CHAPTER 6

COORDINATION AND PUBLIC INVOLVEMENT

This section provides a summary of the agency coordination and public involvement process which were carried out as a part of the preparation of this study.

(Note: Due to the fact that several of the tables in this chapter are lengthy [i.e., more than one page in length], they have all been placed at the end of the chapter to maintain reading continuity within the text.)

6.1 AGENCY COORDINATION

Coordination has been maintained with federal, state, and local governmental agencies since the beginning of the project. A formal scoping process was initiated in the early stages of the project and periodic steering committee / interagency meetings were conducted to obtain concurrence with major decisions.

6.1.1 Scoping

In accordance with the National Environmental Policy Act, a Notice of Intent for this project was published in the Federal Register on May 16, 1996. On December 2, 1994, scoping letters were sent to federal, state, and local agencies to solicit comments on the proposed project. Specifically, these letters were sent to obtain information, and to assess the priority of various concerns in the study area. Details of key issues associated with the project and a map of the project study area were included as a part of the letter.

A list of the agencies which were sent the scoping letter follows; the agency responses are found

in Appendix A, Section A.1.

Federal Agencies

* Department of the Army, Wilmington District, Corps of Engineers

* U.S. Department of the Interior, Fish and Wildlife Service

Department of Housing and Urban Development

Federal Aviation Administration

Geological Survey

Environmental Protection Agency

State Agencies

* North Carolina Department of Cultural Resources

North Carolina Department of Environment and Natural Resources

- * Division of Environmental Health
- * Division of Water Quality (formerly Division of Environmental Management)
- * Division of Land Resources
- * Division of Soil and Water Conservation
- * Legislative and Intergovernmental Affairs
- * Wildlife Resources Commission
- * Staff Forester
- * North Carolina Department of Public Instruction (response received from Cleveland County Schools)

State Clearinghouse

Local Agencies and Organizations

- * Isothermal Planning and Economic Development Commission
- * Cleveland County Planning Board
- * Cleveland County Board of Commissioners
- * Transportation Administration of Cleveland County, Inc.
- * Cleveland County Economic Development Commission
- Cleveland County Chamber
- * Upper Cleveland Chamber
- Cleveland Tomorrow
- * Mayor of Shelby
- * Mayor of Belwood
- * Mayor of Boiling Springs
- * Mayor of Casar
- * Mayor of Earl
- * Mayor of Fallston
- * Mayor of Kings Mountain
- * Mayor of Kingstown
- * Mayor of Lattimore
- * Mayor of Lawndale
- * Mayor of Mooresboro
- * Mayor of Patterson Springs
- Mayor of Polkville
- * Carolinas Transportation Compact
- * Gardner-Webb University
- * Response to scoping letter received from this agency.

6.1.2 <u>Steering Committee / NEPA/404 Merger Meetings</u>

Initially, a steering committee consisting of representatives from the following agencies and jurisdictions was formed to oversee and guide in the development of alternatives for the project and to discuss other project issues:

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- Department of the Army, Wilmington District, Corps of Engineers
- NCDENR, Division of Water Quality (formerly Division of Environmental Management) (DWQ)
- NCDENR, Wildlife Resources Commission (WRC)
- Cleveland County
- City of Shelby

The NEPA/404 Merger process was developed in 1997 to provide resource agencies with an early opportunity to be involved in major project decisions at key points in the planning process.

The 1997 Merger process included four concurrence points:

- <u>Concurrence Point Number 1</u> Purpose and Need Statement
- <u>Concurrence Point Number 2</u> Development of Alternatives
- <u>Concurrence Point Number 3</u> LEDPA (Least Environmentally Damaging Practicable Alternative)
- <u>Concurrence Point Number 4</u> Avoidance and Minimization of Impacts (later changed to Concurrence Point Number 4A)

Since the earlier phases of this project predated the NEPA/404 process, Concurrence Points 1 and 2 were not addressