approximately mapped streams. The roadway also crosses Bailey, Turkey, and Polly Branches within the flood plain of Middle Fork. From a review of Panels 55 and 60 of the April 1984 Yancey County FIRM, it crosses Bald Creek and Cane River, detail study streams which have 100-year flood elevations determined and floodways defined. The road also crosses Banks Creek within the flood plain of Cane River. For the detailed stream impacts, we refer you to the Federal Emergency Management Agency's (FEMA's) "Procedures for 'No Rise' Certification for Proposed Developments in Regulatory Floodways", copies of which have been provided previously to your office. The project should be designed to meet the requirements of the NFIP, administered by FEMA, and be in compliance with all local ordinances. Specific questions pertaining to community flood plain regulations or developments should be referred to the local building official.

We would like to note that Madison and Yancey Counties are within the planning jurisdiction of the U.S. Army Corps of Engineers, Nashville District and the Tennessee Valley Authority (TVA) with respect to any construction or development involving the flood plains. The Nashville District does not currently have projects that would be affected by this proposed project. Mr. Larry Blazek may be contacted at (615) 736-5948 for further information and comments from the Nashville District. Flood plain concerns are normally addressed within the TVA Section 26a permitting process. A 26a permit is required for all construction or development involving streams or flood plains in the Tennessee River drainage basin. Mr. Roger Milstead at (615) 632-6115 should be contacted for information on the TVA 26a permitting process.

**2. WATERS AND WETLANDS: POC - Steven Lund, Asheville Field Office, Regulatory Division, at (704) 271-4857**

This widening and relocation project has the potential to impact significant amounts of trout water streams and their tributaries in the drainage basins of Ivy River and Cane River. Stream and wetland crossings as well as channel relocations would require Department of the Army permit authorization under Section 404 of the Clean Water Act of 1977, as amended. The Environmental Assessment (EA) should quantify impacts to wetlands and stream channels and should include descriptive information on affected wetland types, stream channel classifications and aquatic resources. A description of the proposed hydraulic structures for stream crossings should be included. Hydraulic structures should be designed to allow the continued movement of indigenous aquatic species. Crossing points should avoid wetlands and be as perpendicular to the channel as practicable. Lengthy longitudinal stream encroachments should be avoided by employing asymmetrical widening and the use of innovative cross-sectional designs such as split medians and lane terracing. We recommend that DOT resolve endangered species and cultural resource issues in the environmental assessment process to avoid permitting delays. The EA should explore potential compensatory mitigation options in the vicinity of the project. A plan to provide compensatory mitigation for unavoidable impacts to streams and wetlands should also accompany any permit application. If the proposed work would generate substantial quantities of waste material, the EA should identify potential disposal sites that would avoid impacts to areas under our jurisdiction. The potential for road cuts to expose acidic rock should also be investigated.

Questions related to DA permits may be directed to Mr. Lund.



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

June 30, 1998

Planning Services Section

Mr. William D. Gilmore, P.E., Manager  
Planning and Environmental Branch  
North Carolina Division of Highways  
Post Office Box 25201  
Raleigh, North Carolina 27611-5201



Dear Mr. Gilmore:

This is in response to a letter from your office dated March 4, 1998, requesting comments on "US-19E, from SR 1336 (Jack's Creek Road) to SR 1186, Burnsville, Yancey County, State Project No. 6.909001T, TIP No. R-2519A" (Regulatory Division Action I.D. No. 199830706).

Our comments are enclosed. We appreciate the opportunity to comment on this project. If we can be of further assistance, please contact us.

Sincerely,

C. E. Shuford, Jr., P.E.  
Chief, Technical Services Division

Enclosure

Copies Furnished (with incoming correspondence):

Mr. Roger Milstead  
River System Operations  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

Mr. Larry Blazek (CEORN-EP-H-M)  
U.S. Army Engineer District, Nashville  
Post Office Box 1070  
Nashville, Tennessee 37202-1070



# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section M
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACED					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	0	0	0	0	0	0	0	0	0				
Businesses	3	2	5	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	0	150-250	0	20-40M	5	150-250	3	
					40-70M	0	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>0</b>		<b>0</b>		<b>160</b>		<b>16</b>	

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by Number)**

3. Business services will not be disrupted due to project.

4. (a) Real Estate Office, 4 emp., 1000 S.F., no minorities  
 (b) Dentist office, 5 emp., 1200 S.F., no minorities  
 (c) Hair Salon, 2 emp., 800 S.F., no minorities  
 (d) Fuel Oil Company, 3 emp., 600 S.F., no minorities  
 (e) Produce stand, 2 emp., 400 S.F., no minorities

6. (a) Common ground realty  
 (b) Lunsford Realty, Burnsville, N.C.  
 (c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<p style="font-family: cursive; font-size: 1.2em;">P.P. White</p> <p>Area Relocation Agent</p>	<p>11/19/98</p> <p>Date</p>	<p style="font-family: cursive; font-size: 1.2em;">D.R. Veil</p> <p>Approved by</p>	<p>11-24-98</p> <p>Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section N
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	3	0	3	0	0	3	0	0	0			
Businesses	2	0	2	0	VALUE OF DWELLING							
Farms	0	0	0	0	DSS DWELLING AVAILABLE							
Non-Profit	0	0	0	0	Owners		Tenants		For Sale    For Rent			
					0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	3	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					<b>TOTAL</b>	<b>3</b>		<b>0</b>		<b>160</b>		<b>16</b>

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation-cause a housing shortage?
		6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

4. (a) Hair Salon, 1 emp., 800 S.F., no minorities  
(b) Grocery Store, 3 emp., 1500 S.F., no minorities

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

P.P. White Area Relocation Agent	11/19/98 Date	D.R. Vail Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section O
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	2	0	2	0	0	2	0	0	0				
Businesses	0	6	6	0					VALUE OF DWELLING				
Farms	0	0	0	0					DSS DWELLING AVAILABLE				
Non-Profit	0	0	0	0	Owners		Tenants		For Sale		For Rent		
					0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	0	150-250	0	20-40M	5	150-250	3	
					40-70M	2	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>2</b>		<b>0</b>		<b>160</b>		<b>16</b>	

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
x		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
	x	6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by Number)**

3. Business services will not be disrupted due to project.

4. (a) 6 bay mini. whse., 0 emp., 800 S.F., no minorities  
 (b) Clothing Store, 2 emp., 500 S.F., no minorities  
 (c) Travel agency, 2 emp., 1000 S.F., no minorities  
 (d) Yancy County Child Support Off., 3 emp., 1000 S.F., no minorities  
 (e) Produce stand, 1 emp., 400 S.F., no minorities  
 (f) Produce stand, 1 emp., 400 S.F., no minorities  
 \* Cemetery that may affect 4 or more graves

6. (a) Common ground realty  
 (b) Lunsford Realty, Burnsville, N.C.  
 (c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Area Relocation Agent         </div> <div style="text-align: center;">             11/19/98              Date         </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Approved by         </div> <div style="text-align: center;">             11-24-98              Date         </div> </div>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section P
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACED					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	2	0	2	0	0	2	0	0	0				
Businesses	2	1	3	0					VALUE OF DWELLING				
Farms	0	0	0	0					DSS DWELLING AVAILABLE				
Non-Profit	0	0	0	0	Owners		Tenants		For Sale		For Rent		
					0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	2	150-250	0	20-40M	5	150-250	3	
					40-70M	0	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>2</b>		<b>0</b>		<b>160</b>		<b>16</b>	

ANSWER ALL QUESTIONS		Explain all "YES" answers.
Yes	No	
	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>		3. Will business services still be available after project?
<input checked="" type="checkbox"/>		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input checked="" type="checkbox"/>		7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>		8. Should Last Resort Housing be considered?
	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>		11. Is public housing available?
<input checked="" type="checkbox"/>		12. Is it felt there will be adequate DSS housing available during relocation period?
	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

4. (a) Auto sales, 1 emp., 300 S.F., no minorities  
(b) Produce stand, 2 emp., 1500 S.F., no minorities  
(c) Automotive business, 4 emp., 1200 S.F., no minorities

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section Q
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	9	0	9	0	3	5	1	0	0			
Businesses	1	0	1	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale    For Rent			
Non-Profit	1	0	1	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	2	150-250	0	20-40M	5	150-250	3
					40-70M	7	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					<b>TOTAL</b>	<b>9</b>		<b>0</b>		<b>160</b>		<b>16</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
X		2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section R
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	5	3	8	0	3	5	0	0	0				
Businesses	0	0	0	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	0	150-250	3	20-40M	5	150-250	3	
					40-70M	5	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>5</b>		<b>3</b>		<b>160</b>		<b>16</b>	

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
	x	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/15/98 Date	 Approved by	11-24-98 Date
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# APPENDIX 2

## Noise Tables

TABLE N1

HEARING: SOUNDS BOMBARDING US DAILY

140	Shotgun blast, jet 30m away at takeoff	PAIN
	Motor test chamber	HUMAN EAR PAIN THRESHOLD
130 ----	-----	
	Firecrackers	
120	Severe thunder, pneumatic jackhammer	
	Hockey crowd	
	Amplified rock music	UNCOMFORTABLY LOUD
110 ----	-----	
	Textile loom	
100	Subway train, elevated train, farm tractor	
	Power lawn mower, newspaper press	
	Heavy city traffic, noisy factory	LOUD
90 ----	-----	
D	Diesel truck 65 kmph at 15m away	
E	80	Crowded restaurant, garbage disposal
C		Average factory, vacuum cleaner
I		Passenger car 80 kmph at 15m away
B	70 ----	MODERATELY LOUD
E	-----	
	Quiet typewriter	
L	60	Singing birds, window air-conditioner
S		Quiet automobile
		Normal conversation, average office
50 ----	QUIET	
	-----	
	Household refrigerator	
	Quiet office	VERY QUIET
40 ----	-----	
	Average home	
30	Dripping faucet	
	Whisper at 1.5m away	
20	Light rainfall, rustle of leaves	
		AVERAGE PERSON'S THRESHOLD OF HEARING
	Whisper	JUST AUDIBLE
10 ----	-----	
0		THRESHOLD FOR ACUTE HEARING

Sources: World Book, Rand McNally Atlas of the Human Body, Encyclopedia America, "Industrial Noise and Hearing Conversation" by J. B. Olishifski and E. R. Harford (Researched by N. Jane Hunt and published in the Chicago Tribune in an illustrated graphic by Tom Heinz.)



TABLE N2

NOISE ABATEMENT CRITERIA

CRITERIA FOR EACH FHWA ACTIVITY CATEGORY		
HOURLY A-WEIGHTED SOUND LEVEL - DECIBELS (dBA)		
Activity Category	Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities are essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: Title 23 Code of Federal Regulations (CFR) Part 772, U. S. Department of Transportation, Federal Highway Administration.

CRITERIA FOR SUBSTANTIAL INCREASE	
HOURLY A-WEIGHTED SOUND LEVEL - DECIBELS (dBA)	
Existing Noise Level in Leq(h)	Increase in dBA from Existing Noise Levels to Future Noise Levels
< 50	>= 15
>= 50	>= 10

Source: North Carolina Department of Transportation Noise Abatement Policy.

TABLE N3a  
 AMBIENT NOISE LEVELS (Leq)  
 TIP # R-2518, US 19, Madison/Yancey Counties

SITE	LOCATION	DESCRIPTION	NOISE LEVEL (dBA)
1	US 19 Just South of SR 1136	Grassy	68.6
2	US 19, 350 meters Northeast of SR 1421 @ Bald Creek Lodge	Gravel	69.6
3	US 19 Just North of SR 1516	Grassy	65.3
4	US 19, 200 meters Southwest of SR 1537 @ AAA Mini Storage	Gravel	67.1

NOTE: The ambient noise level sites were measured at 15 meters from the center of the nearest lane of traffic.

R-2518  
6.869005T  
Madison-Yancey

Alternate 2A of 7

3. Business services will not be disrupted due to this project.
4. (a) Auto Repair Shop, 1SMB, 2500 SF, 8 employees, no minorities.  
(b) Ledford Auto Parts & Supply, 1 SMB, 3000 SF, 4 employees, no minorities.  
(c) P & E Farm Supply, 1SRock&FB, 2500 SF, 4 employees, no minorities.
6. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local news and trade papers.
8. As necessary in accordance with State Law
11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section B
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:		US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River			

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	4	0	4	0	0	2	2	0	0	
Businesses	2	0	2	0	VALUE OF DWELLING					
Farms	0	0	0	0	DSS DWELLING AVAILABLE					
Non-Profit	0	0	0	0	Owners	Tenants	For Sale	For Rent		
					0-20M	\$ 0-150	0-20M	\$ 0-150		
					20-40M	150-250	20-40M	150-250		
					40-70M	250-400	40-70M	250-400		
					70-100M	400-600	70-100M	400-600		
					100 UP	600 UP	100 UP	600 UP		
					<b>TOTAL</b>	<b>4</b>	<b>0</b>	<b>244</b>	<b>5</b>	

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">8 months</span>

REMARKS (Respond by number)									
See attached sheet.									

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker</p>	<p style="text-align: center;">5/11/98</p>	<p style="text-align: center;">Date</p>	<p style="text-align: center;"><i>D.R. Veil</i></p>	<p style="text-align: center;">5-12-98</p>	<p style="text-align: center;">Date</p>
Area Relocation Agent			Approved by		

R-2518  
6.869005T  
Madison-Yancey

**Alternate 2B of 7**

3. Business services will not be disrupted due to this project.
4. (a) AAA Mini Storage Rentals, three 1500 SF buildings with office, 1 employee, no minorities.  
(b) Mars Hill Textile Outlet, two mobile homes for storage and display, 1 SFB, 800 SF, 2 employees, no minorities.
6. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local news and trade papers.
8. As necessary in accordance with State Law
11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section C
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	10	1	11	0	2	6	2	1	0				
Businesses	2	0	2	0									
Farms	0	0	0	0									
Non-Profit	0	0	0	0									
					VALUE OF DWELLING				DSS DWELLING AVAILABLE				
					Owners		Tenants		For Sale		For Rent		
					0-20M	1	\$ 0-150	1	0-20M	1	\$ 0-150	0	
					20-40M	0	150-250	0	20-40M	5	150-250	1	
					40-70M	8	250-400	0	40-70M	36	250-400	3	
					70-100M	1	400-600	0	70-100M	52	400-600	1	
					100 UP	0	600 UP	0	100 UP	150	600 UP	0	
					<b>TOTAL</b>	<b>6</b>		<b>1</b>		<b>244</b>		<b>5</b>	

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>		3. Will business services still be available after project?
<input checked="" type="checkbox"/>		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
	<input checked="" type="checkbox"/>	6. Source for available housing (list).
	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>		8. Should Last Resort Housing be considered?
	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>		11. Is public housing available?
<input checked="" type="checkbox"/>		12. Is it felt there will be adequate DSS housing available during relocation period?
	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <b>12 months</b>

**REMARKS (Respond by Number)**

See attached sheet.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker</p>		<p style="font-size: 1.2em;">5/11/98</p>		<p style="font-size: 1.2em;"><i>A.R. 2/1/98</i></p>	<p style="font-size: 1.2em;">5-12-98</p>
Area Relocation Agent		Date		Approved by	Date

R-2518  
6.869005T  
Madison-Yancey

Alternate 2C of 7

3. Business services will not be disrupted due to this project.
4. (a) Auto Repair, 1 SBLKB, 1000 SF, 2 employees, no minorities.  
(b) Auto Repair, junk car storage, 1 SBLKB, 1500 SF, 2 employees, no minorities.
6. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local news and trade papers.
8. As necessary in accordance with State Law
11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section D
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT: US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River					

ESTIMATED DISPLACEES					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	4	0	4	0	1	3	0	0	0	
Businesses	0	0	0	0	VALUE OF DWELLING					
Farms	0	0	0	0	DSS DWELLING AVAILABLE					
Non-Profit	* 2	0	2	0	Owners	Tenants	For Sale	For Rent		
					0-20M	\$ 0-150	0-20M	1	\$ 0-150	0
					20-40M	150-250	20-40M	5	150-250	1
					40-70M	250-400	40-70M	36	250-400	3
					70-100M	400-600	70-100M	52	400-600	1
					100 UP	600 UP	100 UP	150	600 UP	0
					<b>TOTAL</b>	<b>4</b>	<b>0</b>	<b>244</b>	<b>5</b>	<b>5</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
X		2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">8 months</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

\* 2. (a) Ivy Gap Baptist Church - It appears that this building is being torn down and a new brick church is being built beside this structure but off the right of way.  
(b) The Bald Creek Masonic Lodge is also being displaced.

\* One cemetery having approximately 15-20 graves is also in the right of way.

6. (a) Blue Ridge Realty - Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local newspaper and trade papers.

8. As necessary in accordance with State Law.

11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County

12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.

14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

<p>R. P. Whitaker Area Relocation Agent</p>	<p>Date</p>	<p style="text-align: center;"><i>R.P. Whitaker</i></p> <p style="text-align: center;">Approved by</p>	<p style="text-align: center;">5-12-98</p> <p style="text-align: center;">Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section E
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEES					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

ANSWER ALL QUESTIONS									
Yes	No	Explain all "YES" answers.							
		1. Will special relocation services be necessary?							
		2. Will schools or churches be affected by displacement?							
		3. Will business services still be available after project?							
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.							
		5. Will relocation cause a housing shortage?							
		6. Source for available housing (list).							
		7. Will additional housing programs be needed?							
		8. Should Last Resort Housing be considered?							
		9. Are there large, disabled, elderly, etc. families?							
		10. Will public housing be needed for project?							
		11. Is public housing available?							
		12. Is it felt there will be adequate DSS housing available during relocation period?							
		13. Will there be a problem of housing within financial means?							
		14. Are suitable business sites available (list source).							
		15. Number months estimated to complete RELOCATION?							

VALUE OF DWELLING		DSS DWELLING AVAILABLE					
Owners		Tenants		For Sale		For Rent	
0-20M		\$ 0-150		0-20M		\$ 0-150	
20-40M		150-250		20-40M		150-250	
40-70M		250-400		40-70M		250-400	
70-100M		400-600		70-100M		400-600	
100 UP		600 UP		100 UP		600 UP	
TOTAL							

REMARKS (Respond by number)

No relocation involved.

<p style="font-size: 1.2em; margin: 0;"><i>R.P. Whitaker</i></p> <p style="margin: 0;">R. P. Whitaker</p> <p style="margin: 0;">Area Relocation Agent</p>	<p style="font-size: 1.2em; margin: 0;"><i>5/1/98</i></p> <p style="margin: 0;">Date</p>	<p style="font-size: 1.2em; margin: 0;"><i>A.R. Whitaker</i></p> <p style="margin: 0;">Approved by</p>	<p style="font-size: 1.2em; margin: 0;"><i>5-12-98</i></p> <p style="margin: 0;">Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section F
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEES					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
		1. Will special relocation services be necessary?
		2. Will schools or churches be affected by displacement?
		3. Will business services still be available after project?
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
		5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
		7. Will additional housing programs be needed?
		8. Should Last Resort Housing be considered?
		9. Are there large, disabled, elderly, etc. families?
		10. Will public housing be needed for project?
		11. Is public housing available?
		12. Is it felt there will be adequate DSS housing available during relocation period?
		13. Will there be a problem of housing within financial means?
		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION?

VALUE OF DWELLING		DSS DWELLING AVAILABLE	
Owners	Tenants	For Sale	For Rent
0-20M	\$ 0-150	0-20M	\$ 0-150
20-40M	150-250	20-40M	150-250
40-70M	250-400	40-70M	250-400
70-100M	400-600	70-100M	400-600
100 UP	600 UP	100 UP	600 UP
<b>TOTAL</b>			

**REMARKS (Respond by number)**

No relocation involved.

<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">   <b>R. P. Whitaker</b>                      Area Relocation Agent                 </div> <div style="text-align: center;">                     5/11/98                      Date                 </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">                     Approved by                 </div> <div style="text-align: center;">                     5-12-98                      Date                 </div> </div>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section G
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:		US 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River			

ESTIMATED DISPLACED					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

ANSWER ALL QUESTIONS					VALUE OF DWELLING		DSS DWELLING AVAILABLE	
Yes	No	Explain all "YES" answers.			Owners	Tenants	For Sale	For Rent
		1. Will special relocation services be necessary?			0-20M	\$ 0-150	0-20M	\$ 0-150
		2. Will schools or churches be affected by displacement?			20-40M	150-250	20-40M	150-250
		3. Will business services still be available after project?			40-70M	250-400	40-70M	250-400
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.			70-100M	400-600	70-100M	400-600
		5. Will relocation cause a housing shortage?			100 UP	600 UP	100 UP	600 UP
		6. Source for available housing (list).			TOTAL			
		7. Will additional housing programs be needed?			REMARKS (Respond by Number)			
		8. Should Last Resort Housing be considered?			No relocation involved.			
		9. Are there large, disabled, elderly, etc. families?						
		10. Will public housing be needed for project?						
		11. Is public housing available?						
		12. Is it felt there will be adequate DSS housing available during relocation period?						
		13. Will there be a problem of housing within financial means?						
		14. Are suitable business sites available (list source).						
		15. Number months estimated to complete RELOCATION?						

<i>R.P. Whitaker</i> R. P. Whitaker Area Relocation Agent	5/11/98 Date	 Approved by	5-12-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section H
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	1	0	1	0	0	1	0	0	0			
Businesses	0	0	0	0	VALUE OF DWELLING		DSS DWELLING AVAILABLE					
Farms	0	0	0	0	Owners		Tenants		For Sale	For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	1	150-250	0	20-40M	5	150-250	3
					40-70M	0	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					TOTAL	1		0		160		16

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
	x	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
	x	6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px 10px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.
6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N. C.  
(c) Local news & trade papers
8. As is necessary in accordance with State Law.
11. Northwestern Housing Regulation Authority, Yancy County
12. Realtors indicate that adequate DSS replacement property would be available.
14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<i>R.P. White</i> Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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Vail 11/19/98

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section I
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	1	0	1	0	1	0	0	0	0				
Businesses	0	0	0	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	1	0	1	0	0-20M	1	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	0	150-250	0	20-40M	5	150-250	3	
					40-70M	0	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>1</b>		<b>0</b>		<b>160</b>		<b>16</b>	

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
x		2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
	x	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
	x	6. Source for available housing (list).
x		7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by Number)**

2. Seventh Day Adventist Church 1S Brick - 2800 S.F.
3. Business services will not be disrupted due to project.
6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N. C.  
(c) Local news & trade papers
8. As is necessary in accordance with State Law
11. Northwestern Housing Regulation Authority, Yancy County
12. Realtors indicate that adequate DSS replacement property would be available.
14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11-19-98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section J
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19'E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	2	0	2	0	1	0	1	1	0			
Businesses	0	0	0	0	VALUE OF DWELLING                      DSS DWELLING AVAILABLE Owners                      Tenants                      For Sale                      For Rent							
Farms	0	0	0	0								
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	1	150-250	0	20-40M	5	150-250	3
					40-70M	1	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					<b>TOTAL</b>	<b>2</b>		<b>0</b>		<b>160</b>		<b>16</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>		3. Will business services still be available after project?
	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>		8. Should Last Resort Housing be considered?
	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>		11. Is public housing available?
<input checked="" type="checkbox"/>		12. Is it felt there will be adequate DSS housing available during relocation period?
	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION?      / 8

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N. C.  
(c) Local news & trade papers

8. As is necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

Area Relocation Agent	11/19/98 Date	Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section K
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	0	0	0	0	0	0	0	0	0			
Businesses	1	3	4	0	VALUE OF DWELLING      DSS DWELLING AVAILABLE							
Farms	0	0	0	0	Owners		Tenants		For Sale      For Rent			
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	0	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					<b>TOTAL</b>	<b>0</b>		<b>0</b>		<b>160</b>		<b>16</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
x		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

REMARKS (Respond by Number)	
3.	Business services will not be disrupted due to project.
4.	(a) Real Estate Office, 4 emp., 800 S.F., no minorities (b) Insurance Office, 3 emp., 800 S.F., no minorities (c) Cellular Phone Office, 4 emp., 800 S.F., no minorities (d) Real Estate Office, 4 emp., 1,200 S.F., no minorities
6.	(a) Common ground realty (b) Lunsford Realty, Burnsville, N.C. (c) Local news & trade papers
8.	As necessary in accordance with State Law
11.	Northwestern Housing Regulation Authority, Yancy County
12.	Realtors indicate that adequate DSS replacement property would be available.
14.	Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<p style="text-align: center;"><i>R.P. White</i> Area Relocation Agent</p>	<p style="text-align: center;">11/19/98 Date</p>	<p style="text-align: center;"><i>D.R. Vail</i> Approved by</p>	<p style="text-align: center;">11-24-98 Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 2	Section L
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	5	0	5	0	0	2	2	1	0				
Businesses	1	0	1	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
ANSWER ALL QUESTIONS					20-40M	0	150-250	0	20-40M	5	150-250	3	
Yes	No	<i>Explain all "YES" answers.</i>											
	X	1. Will special relocation services be necessary?											
	X	2. Will schools or churches be affected by displacement?											
X		3. Will business services still be available after project?											
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.											
	X	5. Will relocation cause a housing shortage?											
		6. Source for available housing (list).											
	X	7. Will additional housing programs be needed?											
X		8. Should Last Resort Housing be considered?											
	X	9. Are there large, disabled, elderly, etc. families?											
	X	10. Will public housing be needed for project?											
X		11. Is public housing available?											
X		12. Is it felt there will be adequate DSS housing available during relocation period?											
	X	13. Will there be a problem of housing within financial means?											
X		14. Are suitable business sites available (list source).											
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>											

**REMARKS (Respond by Number)**

- 3. Business services will not be disrupted due to project.**
- 4. (a) 4 bay car wash, 0 emp., 1,500 S.F., no minorities**
- 6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers**
- 8. As necessary in accordance with State Law**
- 11. Northwestern Housing Regulation Authority,  
Yancy County**
- 12. Realtors indicate that adequate DSS replacement property would be available.**
- 14. Lunsford Realty, Burnsville, N. C.**

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Area Relocation Agent         </div> <div style="text-align: center;">             11/19/98              Date         </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Approved by         </div> <div style="text-align: center;">             11-24-98              Date         </div> </div>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section J
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	2	0	2	0	0	0	1	1	0	
Businesses	0	0	0	0	VALUE OF DWELLING					
Farms	0	0	0	0	DSS DWELLING AVAILABLE					
Non-Profit	0	0	0	0	Owners	Tenants	For Sale	For Rent		
					0-20M	0	\$ 0-150	0	0-20M	3
					20-40M	0	150-250	0	20-40M	5
					40-70M	1	250-400	0	40-70M	37
					70-100M	0	400-600	0	70-100M	43
					100 UP	1	600 UP	0	100 UP	72
					TOTAL	2		0		160

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px 10px;">18</span>

REMARKS (Respond by number)							
3.	Business services will not be disrupted due to project.						
6.	(a) Common ground realty (b) Lunsford Realty, Burnsville, N. C. (c) Local news & trade papers						
8.	As is necessary in accordance with State Law						
11.	Northwestern Housing Regulation Authority, Yancy County						
12.	Realtors indicate that adequate DSS replacement property would be available.						
14.	Lunsford Realty, Burnsville, N. C.						

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section K
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	0	0	0	0	0	0	0	0	0			
Businesses	1	3	4	0	VALUE OF DWELLING							
Farms	0	0	0	0	DSS DWELLING AVAILABLE							
Non-Profit	0	0	0	0	Owners		Tenants		For Sale      For Rent			
					0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	0	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					TOTAL	0		0		160		16

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (respond by number)**

3. Business services will not be disrupted due to project.

4. (a) Real Estate Office, 4 emp., 800 S.F., no minorities  
 (b) Insurance Office, 3 emp., 800 S.F., no minorities  
 (c) Cellular Phone Office, 4 emp., 800 S.F., no minorities  
 (d) Real Estate Office, 4 emp., 1,200 S.F., no minorities

6. (a) Common ground realty  
 (b) Lunsford Realty, Burnsville, N.C.  
 (c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

Area Relocation Agent	11/19/98 Date	Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section L
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEES					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	3	0	3	0	0	1	1	1	0			
Businesses	0	1	1	0	VALUE OF DWELLING		DSS DWELLING AVAILABLE					
Farms	0	0	0	0	Owners	Tenants	For Sale	For Rent				
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
ANSWER ALL QUESTIONS					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	2	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	1	600 UP	0	100 UP	72	600 UP	1
					TOTAL	3		0		160		16

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
x		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by Number)**

3. Business services will not be disrupted due to project.

4. (a) First Citizens Bank, 6 emp., 1,200 S.F., no minorities

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section M
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACED					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	0	0	0	0	0	0	0	0	0			
Businesses	2	2	4	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	0	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					<b>TOTAL</b>	<b>0</b>		<b>0</b>		<b>160</b>		<b>16</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
x		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
	x	6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>

REMARKS (Respond by Number)	
3.	Business services will not be disrupted due to project.
4.	(a) Real Estate Office, 4 emp., 1000 S.F., no minorities (b) Hair Salon, 2 emp., 800 S.F., no minorities (c) Conv. store & laundry, 5 emp., 2200 S.F., no minorities (d) Produce stand, 2 emp., 400 S.F., no minorities
6.	(a) Common ground realty (b) Lunsford Realty, Burnsville, N.C. (c) Local news & trade papers
8.	As necessary in accordance with State Law
11.	Northwestern Housing Regulation Authority, Yancy County
12.	Realtors indicate that adequate DSS replacement property would be available.
14.	Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

Area Relocation Agent	11/19/98 Date	Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section N
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50.UP				
Residential	4	0	4	0	0	3	1	0	0				
Businesses	2	0	2	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
					20-40M	0	150-250	0	20-40M	5	150-250	3	
					40-70M	4	250-400	0	40-70M	37	250-400	8	
					70-100M	0	400-600	0	70-100M	43	400-600	4	
					100 UP	0	600 UP	0	100 UP	72	600 UP	1	
					<b>TOTAL</b>	<b>4</b>		<b>0</b>		<b>160</b>		<b>16</b>	

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>		3. Will business services still be available after project?
<input checked="" type="checkbox"/>		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input checked="" type="checkbox"/>		7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>		8. Should Last Resort Housing be considered?
	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>		11. Is public housing available?
<input checked="" type="checkbox"/>		12. Is it felt there will be adequate DSS housing available during relocation period?
	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

4. (a) Hair Salon, 1 emp., 800 S.F., no minorities  
(b) Grocery Store, 3 emp., 1500 S.F., no minorities

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

P.P. White Area Relocation Agent	11/19/98 Date	D.R. Visk Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section 0
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL								
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP				
Residential	2	0	2	0	0	2	0	0	0				
Businesses	0	6	6	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale		For Rent		
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0	
ANSWER ALL QUESTIONS					20-40M	0	150-250	0	20-40M	5	150-250	3	
Yes	No	Explain all "YES" answers.											
	X	1. Will special relocation services be necessary?											
	X	2. Will schools or churches be affected by displacement?											
X		3. Will business services still be available after project?											
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.											
	X	5. Will relocation cause a housing shortage?											
		6. Source for available housing (list).											
	X	7. Will additional housing programs be needed?											
X		8. Should Last Resort Housing be considered?											
	X	9. Are there large, disabled, elderly, etc. families?											
	X	10. Will public housing be needed for project?											
X		11. Is public housing available?											
X		12. Is it felt there will be adequate DSS housing available during relocation period?											
	X	13. Will there be a problem of housing within financial means?											
X		14. Are suitable business sites available (list source).											
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">18</span>											

**REMARKS (Respond by Number)**

3. Business services will not be disrupted due to project.

4. (a) 6 bay mini. whse., 0 emp., 800 S.F., no minorities  
 (b) Clothing Store, 2 emp., 500 S.F., no minorities  
 (c) Travel agency, 2 emp., 1000 S.F., no minorities  
 (d) Yancy County Child Support Off., 3 emp., 1000 S.F., no minorities  
 (e) Produce stand, 1 emp., 400 S.F., no minorities  
 (f) Produce stand, 1 emp., 400 S.F., no minorities  
 \* Cemetery that may affect 4 or more graves

6. (a) Common ground realty  
 (b) Lunsford Realty, Burnsville, N.C.  
 (c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Area Relocation Agent         </div> <div style="text-align: center;"> <span style="border-bottom: 1px solid black; padding: 0 20px;">11-19-98</span>              Date         </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Approved by         </div> <div style="text-align: center;"> <span style="border-bottom: 1px solid black; padding: 0 20px;">11-24-98</span>              Date         </div> </div>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section P
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	2	0	2	0	0	2	0	0	0	
Businesses	2	1	3	0	VALUE OF DWELLING      DSS DWELLING AVAILABLE					
Farms	0	0	0	0	Owners		Tenants		For Sale      For Rent	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3
					20-40M	2	150-250	0	20-40M	5
					40-70M	0	250-400	0	40-70M	37
					70-100M	0	400-600	0	70-100M	43
					100 UP	0	600 UP	0	100 UP	72
					TOTAL	2	0	0	160	16

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

REMARKS (Respond by number)			
3.	Business services will not be disrupted due to project.	4.	(a) Auto sales, 1 emp., 300 S.F., no minorities (b) Produce stand, 2 emp., 1500 S.F., no minorities (c) Automotive business, 4 emp., 1200 S.F., no minorities
6.	(a) Common ground realty (b) Lunsford Realty, Burnsville, N.C. (c) Local news & trade papers	8.	As necessary in accordance with State Law
11.	Northwestern Housing Regulation Authority, Yancy County	12.	Realtors indicate that adequate DSS replacement property would be available.
14.	Lunsford Realty, Burnsville, N. C.		

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

Area Relocation Agent	11-19-98 Date	Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section Q
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	7	0	7	0	2	4	1	0	0			
Businesses	2	0	2	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale	For Rent		
Non-Profit	1	0	1	0	0-20M	0	\$ 0-150	0	0-20M	3	\$ 0-150	0
ANSWER ALL QUESTIONS					20-40M	2	150-250	0	20-40M	5	150-250	3
					40-70M	5	250-400	0	40-70M	37	250-400	8
Yes    No    Explain all "YES" answers.					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					TOTAL	7		0		160		16

		1. Will special relocation services be necessary?
	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>		3. Will business services still be available after project?
<input checked="" type="checkbox"/>		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>		8. Should Last Resort Housing be considered?
	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>		11. Is public housing available?
<input checked="" type="checkbox"/>		12. Is it felt there will be adequate DSS housing available during relocation period?
	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px 10px;">18</span>

**REMARKS (Respond by number)**

2. House of Prayer, 1000 S.F., no minorities

3. Business services will not be disrupted due to project.

4. (a) Recreation Center, 2 emp., 1400 S.F., no minorities  
(b) Book & Craft Store, 2 emp., 1200 S.F., no minorities

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N.C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<p><i>R.D. White</i> Area Relocation Agent</p>	<p>11/16/98 Date</p>	<p><i>D.R. Urd</i> Approved by</p>	<p>11-24-98 Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section R
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACED					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	4	3	7	0	3	4	0	0	0	
Businesses	0	0	0	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE		
Farms	0	0	0	0	Owners		Tenants		For Sale    For Rent	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3
					20-40M	0	150-250	3	20-40M	5
					40-70M	4	250-400	0	40-70M	37
					70-100M	0	400-600	0	70-100M	43
					100 UP	0	600 UP	0	100 UP	72
					TOTAL	4		3		160

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by number)**

3. Business services will not be disrupted due to project.

6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N.C.  
(c) Local news & trade papers

8. As necessary in accordance with State Law

11. Northwestern Housing Regulation Authority, Yancy County

12. Realtors indicate that adequate DSS replacement property would be available.

14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

 Area Relocation Agent	11/19/98 Date	 Approved by	11-24-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 2	Section A
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEDS					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential	4	0	4	0	0	0	4	0	0
Businesses	3	0	3	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE	
Farms	0	0	0	0	Owners	Tenants	For Sale	For Rent	
Non-Profit	0	0	0	0	0-20M	\$ 0-150	0-20M	1	\$ 0-150
					20-40M	150-250	20-40M	5	150-250
					40-70M	250-400	40-70M	36	250-400
					70-100M	400-600	70-100M	52	400-600
					100 UP	600 UP	100 UP	150	600 UP
					<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>244</b>	<b>5</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <b>8 months</b>

REMARKS (Respond by number)

See attached sheet.

<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">   <b>R. P. Whitaker</b>                      Area Relocation Agent                 </div> <div style="text-align: center;"> <u>5/1/98</u>                      Date                 </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">                       Approved by                 </div> <div style="text-align: center;"> <u>5-12-98</u>                      Date                 </div> </div>
--	--	--

*Handwritten signature and date: 3/5/98*

R-2518  
6.869005T  
Madison-Yancey

Alternate 1A of 7

3. Business services will not be disrupted due to this project.
4.
  - (a) Young Design, 1 SFB, 800 SF, 1 employee, no minorities.
  - (b) Discount Monument, 1 SFB, 250 SF, 1 employee, no minorities.
  - (c) Auto Repair Shop, 1SMB, 2500 SF, 8 employees, no minorities.
  - (d) Ledford Auto Parts & Supply, 1 SMB, 3000 SF, 4 employees, no minorities.
  - (e) P & E Farm Supply, 1SRock&FB, 2500 SF, 4 employees, no minorities.
6.
  - (a) Blue Ridge Realty, Mars Hill, N. C.
  - (b) Common Ground Realty, Burnsville, N. C.
  - (c) Lunsford Realty, Burnsville, N. C.
  - (d) Local news and trade papers.
8. As necessary in accordance with State Law
11.
  - (a) Marshall Housing Authority, Madison County
  - (b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14.
  - (a) Blue Ridge Realty, Mars Hill, N. C.
  - (b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section B
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEDS					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential	6	0	6	0	0	4	2	0	0
Businesses	1	0	1	0	VALUE OF DWELLING				
Farms	0	0	0	0	DSS DWELLING AVAILABLE				
Non-Profit	1	0	1	0	Owners	Tenants	For Sale	For Rent	
					0-20M	\$ 0-150	0-20M	\$ 0-150	0
					20-40M	150-250	20-40M	150-250	1
					40-70M	250-400	40-70M	250-400	3
					70-100M	400-600	70-100M	400-600	1
					100 UP	600 UP	100 UP	600 UP	0
					<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>244</b>	<b>5</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Will special relocation services be necessary?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Will schools or churches be affected by displacement?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Will business services still be available after project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Will relocation cause a housing shortage?
<input type="checkbox"/>	<input type="checkbox"/>	6. Source for available housing (list).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will additional housing programs be needed?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Should Last Resort Housing be considered?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Are there large, disabled, elderly, etc. families?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Will public housing be needed for project?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Is public housing available?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is it felt there will be adequate DSS housing available during relocation period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Will there be a problem of housing within financial means?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Are suitable business sites available (list source).
<input type="checkbox"/>	<input type="checkbox"/>	15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">8 months</span>

REMARKS (Respond by number)

See attached sheet.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker Area Relocation Agent</p>	<p>5/1/98 Date</p>	<p style="text-align: center;"><i>D. R. [Signature]</i> Approved by</p>	<p>5-12-98 Date</p>
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R-2518  
6.869005T  
Madison-Yancey

**Alternate 1B of 7**

2. Middlefork Independent Baptist Church, 1SFB, 1000 SF.
3. Business services will not be disrupted due to this project.
4. AAA Mini Storage Rentals, three 1500 SF buildings with office, 1 employee, no minorities.
6. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local news and trade papers.
8. As necessary in accordance with State Law
11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section C
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEDS					INCOME LEVEL																																																																				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP																																																																
Residential	1	2	13	0	1	8	3	1	0																																																																
Businesses	5	0	5	0	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4">VALUE OF DWELLING</th> <th colspan="4">DSS DWELLING AVAILABLE</th> </tr> <tr> <th colspan="2">Owners</th> <th colspan="2">Tenants</th> <th colspan="2">For Sale</th> <th colspan="2">For Rent</th> </tr> <tr> <td>0-20M</td> <td style="text-align: center;">1</td> <td>\$ 0-150</td> <td style="text-align: center;">1</td> <td>0-20M</td> <td style="text-align: center;">1</td> <td>\$ 0-150</td> <td style="text-align: center;">0</td> </tr> <tr> <td>20-40M</td> <td style="text-align: center;">1</td> <td>150-250</td> <td style="text-align: center;">1</td> <td>20-40M</td> <td style="text-align: center;">5</td> <td>150-250</td> <td style="text-align: center;">1</td> </tr> <tr> <td>40-70M</td> <td style="text-align: center;">8</td> <td>250-400</td> <td style="text-align: center;">0</td> <td>40-70M</td> <td style="text-align: center;">36</td> <td>250-400</td> <td style="text-align: center;">3</td> </tr> <tr> <td>70-100M</td> <td style="text-align: center;">1</td> <td>400-600</td> <td style="text-align: center;">0</td> <td>70-100M</td> <td style="text-align: center;">52</td> <td>400-600</td> <td style="text-align: center;">1</td> </tr> <tr> <td>100 UP</td> <td style="text-align: center;">0</td> <td>600 UP</td> <td style="text-align: center;">0</td> <td>100 UP</td> <td style="text-align: center;">150</td> <td>600 UP</td> <td style="text-align: center;">0</td> </tr> <tr> <td><b>TOTAL</b></td> <td style="text-align: center;"><b>11</b></td> <td></td> <td style="text-align: center;"><b>2</b></td> <td></td> <td style="text-align: center;"><b>244</b></td> <td></td> <td style="text-align: center;"><b>5</b></td> </tr> </table>					VALUE OF DWELLING				DSS DWELLING AVAILABLE				Owners		Tenants		For Sale		For Rent		0-20M	1	\$ 0-150	1	0-20M	1	\$ 0-150	0	20-40M	1	150-250	1	20-40M	5	150-250	1	40-70M	8	250-400	0	40-70M	36	250-400	3	70-100M	1	400-600	0	70-100M	52	400-600	1	100 UP	0	600 UP	0	100 UP	150	600 UP	0	<b>TOTAL</b>	<b>11</b>		<b>2</b>		<b>244</b>		<b>5</b>
VALUE OF DWELLING				DSS DWELLING AVAILABLE																																																																					
Owners		Tenants		For Sale		For Rent																																																																			
0-20M	1	\$ 0-150	1	0-20M	1	\$ 0-150	0																																																																		
20-40M	1	150-250	1	20-40M	5	150-250	1																																																																		
40-70M	8	250-400	0	40-70M	36	250-400	3																																																																		
70-100M	1	400-600	0	70-100M	52	400-600	1																																																																		
100 UP	0	600 UP	0	100 UP	150	600 UP	0																																																																		
<b>TOTAL</b>	<b>11</b>		<b>2</b>		<b>244</b>		<b>5</b>																																																																		
Farms	0	0	0	0																																																																					
Non-Profit	0	0	0	0																																																																					

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">12 months</span>

REMARKS (Respond by number)

See attached sheet.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker Area Relocation Agent</p>	<p style="text-align: center;">5/11/98 Date</p>	<p style="text-align: center;"><i>D. R. [Signature]</i> Approved by</p>	<p style="text-align: center;">5-12-98 Date</p>
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R-2518  
6.869005T  
Madison-Yancey

Alternate 1C of 7

- \* 2. It might be noted that the Fellowship Building of Bethel Baptist Church is affected.
3. Business services will not be disrupted due to this project.
4. (a) Produce Stand, 1 SFB, .900 SF, 2 employees, no minorities.  
(b) Craft Shop 1SLOGB, 1200 SF 2 employee, no minorities.  
(c) Auto Repair, junk car storage, 1 SBLKB, 1000 SF, 2 employees, no minorities.  
(d) Car Sales Lot, 2 SFB, 600 SF, 1 employees, no minorities. (One side of building is vacant.  
(e) Antique Business, 2 SFB, 3500 SF, and 1SFB, 600 SF, two employees, no minorities.
6. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Common Ground Realty, Burnsville, N. C.  
(c) Lunsford Realty, Burnsville, N. C.  
(d) Local news and trade papers.
8. As necessary in accordance with State Law
11. (a) Marshall Housing Authority, Madison County  
(b) Northwestern Housing Regulation Authority, Yancey County
12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.
14. (a) Blue Ridge Realty, Mars Hill, N. C.  
(b) Lunsford Realty, Burnsville, N. C.

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section D
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT: US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River					

ESTIMATED DISPLACEDS					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	1	0	1	0	1	0	0	0	0	
Businesses	0	0	0	0	VALUE OF DWELLING					
Farms	0	0	0	0	DSS DWELLING AVAILABLE					
Non-Profit	2	0	2	0	Owners	Tenants	For Sale	For Rent		
					0-20M	0	0-150	0	0-20M	1
					20-40M	1	150-250	0	20-40M	5
					40-70M	0	250-400	0	40-70M	36
					70-100M	0	400-600	0	70-100M	52
					100 UP	0	600 UP	0	100up	150
					TOTAL	1	0	0	244	5

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
X		2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
	X	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing. Available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list Source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">8 months</span>

**REMARKS (Respond by number)**

\* 2. (a) Ivy Gap Baptist Church - It appears that this building is being torn down and a new brick church is being built beside this structure but off the right of way.  
 (b) The Bald Creek Masonic Lodge is also being displaced.

3. Business services will not be disrupted by the project.

6. (a) Blue Ridge Realty - Mars Hill, N. C.  
 (b) Common Ground Realty - Burnsville, N. C.  
 (c) Lunsford Realty - Burnsville, N. C.  
 (d) Local news and trade papers.

8. As necessary in accordance with State Law.

11. (a) Marshall Housing Authority, Madison County.  
 (b) Northwestern Housing Regulation Authority, Yancey County

12. Realtors indicate that adequate DSS replacement property would be available for the above displacees.

14. (a) Blue Ridge Realty, Mars Hill, N. C.  
 (b) Lunsford Realty, Burnsville, N. C.

R. P. Whitaker Area Relocation Agent	Date	Approved by	5-12-98 Date
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section E
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:		US. 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River			

ESTIMATED DISPLACES					INCOME LEVEL				
Type of Displaces	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

		VALUE OF DWELLING		DSS DWELLING AVAILABLE	
		Owners	Tenants	For Sale	For Rent
0-20M		\$ 0-150		0-20M	\$ 0-150
20-40M		150-250		20-40M	150-250
40-70M		250-400		40-70M	250-400
70-100M		400-600		70-100M	400-600
100 UP		600 UP		100 UP	600 UP
<b>TOTAL</b>					

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
		1. Will special relocation services be necessary?
		2. Will schools or churches be affected by displacement?
		3. Will business services still be available after project?
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
		5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
		7. Will additional housing programs be needed?
		8. Should Last Resort Housing be considered?
		9. Are there large, disabled, elderly, etc. families?
		10. Will public housing be needed for project?
		11. Is public housing available?
		12. Is it felt there will be adequate DSS housing available during relocation period?
		13. Will there be a problem of housing within financial means?
		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px 10px;"> </span>

**REMARKS (Respond by number)**

No relocation involved.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker Area Relocation Agent</p>	<p style="text-align: center;">5/11/98 Date</p>		<p style="text-align: center;"><i>D.R. Vest</i> Approved by</p>	<p style="text-align: center;">5-12-98 Date</p>
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# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY:	Madison-Yancey	Alternate 1	Section F
I.D. NO.:	R-2518	F.A. PROJECT:	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEES					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

VALUE OF DWELLING				DSS DWELLING AVAILABLE			
Owners		Tenants		For Sale		For Rent	
0-20M		\$ 0-150		0-20M		\$ 0-150	
20-40M		150-250		20-40M		150-250	
40-70M		250-400		40-70M		250-400	
70-100M		400-600		70-100M		400-600	
100 UP		600 UP		100 UP		600 UP	
<b>TOTAL</b>							

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
		1. Will special relocation services be necessary?
		2. Will schools or churches be affected by displacement?
		3. Will business services still be available after project?
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
		5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
		7. Will additional housing programs be needed?
		8. Should Last Resort Housing be considered?
		9. Are there large, disabled, elderly, etc. families?
		10. Will public housing be needed for project?
		11. Is public housing available?
		12. Is it felt there will be adequate DSS housing available during relocation period?
		13. Will there be a problem of housing within financial means?
		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right;">_____</span>

**REMARKS (Respond by number)**

No relocation involved.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker Area Relocation Agent</p>		<p style="text-align: center;"><i>A.R. V... 8</i> Approved by</p>
5/1/98 Date		5-12-98 Date

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section G
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 From Future I-26 (Existing US 19-23) to SR 1336 at Cane River				

ESTIMATED DISPLACEDS					INCOME LEVEL				
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP
Residential									
Businesses									
Farms									
Non-Profit									

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
		1. Will special relocation services be necessary?
		2. Will schools or churches be affected by displacement?
		3. Will business services still be available after project?
		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
		5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
		7. Will additional housing programs be needed?
		8. Should Last Resort Housing be considered?
		9. Are there large, disabled, elderly, etc. families?
		10. Will public housing be needed for project?
		11. Is public housing available?
		12. Is it felt there will be adequate DSS housing available during relocation period?
		13. Will there be a problem of housing within financial means?
		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION?

**REMARKS (Respond by number)**

No relocation involved.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker</p>		<p style="text-align: center;">5/11/98</p>		<p style="text-align: center;"><i>A.R. Vail</i></p>	<p style="text-align: center;">5-12-98</p>
Area Relocation Agent		Date		Approved by	Date

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	<b>Alternate 1</b>	<b>Section H</b>
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACED					INCOME LEVEL					
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP	
Residential	1	4	5	0	4	1	0	0	0	
Businesses	0	0	0	0	VALUE OF DWELLING				DSS DWELLING AVAILABLE	
Farms	0	0	0	0	Owners		Tenants		For Sale	
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	3
					20-40M	1	150-250	4	20-40M	5
					40-70M	0	250-400	0	40-70M	37
					70-100M	0	400-600	0	70-100M	43
					100 UP	0	600 UP	0	100 UP	72
					<b>TOTAL</b>	<b>1</b>		<b>4</b>		<b>160</b>

ANSWER ALL QUESTIONS		
Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
	x	2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
	x	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc
	x	5. Will relocation cause a housing shortage?
	x	6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (respond by number)**

3. Business services will not be disrupted due to project.
6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N. C.  
(c) Local news & trade papers  
(d) On the ground survey
8. As is necessary in accordance with State Law
11. Northwestern Housing Regulation Authority, Yancy County
12. Realtors indicate that adequate DSS replacement property would be available.
14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.

<p style="text-align: center;"><i>[Signature]</i> Area Relocation Agent</p>	<p style="text-align: center;"><i>[Signature]</i> Approved by</p>
Date	Date

*[Handwritten Signature]* 11/19/98

# RELOCATION REPORT

North Carolina Department of Transportation  
AREA RELOCATION OFFICE

E.I.S.     CORRIDOR     DESIGN

PROJECT:	6.909001T	COUNTY	Yancy	Alternate 1	Section I
I.D. NO.:	R-2519A	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:	US 19 E from SR 1336 (Jack's Creek Rd.) to SR 1186				

ESTIMATED DISPLACEDS					INCOME LEVEL							
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	1	0	1	0	1	0	0	0	0			
Businesses	0	0	0	0	- VALUE OF DWELLING			DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners	Tenants	For Sale	For Rent				
Non-Profit	1	0	1	0	0-20M	1	50-150	0	0-20M	3	50-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	3
					40-70M	0	250-400	0	40-70M	37	250-400	8
					70-100M	0	400-600	0	70-100M	43	400-600	4
					100 UP	0	600 UP	0	100 UP	72	600 UP	1
					TOTAL	1	0	0	160			16

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	x	1. Will special relocation services be necessary?
x		2. Will schools or churches be affected by displacement?
x		3. Will business services still be available after project?
	x	4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	x	5. Will relocation cause a housing shortage?
		6. Source for available housing (list).
	x	7. Will additional housing programs be needed?
x		8. Should Last Resort Housing be considered?
	x	9. Are there large, disabled, elderly, etc. families?
	x	10. Will public housing be needed for project?
x		11. Is public housing available?
x		12. Is it felt there will be adequate DSS housing available during relocation period?
	x	13. Will there be a problem of housing within financial means?
x		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="float: right; border: 1px solid black; padding: 2px;">18</span>

**REMARKS (Respond by Number)**

2. Seventh Day Adventist Church 1S Brick - 2800 S.F.
3. Business services will not be disrupted due to project.
6. (a) Common ground realty  
(b) Lunsford Realty, Burnsville, N. C.  
(c) Local news & trade papers
8. As is necessary in accordance with State Law
11. Northwestern Housing Regulation Authority, Yancy County
12. Realtors indicate that adequate DSS replacement property would be available.
14. Lunsford Realty, Burnsville, N. C.

\*You will note a difference in the count of displacees on the Relocation EIS Report & Appraisal Cost Estimate due to proximity damage being a factor on the Cost Estimate Report & improvements not actually in the take. Several improvements were considered as one displacee on cost estimate but were occupied by more than one tenant owned business for the EIS Report.


Area Relocation Agent	11/19/98 Date	Approved by	11-24-98 Date
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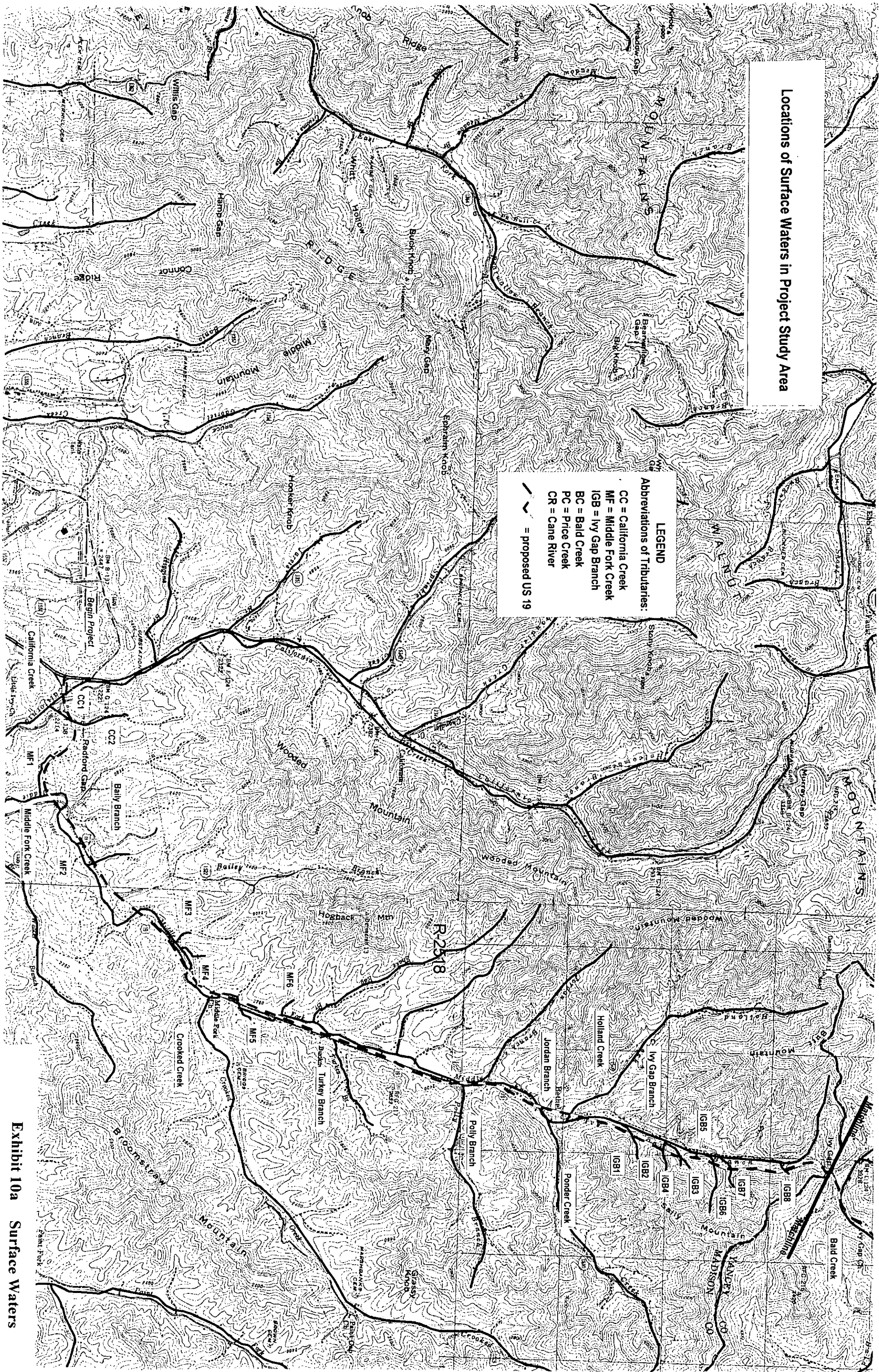
Locations of Surface Waters in Project Study Area

**LEGEND**

Abbreviations of Tributaries:

- CC = California Creek
- MF = Middle Fork Creek
- IGB = Ivy Gap Branch
- BC = Bald Creek
- PC = Price Creek
- CR = Cane River

 = proposed US 19




Locations of Surface Waters in Project Study Area

**LEGEND**

Abbreviations of Tributaries:

- CC = California Creek
- MF = Middle Fork Creek
- IGB = Ivy Gap Branch
- BC = Bald Creek
- PC = Price Creek
- CR = Cane River

 = proposed US 19

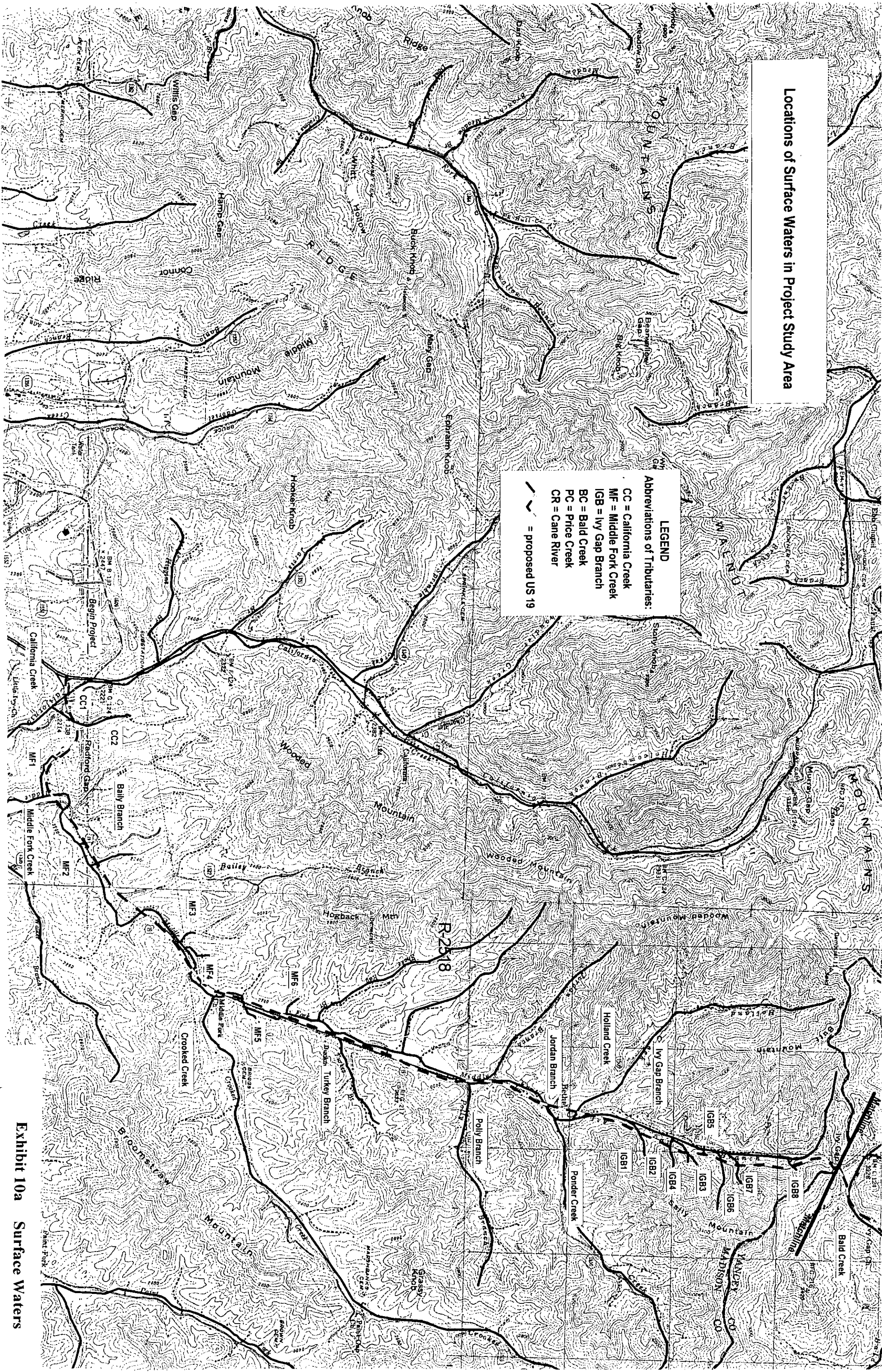
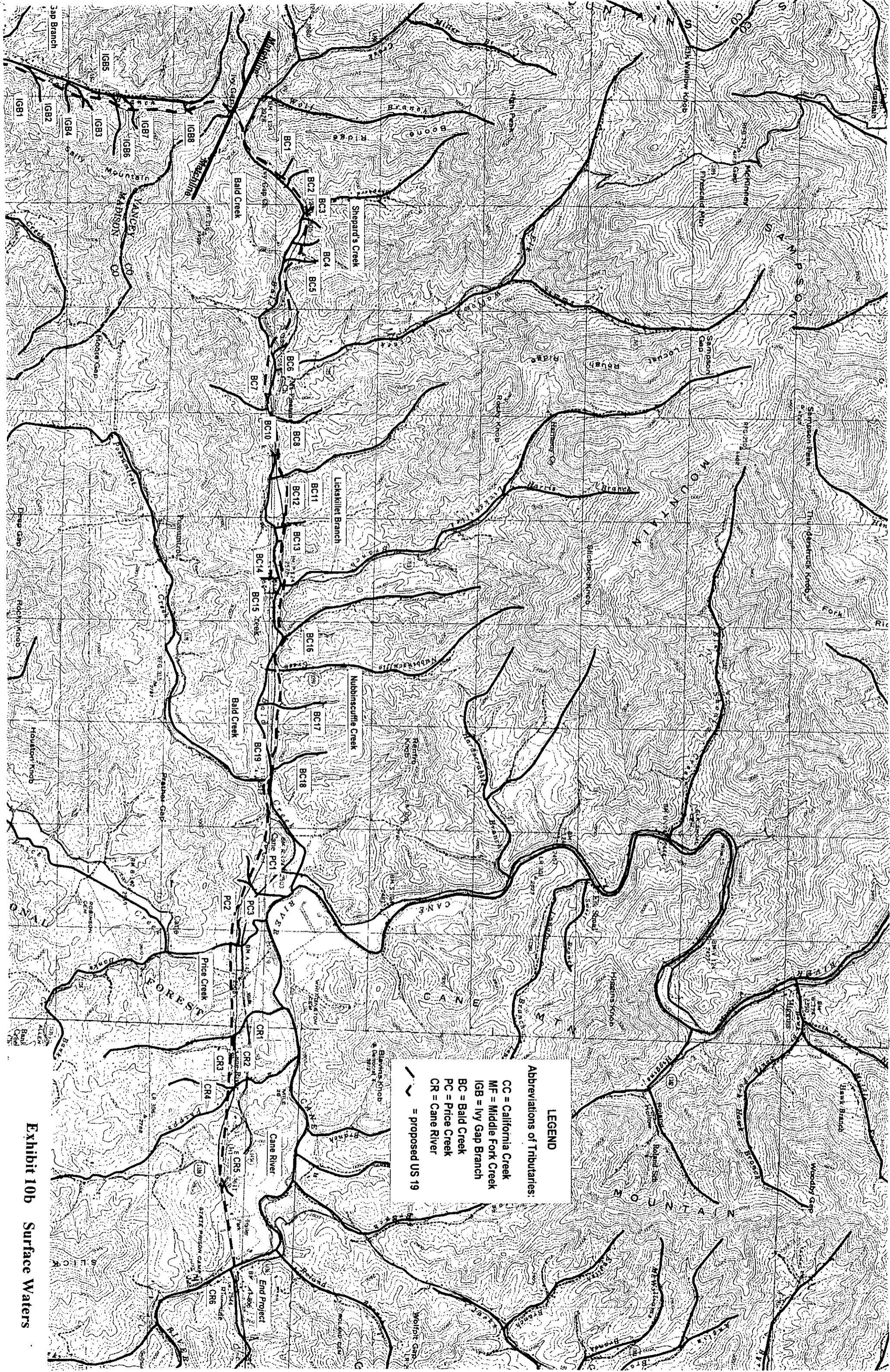



Exhibit 10a Surface Waters



**LEGEND**

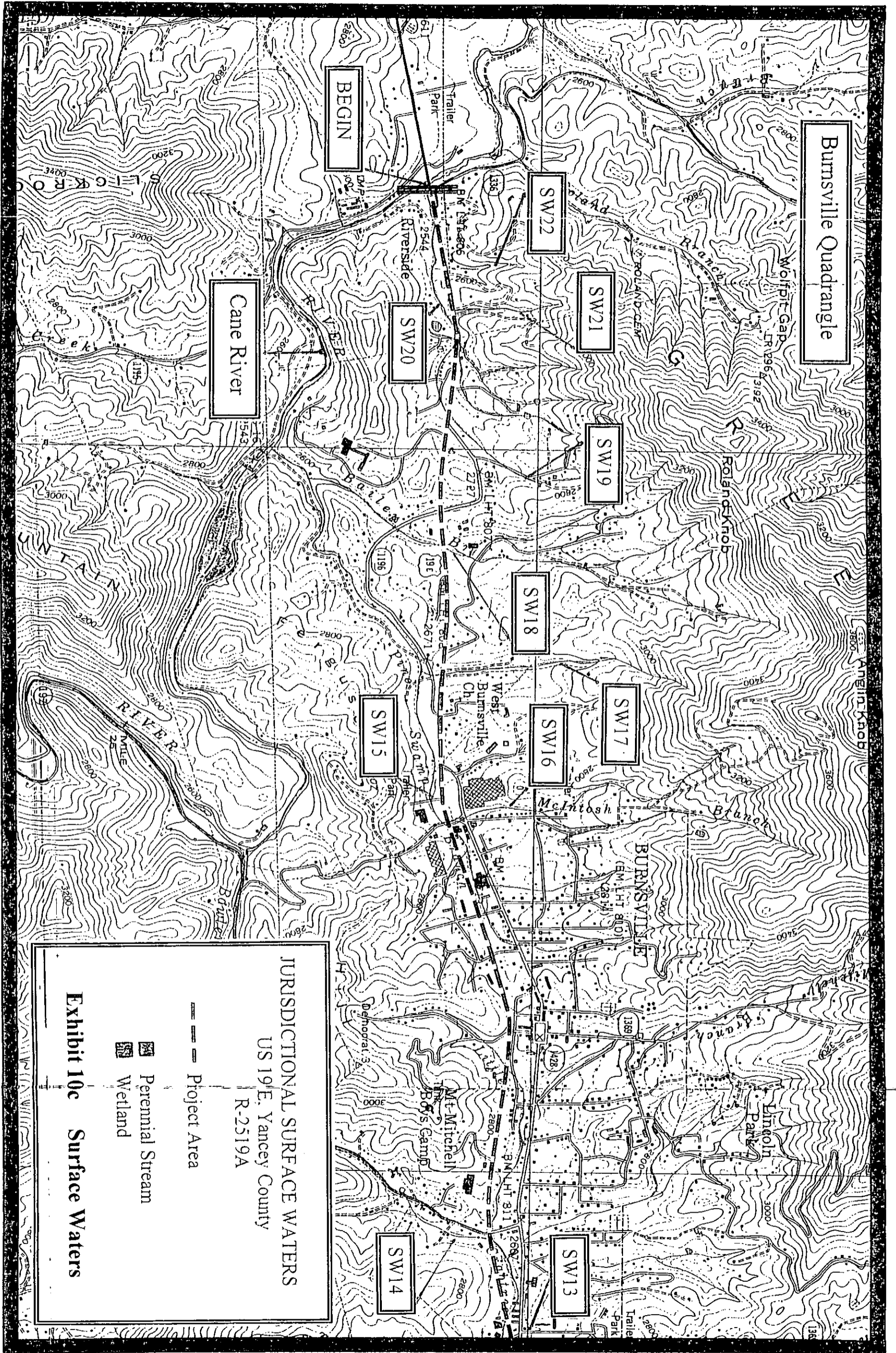
**Abbreviations of Tributaries:**

- CC = California Creek
- MF = Middle Fork Creek
- IGB = Ivy Gap Branch
- BC = Bald Creek
- PC = Price Creek
- CR = Cane River

 = proposed US 19

**Exhibit 10b Surface Waters**





Burnsville Quadrangle

Cane River

BEGIN

SW22

SW21

SW20

SW19

SW18

SW15

SW16

SW17

SW14

SW13

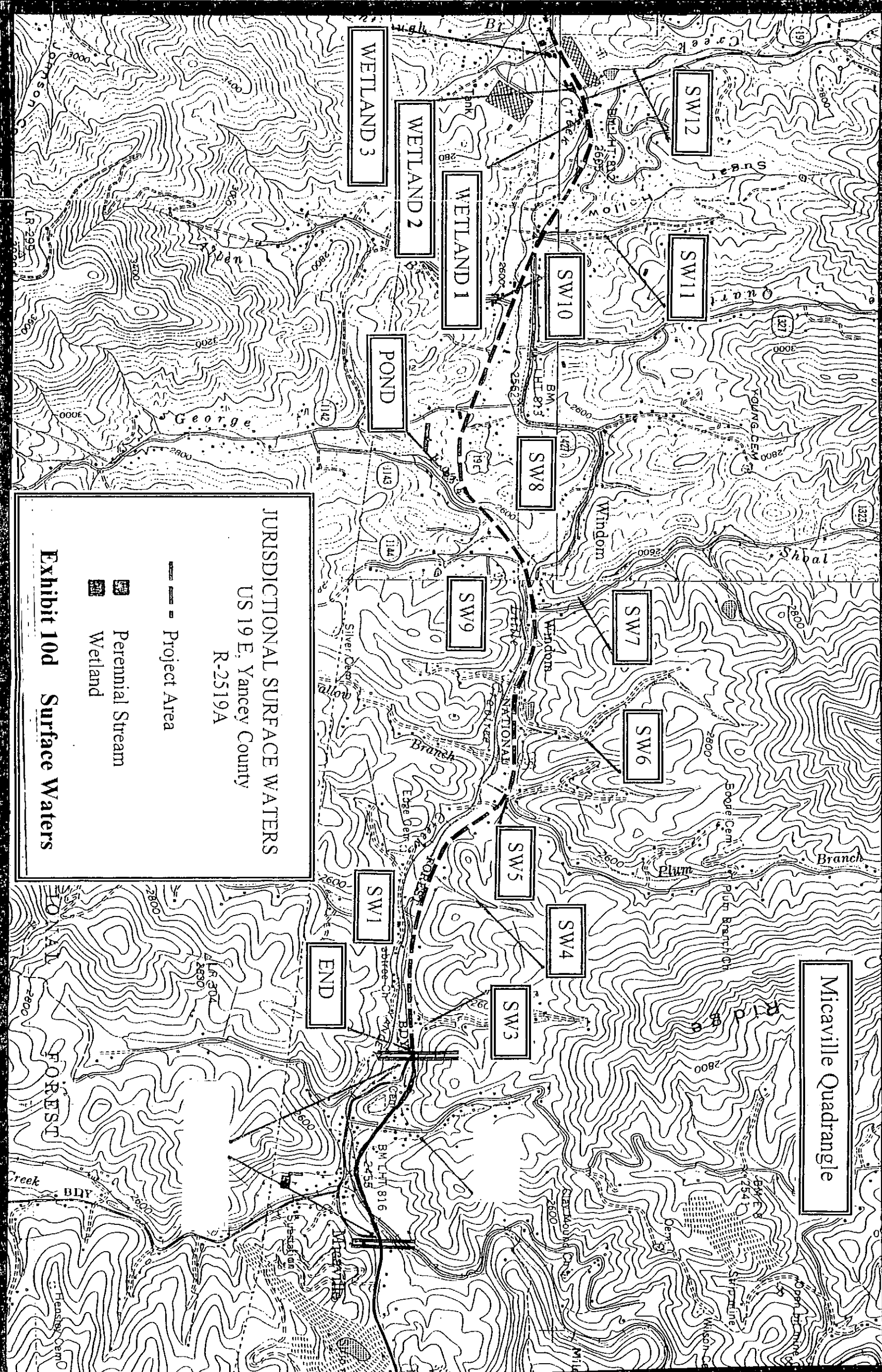
**JURISDICTIONAL SURFACE WATERS**  
 US 19°E, Yancey County  
 R-2519A

--- Project Area

▣ Perennial Stream

▣ Wetland

**Exhibit 10c Surface Waters**

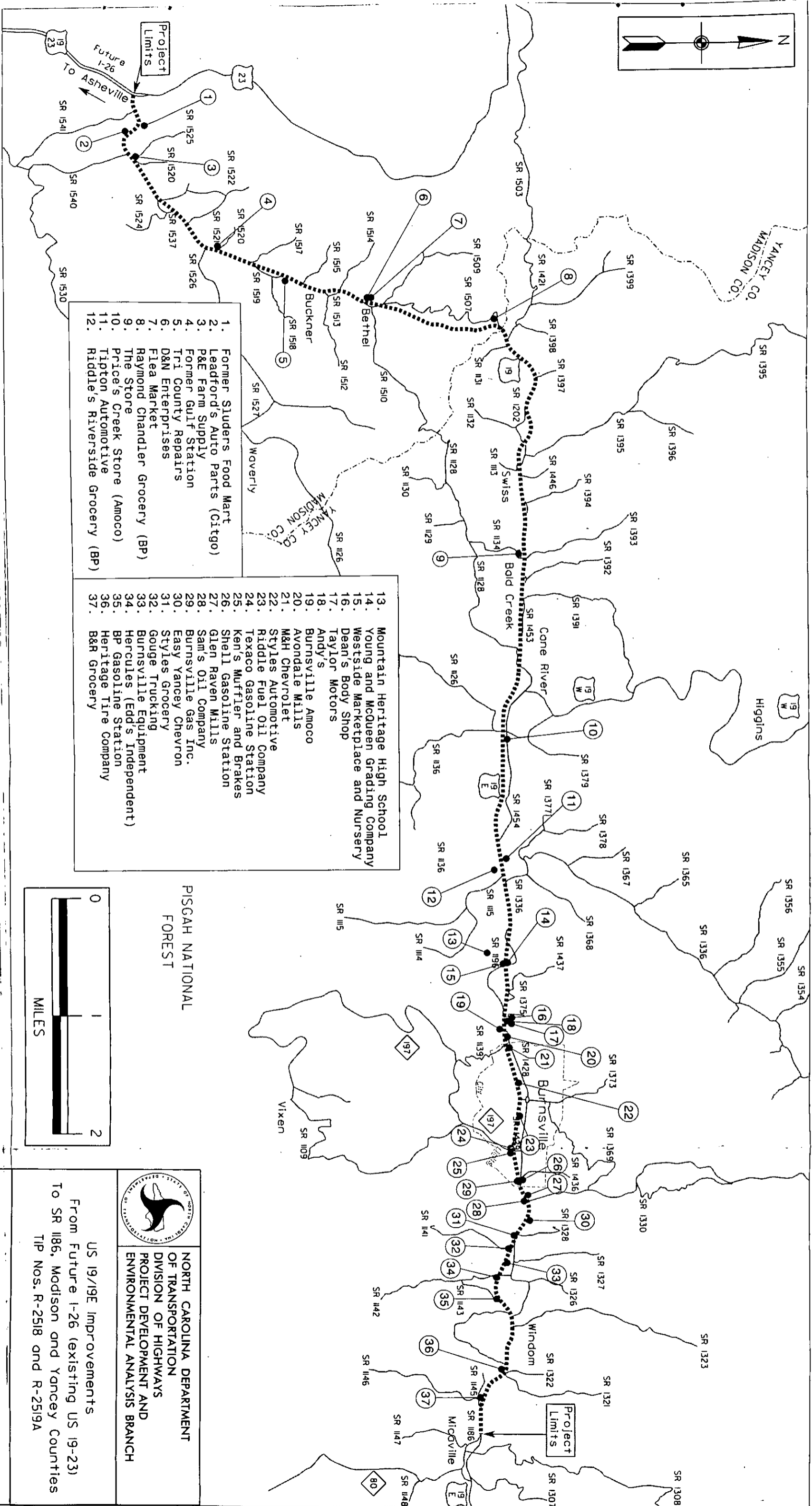


**JURISDICTIONAL SURFACE WATERS**  
 US 19 E, Yancey County  
 R-2519A

- - - Project Area  
 — Perennial Stream  
 ■ Wetland


**Exhibit 10d** Surface Waters

Micaville Quadrangle



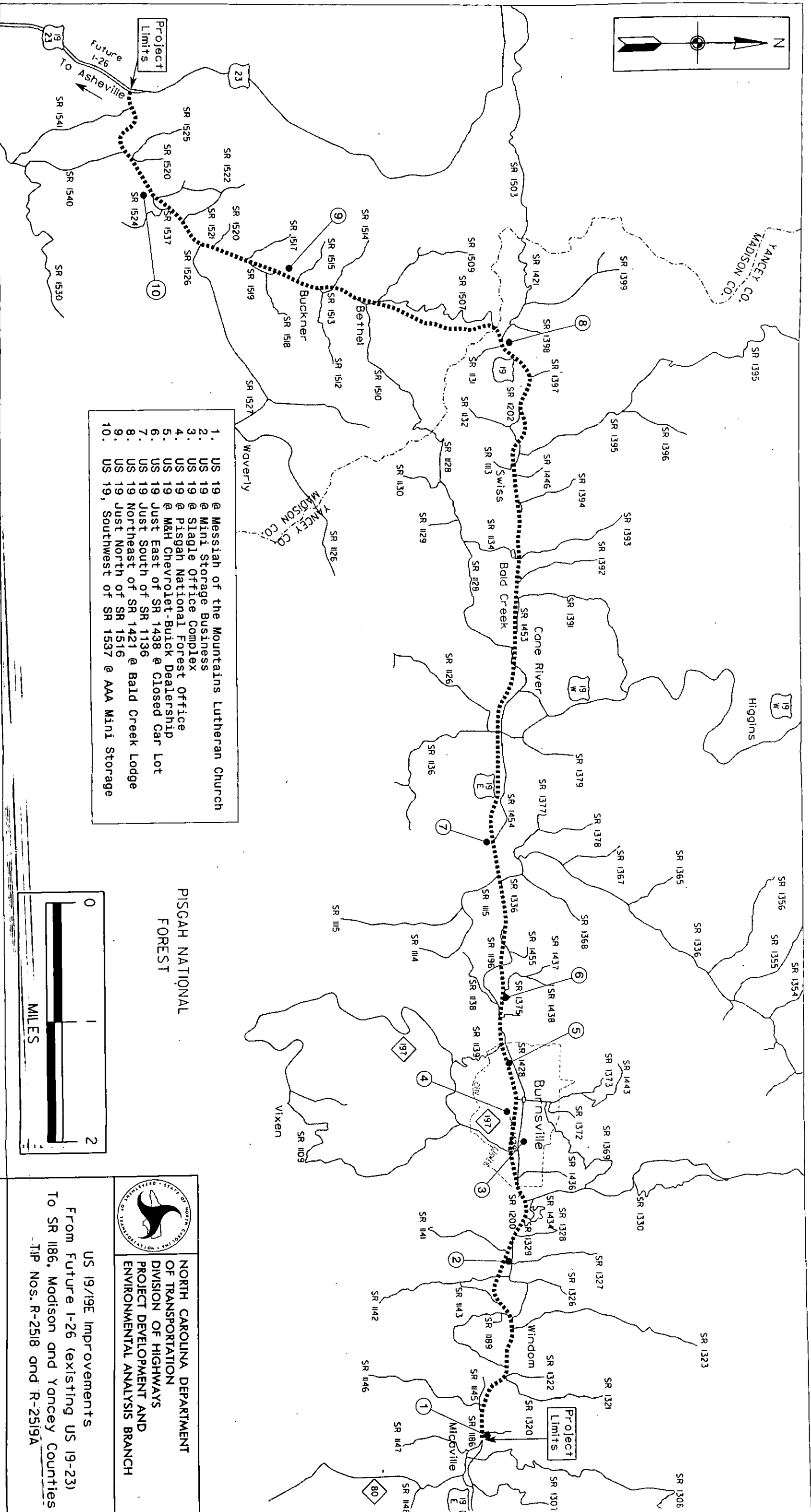
1. Former Sluders Food Mart
2. Leadford's Auto Parts (Citgo)
3. P&E Farm Supply
4. Former Gulf Station
5. Tri County Repairs
6. D&N Enterprises
7. Flea Market
8. Raymond Chandler Grocery (BP)
9. The Store
10. Price's Creek Store (Amoco)
11. Tipton Automotive
12. Riddle's Riverside Grocery (BP)

13. Mountain Heritage High School
14. Young and McQueen Grading Company
15. Westside Marketplace and Nursery
16. Dean's Body Shop
17. Taylor Motors
18. Andy's
19. Burnsville Amoco
20. Avondale Mills
21. M&H Chevrolet
22. Styles Automotive
23. Riddle Fuel Oil Company
24. Texaco Gasoline Station
25. Ken's Muffler and Brakes
26. Shell Gasoline Station
27. Glen Raven Mills
28. Sam's Oil Company
29. Burnsville Gas Inc.
30. Easy Yancey Chevron
31. Styles Grocery
32. Gauge Trucking
33. Burnsville Equipment
34. Hercules (Edd's Independent)
35. BP Gasoline Station
36. Heritage Tire Company
37. B&R Grocery

  
 NORTH CAROLINA DEPARTMENT  
 OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND  
 ENVIRONMENTAL ANALYSIS BRANCH

US 19/19E Improvements  
 From Future I-26 (existing US 19-23)  
 To SR 1186, Madison and Yancey Counties  
 TIP Nos. R-2518 and R-2519A

EXHIBIT II HAZARDOUS MATERIAL SITES



1. US 19 @ Messiah of the Mountains Lutheran Church
2. US 19 @ Mini Storage Business
3. US 19 @ Siagle Office Complex
4. US 19 @ Pisgah National Forest Office
5. US 19 @ M&H Chevrolet-Buick Dealership
6. US 19 Just East of SR 1438 @ Closed Car Lot
7. US 19 Just South of SR 1136
8. US 19 Northeast of SR 1421 @ Bald Creek Lodge
9. US 19 Just North of SR 1516
10. US 19, Southwest of SR 1537 @ AAA Mini Storage

NORTH CAROLINA DEPARTMENT  
 OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND  
 ENVIRONMENTAL ANALYSIS BRANCH

US 19/19E Improvements  
 From Future I-26 (existing US 19-23)  
 To SR 1186, Madison and Yancey Counties  
 TIP Nos. R-2518 and R-2519A

EXHIBIT 12 NOISE MONITORING LOCATIONS

# APPENDIX 1

## NCDOT Relocation Reports

# RELOCATION REPORT

**MANAGER OF  
RIGHT OF WAY BRANCH**  
 North Carolina Department of Transportation  
**AREA RELOCATION OFFICE**  
 MAY 11 1998

E.I.S.   
  CORRIDOR   
  DESIGN

PROJECT:	6.869005T	COUNTY	Madison-Yancey	Alternate 1	Section A
I.D. NO.:	R-2518	F.A. PROJECT	N/A		
DESCRIPTION OF PROJECT:		US 19 From Future I-26 (existing US 19-23) to SR 1336 at Cane River			

ESTIMATED DISPLACES					INCOME LEVEL							
Type of Displaces	Owners	Tenants	Total	Minorities	0-15M	15-25M	25-35M	35-50M	50 UP			
Residential	6	0	6	0	0	3	3	0	0			
Businesses	5	0	5	0	VALUE OF DWELLING			DSS DWELLING AVAILABLE				
Farms	0	0	0	0	Owners		Tenants		For Sale      For Rent			
Non-Profit	0	0	0	0	0-20M	0	\$ 0-150	0	0-20M	1	\$ 0-150	0
					20-40M	0	150-250	0	20-40M	5	150-250	1
					40-70M	5	250-400	0	40-70M	36	250-400	3
					70-100M	1	400-600	0	70-100M	52	400-600	1
					100 UP	0	600 UP	0	100 UP	150	600 UP	0
					<b>TOTAL</b>	<b>6</b>		<b>0</b>		<b>244</b>		<b>5</b>

**ANSWER ALL QUESTIONS**

Yes	No	Explain all "YES" answers.
	X	1. Will special relocation services be necessary?
	X	2. Will schools or churches be affected by displacement?
X		3. Will business services still be available after project?
X		4. Will any business be displaced? If so, indicate size, type, estimated number of employees, minorities, etc.
	X	5. Will relocation cause a housing shortage?
	X	6. Source for available housing (list).
	X	7. Will additional housing programs be needed?
X		8. Should Last Resort Housing be considered?
	X	9. Are there large, disabled, elderly, etc. families?
	X	10. Will public housing be needed for project?
X		11. Is public housing available?
X		12. Is it felt there will be adequate DSS housing available during relocation period?
	X	13. Will there be a problem of housing within financial means?
X		14. Are suitable business sites available (list source).
		15. Number months estimated to complete RELOCATION? <span style="border: 1px solid black; padding: 2px;">8 months</span>

**REMARKS (Respond by Number)**

See attached sheet.

<p style="text-align: center;"><i>R.P. Whitaker</i> R. P. Whitaker</p> <p style="text-align: center;">Area Relocation Agent</p>	<p style="text-align: center;">5/1/98</p> <p style="text-align: center;">Date</p>		<p style="text-align: center;"><i>L.R. Lee</i></p> <p style="text-align: center;">Approved by</p>	<p style="text-align: center;">5-12-98</p> <p style="text-align: center;">Date</p>
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*16/11/98*

MATCH LINE E

SECTION D SECTION E

SR 1397  
Shepherd Branch Road



SR 1202

Schronce Creek Road

SR 1451

Mt. Pleasant Baptist Church

SR 1446

Sam Byrd House  
Historic Property

SR 1394 Sam Byrd Road

SECTION E SECTION F

MATCH LINE F



NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

US 1919E IMPROVEMENTS  
FROM FUTURE I-26  
(EXISTING US 19-23) TO SR 1186  
MADISON AND YANCEY COUNTIES  
TIP NOS. R-2518 AND R-2519A

EXHIBIT 2 PROJECT AERIAL

SHEET 6 OF 14

rd House  
Property

SR 1394 Sam Byrd Road

MATCHLINE F

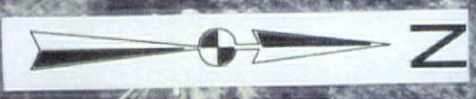
Bald Creek School  
Historic Property

Captain E. E. Neill House  
Historic Property

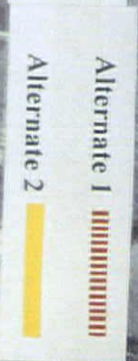
SR 1134

SR 1393 Licksillet Drive

Bald Creek United  
Methodist Church



SHEET 7 OF 14



1391 Hardscramble Road

SR 1453

Lumber Mill

MATCHLINE G





MATCH LINE G

Lumber Mill

Porter and Briggs Ray House  
Historic Property

Bald Creek

US 19W



BRIDGE # 309

SR 1454

Price's Creek

SECTION F  
SECTION G

SR 1136  
Price's Creek Road

Cane River  
Middle School

Cane River Road

SR 1137

MATCH LINE H



NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH

US 19/19E IMPROVEMENTS  
FROM FUTURE I-26  
(EXISTING US 19-23) TO SR 1186  
MADISON AND YANCEY COUNTIES  
TIP NOS. R-2518 AND R-2519A

SHEET 8 OF 14

EXHIBIT 2 PROJECT AERIAL



SECTION G  
SECTION H

US 19E

END PROJECT R-2518  
(BEGIN PROJECT R-2519)

Alternate 1  
Alternate 2

MATCH LINE I

Jack's Creek Road

SR 1336

BRIDGE # 9

SR 1115

Cane River

0 300 600 feet  
0 100 200 meters

SHEET 9 OF 14

SR 1136

Phipps Creek Road

Cane River Road


SR 1137

MATCH LINE H

ver  
school

MATCH LINE J

NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS BRANCH



US 1949E IMPROVEMENTS  
FROM FUTURE 1-26  
(EXISTING US 19-23) TO SR 1186  
MADISON AND YANCEY COUNTIES  
TIP NOS. R-2518 AND R-2519A

EXHIBIT 2 PROJECT AERIAL

SHEET 10 OF 14

W. BURNSVILLE  
CHURCH

SR 1438  
CHARLIE BROWN ROAD

Horton Hill Cemetery  
Historic Property

SR 1437

SR 1196  
7TH DAY ADVENTIST  
CHURCH

MT. HERITAGE  
HIGH SCHOOL

SECTION I  
SECTION J

SR 1455  
WHEELER HILLS ROAD

SR 1376  
WHEELER ROAD

SIGNALIZED INTERSECTION

Alternate 1 

Alternate 2 



0 300 600 feet

0 100 200 meters

US 1949E

SECTION II  
SECTION I

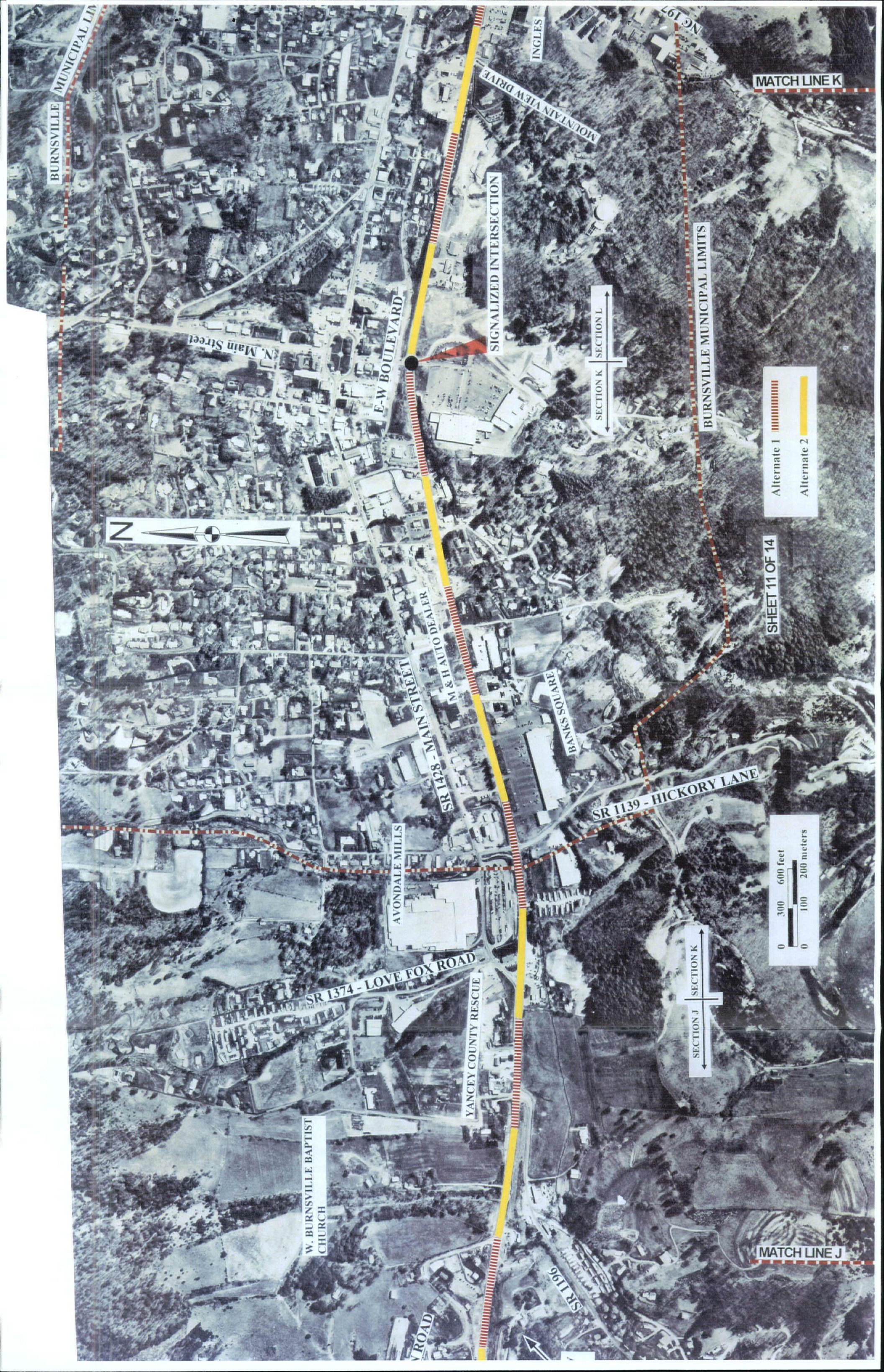
BEGIN  
PROJECT  
R-2519 A

SR 1336 - JACK'S CREEK ROAD

SR 1115 - BAKER'S CREEK ROAD

MATCH LINE I

CANE RIVER



BURNSVILLE MUNICIPAL LIMITS

MATCH LINE K

SIGNALIZED INTERSECTION

BURNSVILLE MUNICIPAL LIMITS



Alternate 1  
Alternate 2

SHEET 11 OF 14

0 300 600 feet  
0 100 200 meters

MATCH LINE J

BURNSVILLE

N. Main Street

E-W BOULEVARD

SR 1428 - MAIN STREET

AVONDALE MILLS

SR 1374 - LOVE FOX ROAD

W. BURNSVILLE BAPTIST CHURCH

YANCEY COUNTY RESCUE

SR 1139 - HICKORY LANE

SR 196

SECTION L  
SECTION K

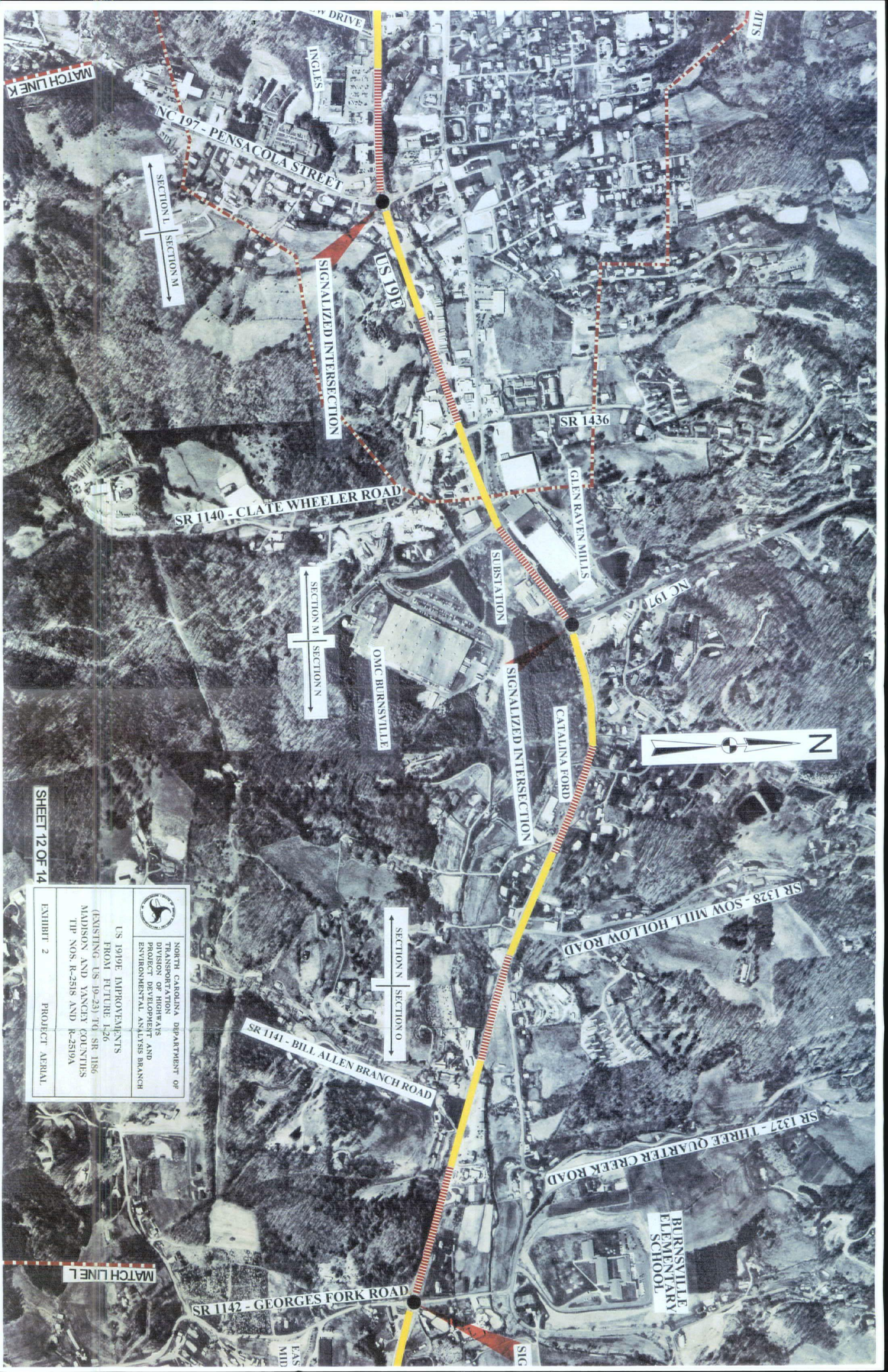
SECTION K  
SECTION J


INGLES

MOUNTAIN VIEW DRIVE

NG 197

ROAD




 NORTH CAROLINA DEPARTMENT OF  
 TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND  
 ENVIRONMENTAL ANALYSIS BRANCH

US 1919E IMPROVEMENTS  
 FROM FUTURE 1-26  
 (EXISTING US 19-23) TO SR 1186  
 MADISON AND YANCEY COUNTIES  
 TYP NOS. R-2518 AND R-2519A

SHEET 12 OF 14

EXHIBIT 2 PROJECT AERIAL

MATCH LINE L

SECTION L  
SECTION M

SECTION M  
SECTION N

SECTION N  
SECTION O

MATCH LINE K

AITS

SIG

BURNSVILLE  
ELEMENTARY  
SCHOOL

SUBSTATION

OMC BURNSVILLE

GLEN RAVEN MILLS

NC 197

SR 1436

SR 1140 - CLATE WHEELER ROAD

NC 197 - PENSACOLA STREET

INGLES

SIGNALIZED INTERSECTION

SIGNALIZED INTERSECTION

CATALINA FORD

SR 1328 - SOW MILL HOLLOW ROAD

SR 1327 - THREE QUARTER CREEK ROAD

SR 1142 - GEORGES FORK ROAD

EAS  
MID





MATCH LINE L

SR 1142 - GEORGES FORK ROAD

BURNSVILLE  
ELEMENTARY  
SCHOOL

SIGNALIZED INTERSECTION

CEMETERY

EAST YANCEY  
MIDDLE SCHOOL

SR 1143

SR 1427 - OLD US 19E

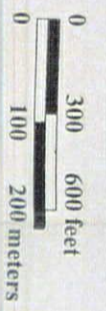
SR 1323 - SHOAL CREEK ROAD

SECTION O

SECTION P

SECTION P

SECTION O



SHEET 13 OF 14

Alternate 1  
Alternate 2

US 19E

SR 1144 - BEAR WALLOW ROAD

SR 1321 - PLUM BRANCH ROAD

SECTION O

SECTION R

SR 1145 - GILLESPIE ROAD

SR 1146 - CANE BRANCH ROAD

MATCH LINE M

91 DM BRANCH ROAD

SR 1145 - GILLESPIE ROAD

SR 1146 - CANE BRANCH ROAD

MATCH LINE M

END  
PROJECT  
R-2519 A

SECTION R

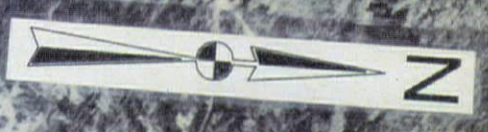
US 19E

SR 1186


TO SPRUCE PINE

MICAVILLE

NC 80



SHEET 14 OF 14

	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH
	US 19/19E IMPROVEMENTS FROM FUTURE I-26 (EXISTING US 19-23) TO SR 1186 MADISON AND YANCEY COUNTIES TIP NOS. R-2518 AND R-2519A
EXHIBIT 2	PROJECT AERIAL



Shepherd Branch Road  
SR 1397

Ivy Gap Baptist Church

1421 Windy Gap Road

Ivy Gap

SR 1507

Old Mountain Road

Yancey County

Madison County

SECTION D SECTION E

MATCHLINE E

Alternate 1  
Alternate 2

SHEET 5 OF 14

MATCH LINE D



MATCH LINE C

SR 1513

Jordan Branch Road SR 1514

Bethel Circle SR 1511

SR 1510

SR 1509


Holland Creek Road

SR 1507

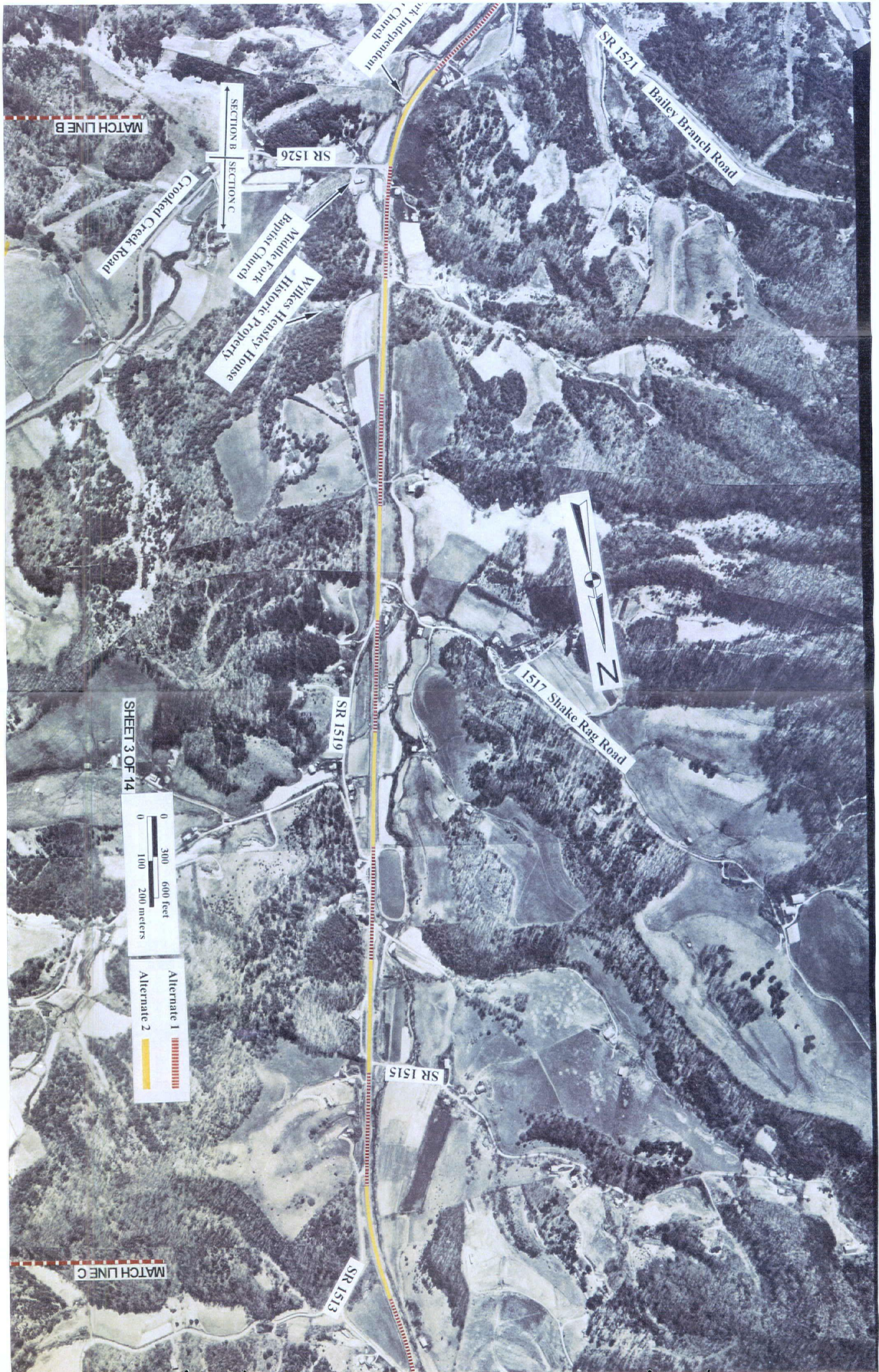


SECTION C | SECTION D

SHEET 4 OF 14

	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH
	US 1919E IMPROVEMENTS FROM FUTURE 1-26 (EXISTING US 19-23) TO SR 1186 MADISON AND YANCEY COUNTIES TIP NOS. R-2518 AND R-2519A
EXHIBIT 2	PROJECT AERIAL

MATCH LINE D



MATCH LINE B

SECTION B  
SECTION C

SR 1526

Crooked Creek Road

Middle Fork Baptist Church

Wilkes Hensley House  
Historic Property

Mark Independent Church

SR 1521

Bailey Branch Road

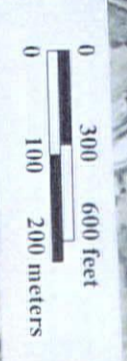
1517 Shake Rag Road

SR 1519

SR 1515

SR 1513

SHEET 3 OF 14



MATCH LINE C

1540 Beech Glen Road

P&E Grocery

P&E Farm Supply

SR 1524

Mobile Home Sales

SECTION A

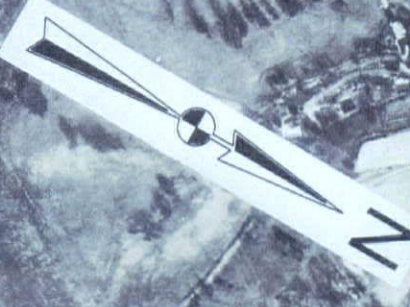
SECTION B

MATCHLINE A

Mini Storage

Bethel Baptist Church

SR 1537



Bailey Branch

SR 1521

SHEET 2 OF 14

EXHIBIT 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH

US 1919E IMPROVEMENTS FROM FUTURE I-26 (EXISTING US 19-23) TO SR 1186 MADISON AND YANCEY COUNTIES TIP NOS. R-2518 AND R-2519A  
 PROJECT AERIAL

Middle Fork Independent Baptist Church

SR 1526

SECTION B

SECTION C

Middle Fork Baptist Church

Wilkes Hensley House  
Historic Property

Crooked Creek Road

MATCHLINE B

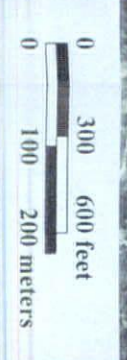
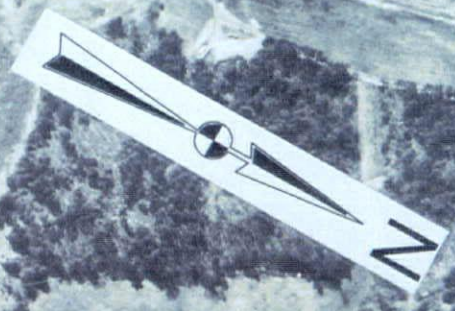
US 19-23 (FUTURE I-26)  
TO MARSHILL AND ASHEVILLE

BEGIN PROJECT  
R-2518

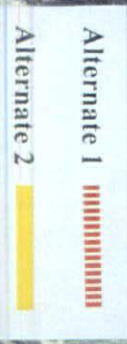
US 19

SR 1608

SECTION A



SHEET 1 OF 14



1540 Beech Glen Road

P&E Grocery

P&E Farm Supply

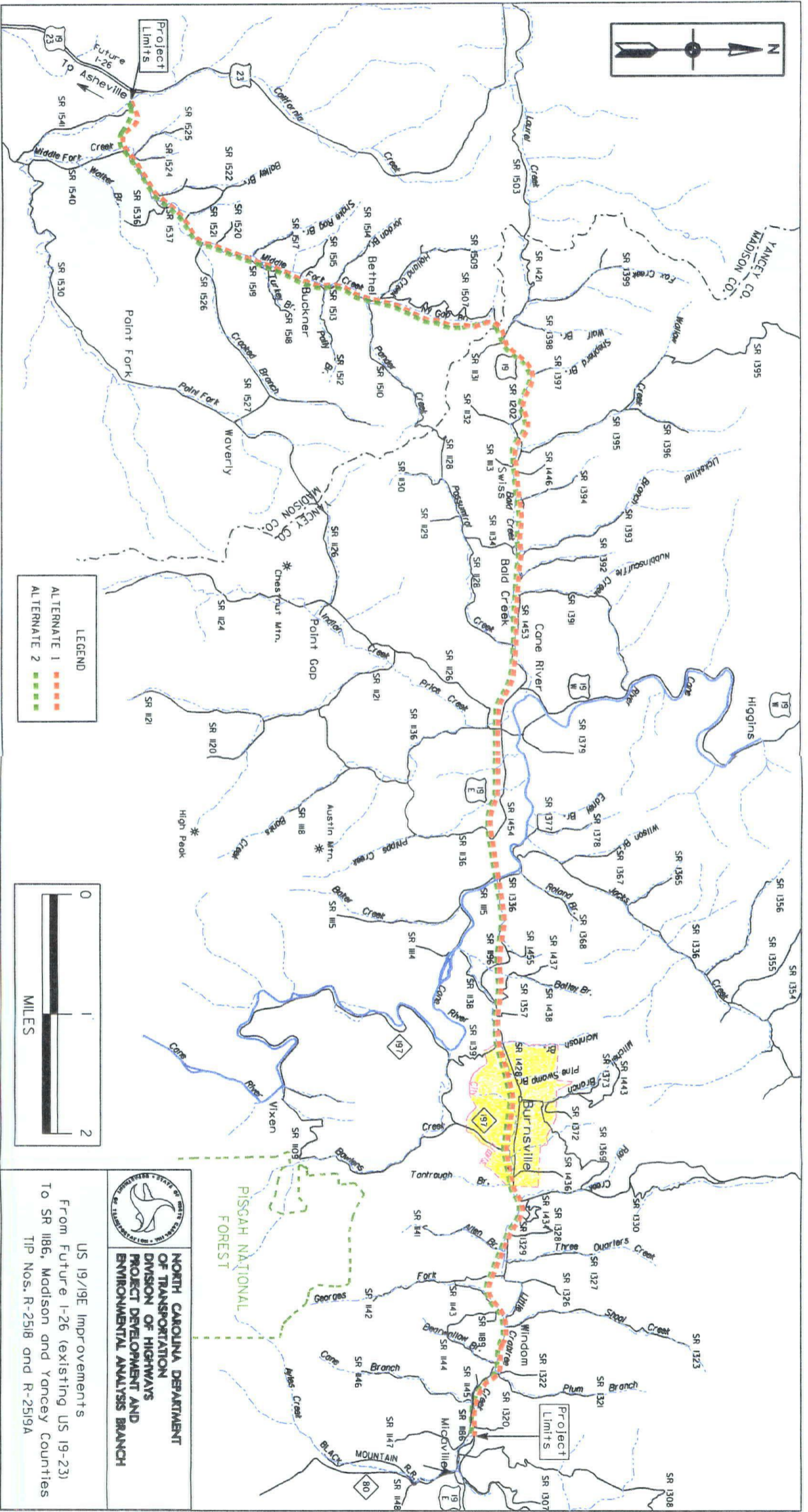
SR 1524

Mobile Home Sales

SECTION A  
SECTION B

MATCH LINE A

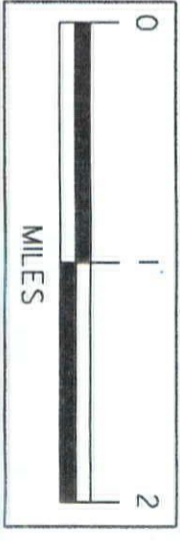
Mini Storage



**LEGEND**

ALTERNATE 1 ---

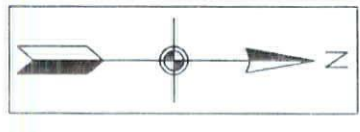
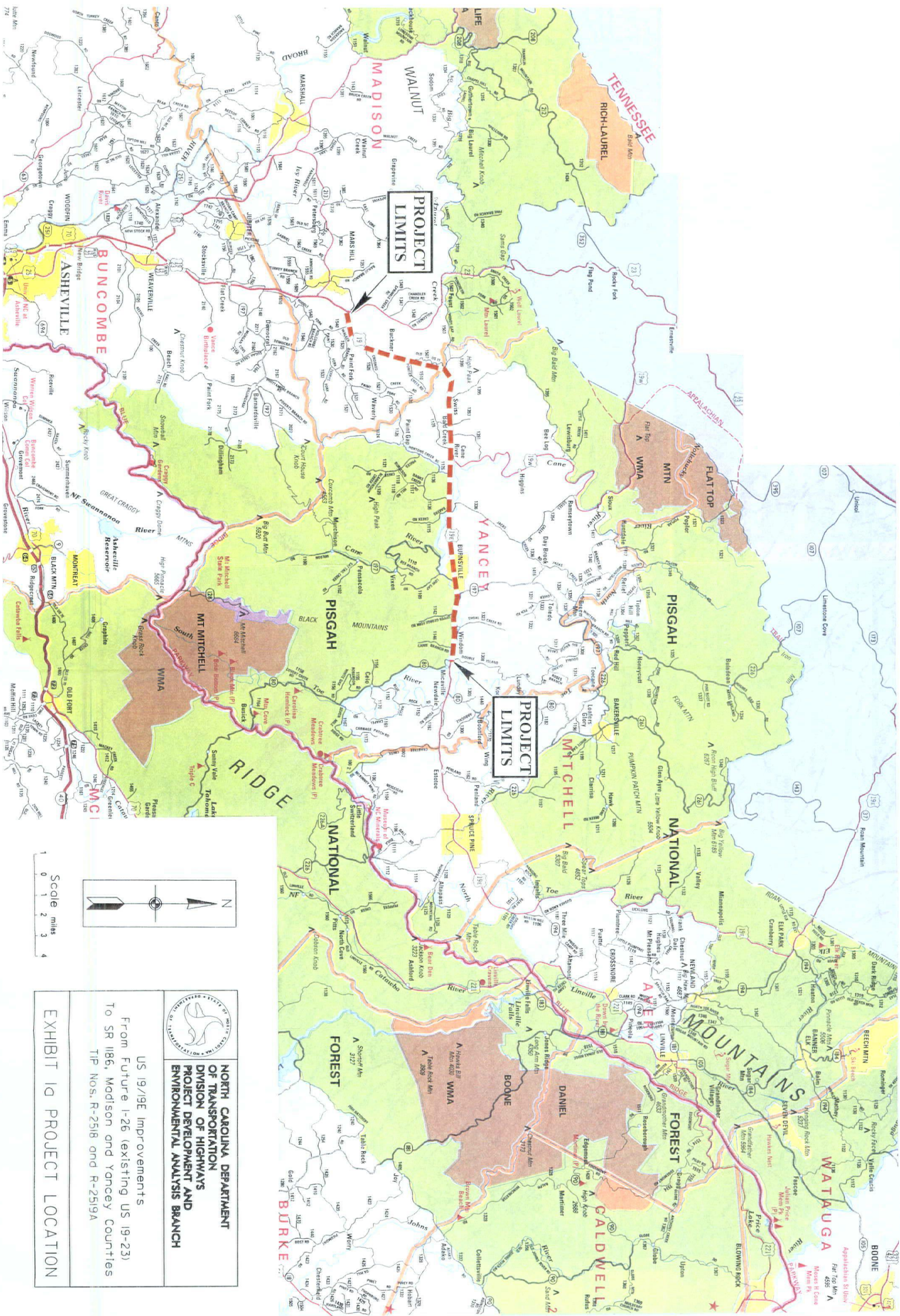
ALTERNATE 2 ---



**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH**

US 19/19E Improvements  
 From Future I-26 (existing US 19-23)  
 To SR 1186, Madison and Yancey Counties  
 TIP Nos. R-2518 and R-2519A

**EXHIBIT 1B PROJECT LOCATION**



Scale miles  
0 1 2 3 4



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US 19/19E Improvements  
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 TIP Nos. R-2518 and R-2519A

**EXHIBIT 1G PROJECT LOCATION**

# US 19 E IMPROVEMENTS 4-LANE DIVIDED FACILITY (CURB & GUTTER)

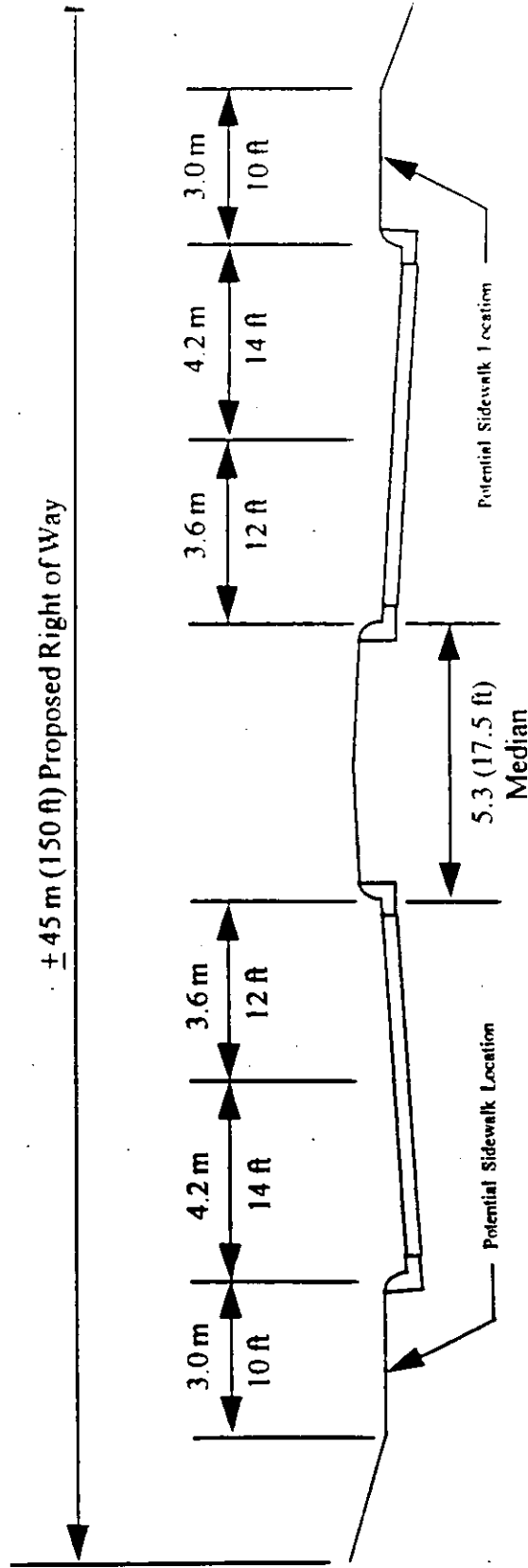


Exhibit 3a Four-Lane Divided Curb and Gutter

# US 19 IMPROVEMENTS 4-LANE DIVIDED FACILITY

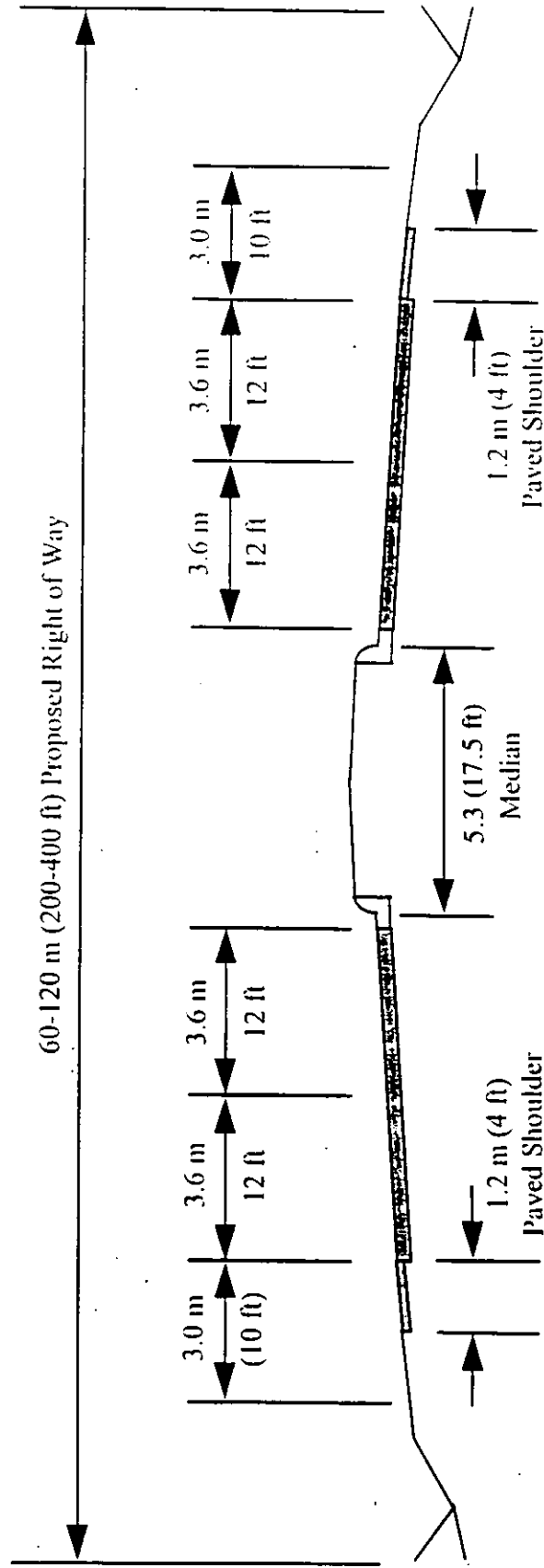
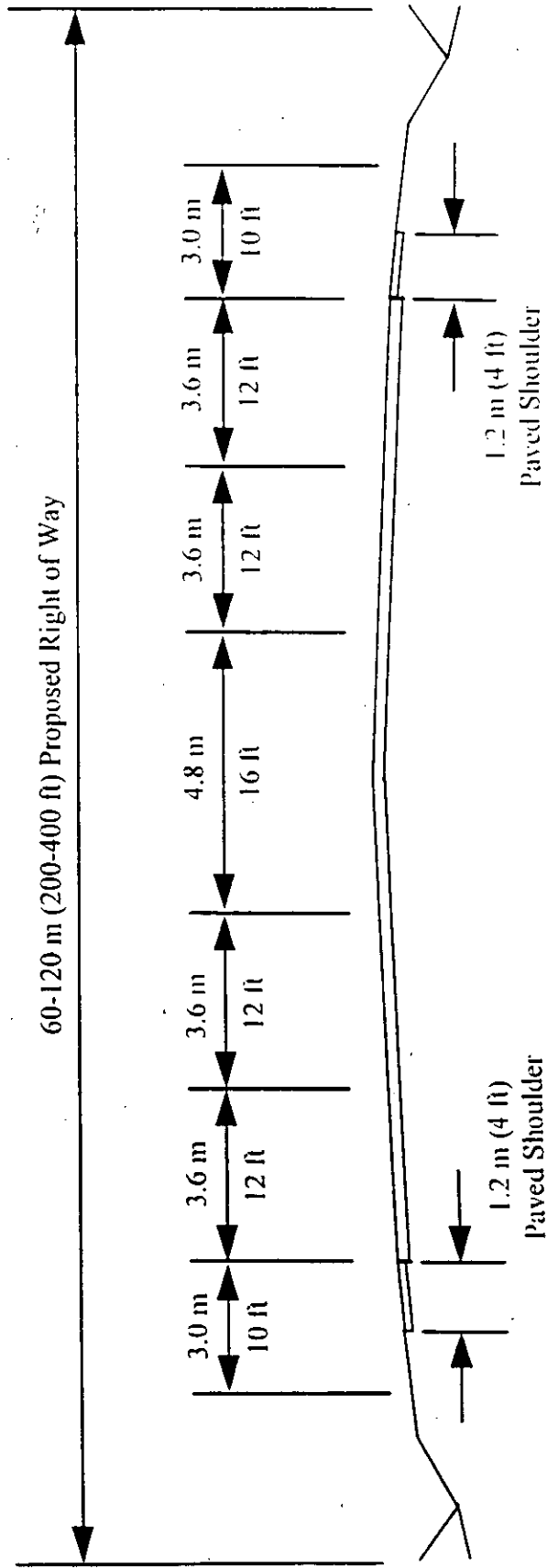


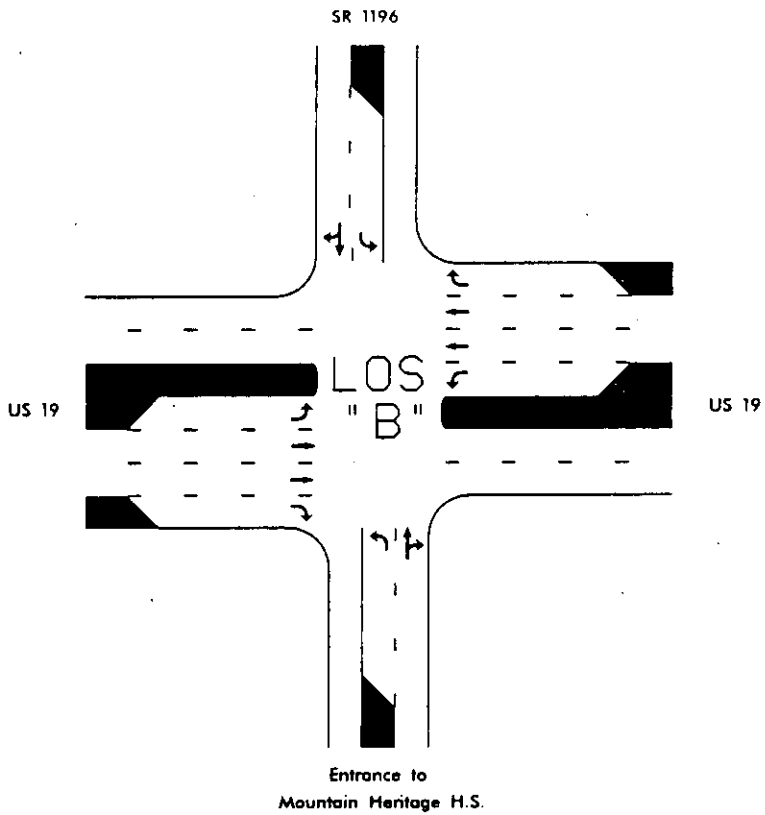
Exhibit 3b Four-Lane Divided with Shoulder



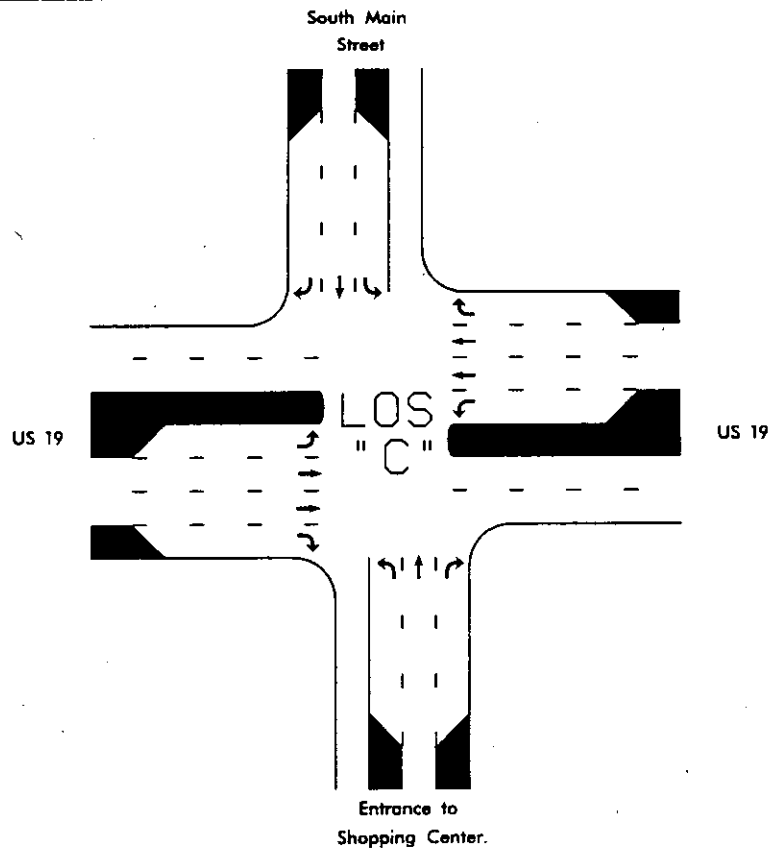
# US 19 IMPROVEMENTS 5-LANE UNDIVIDED FACILITY



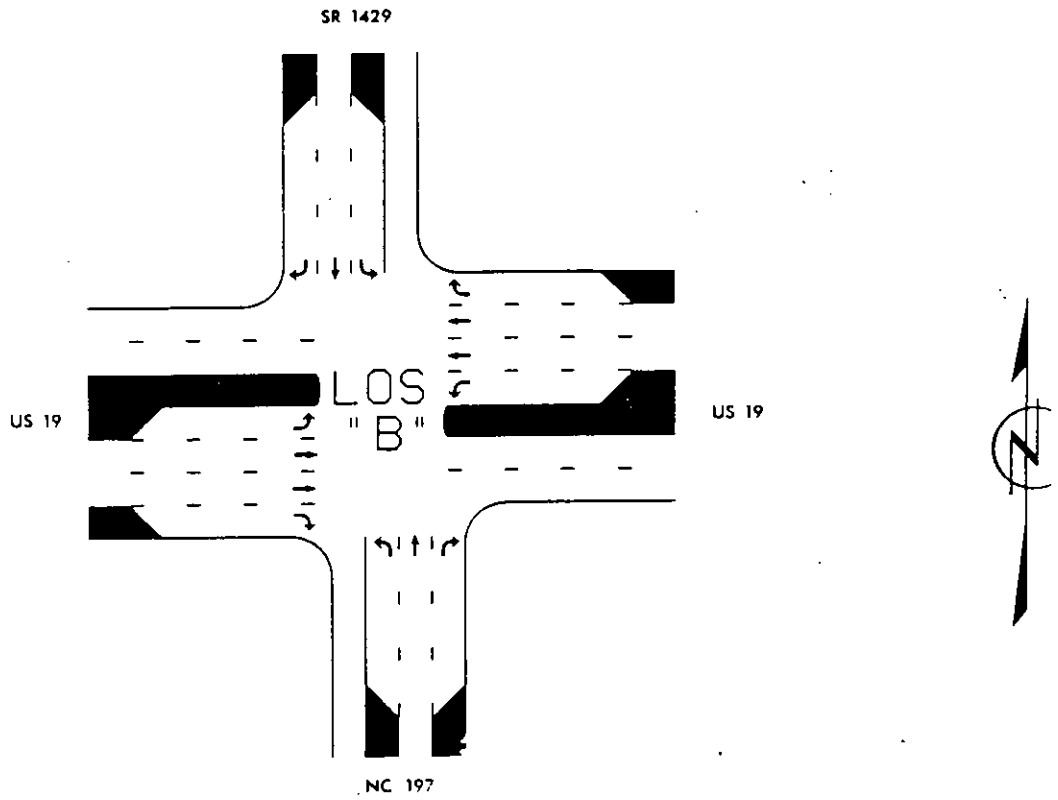
**Exhibit 3c Five-Lane with Shoulder**



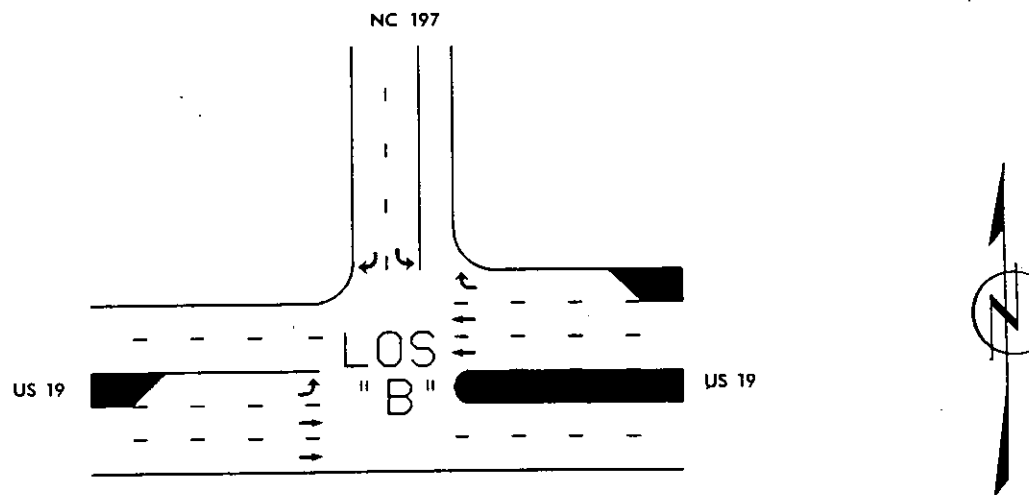
**Exhibit 8a Proposed Intersection of US 19E and SR 1196**



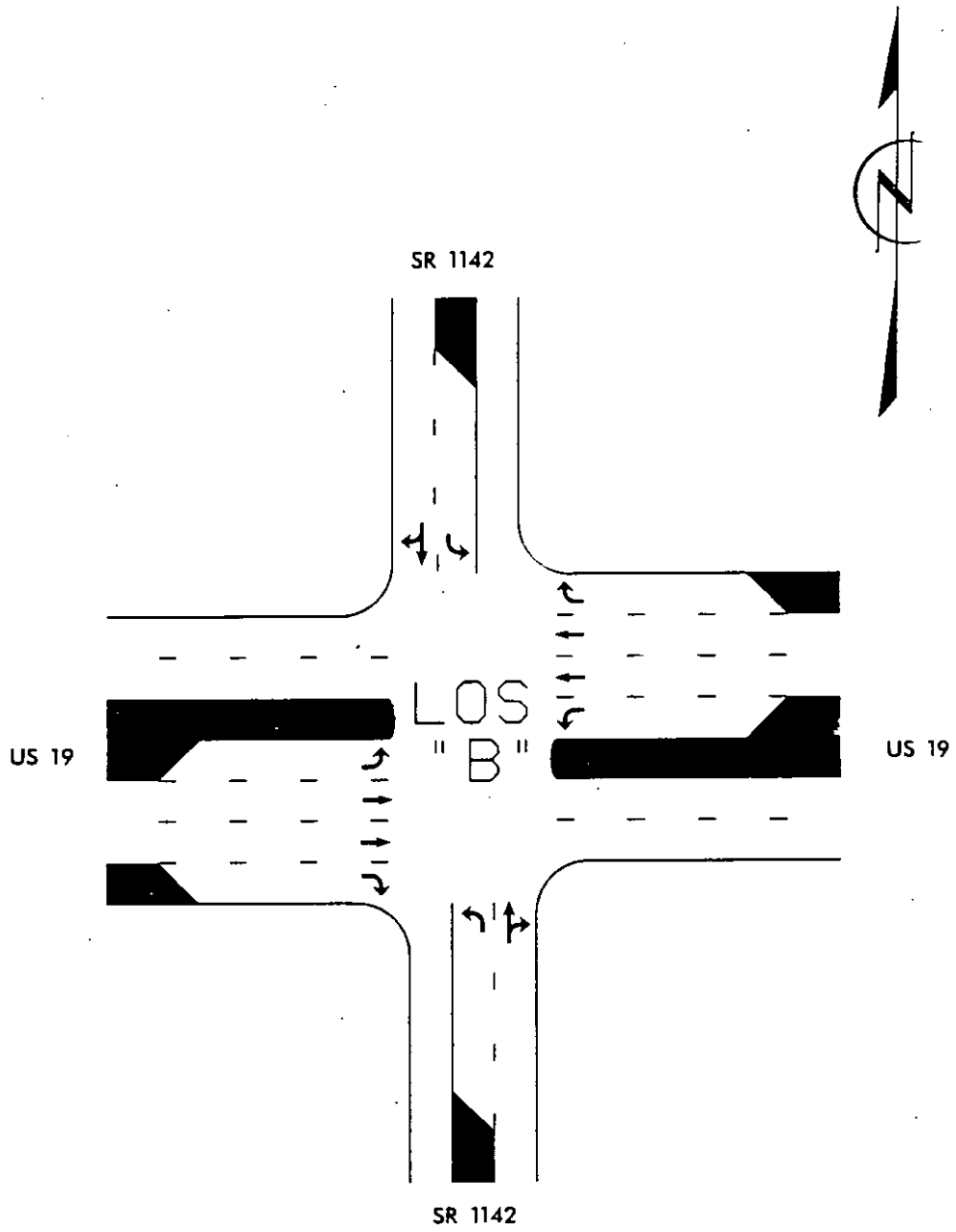
**Exhibit 8b Proposed Intersection of US 19E and South Main Street**



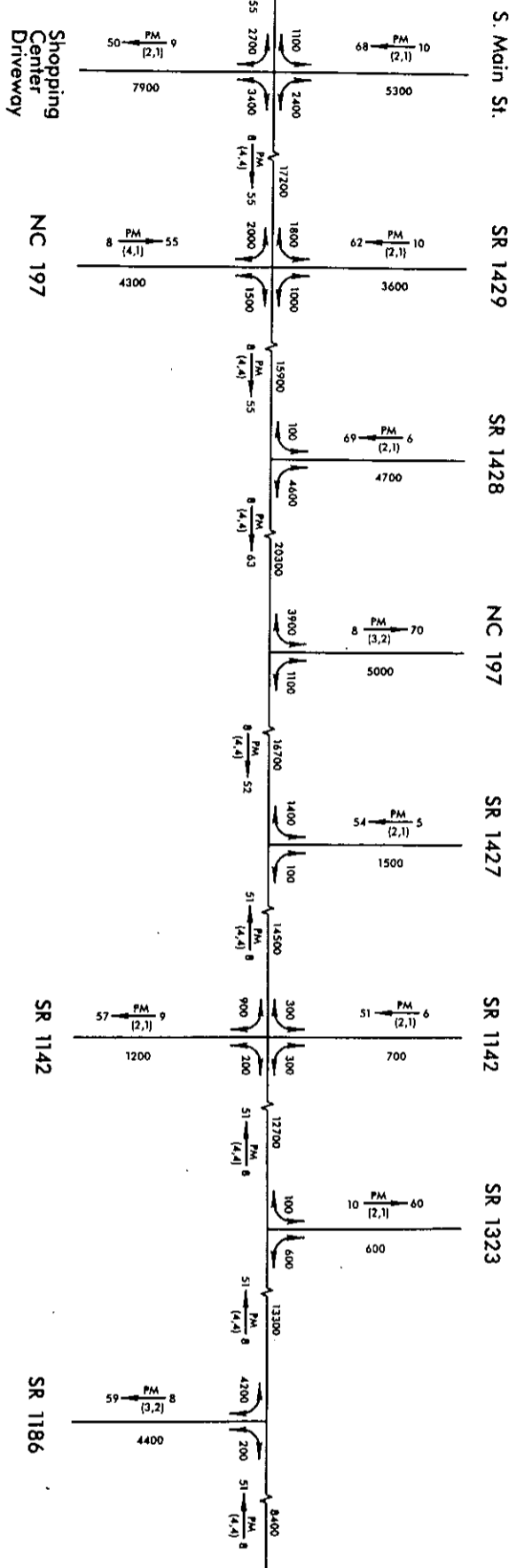
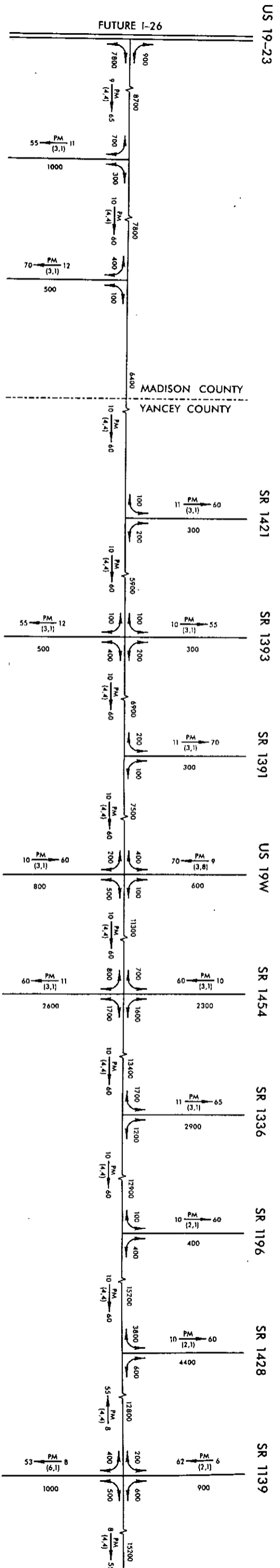
**Exhibit 8c Proposed Intersection of US 19E and SR 1429**



**Exhibit 8d Proposed Intersection of US 19E and NC 197**



**Exhibit 8e Proposed Intersection of US 19E and SR 1142**

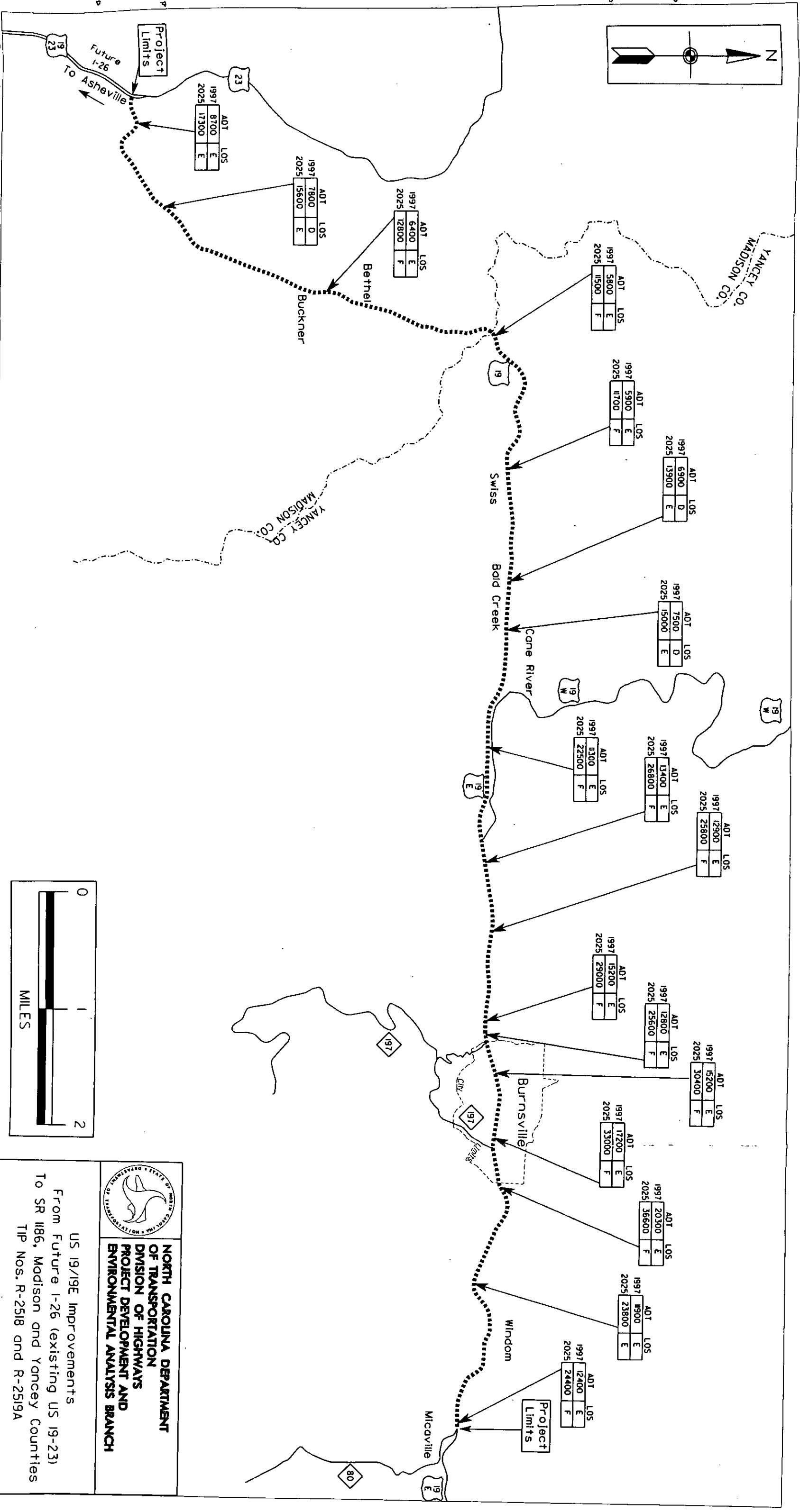


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EXHIBIT 4 1997 TRAFFIC DATA

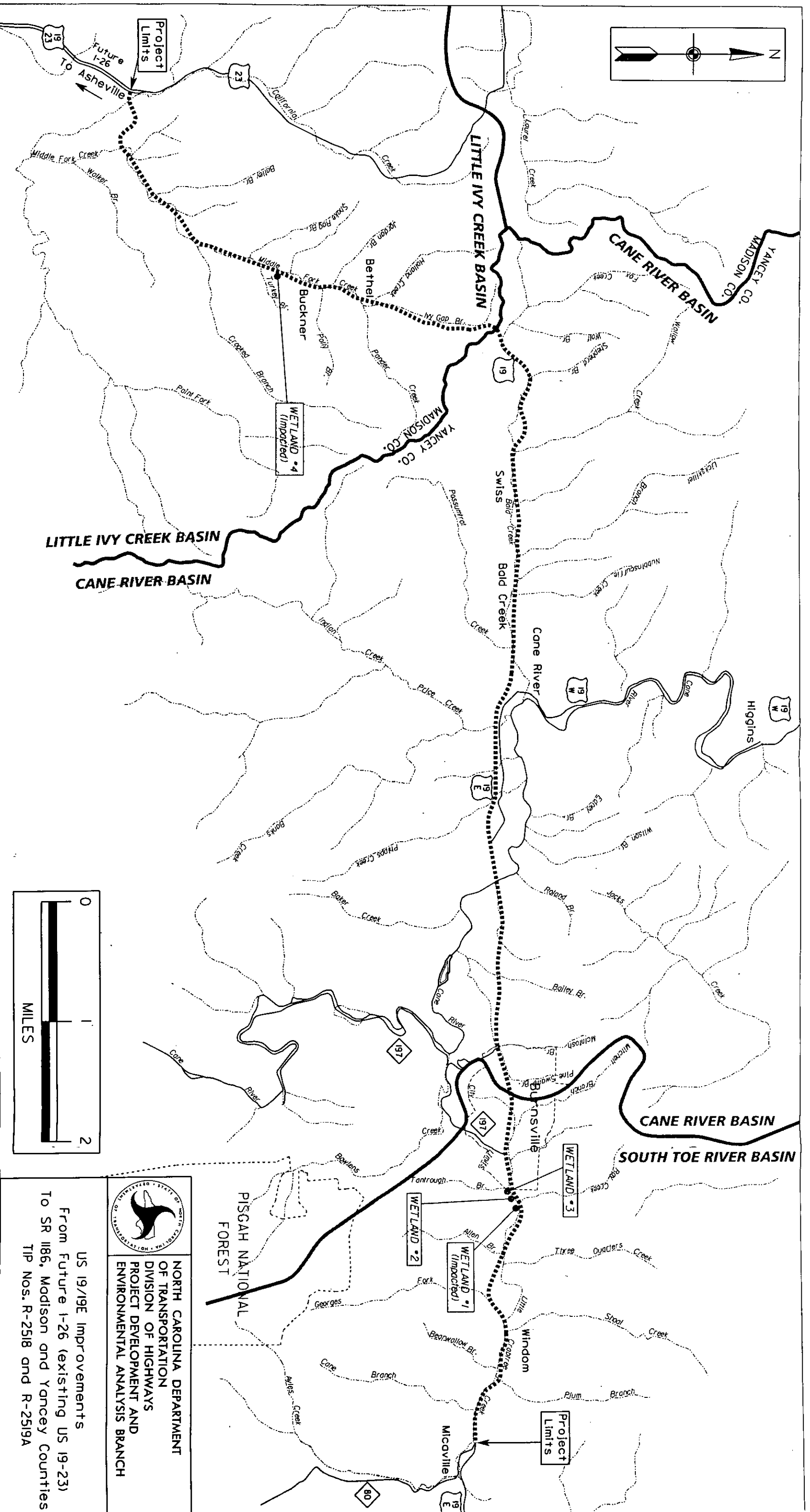




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**EXHIBIT 6 EXISTING AND 2025 NO-BUILD LEVELS OF SERVICE**



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EXHIBIT 9 — WATER RESOURCES  
AND WETLANDS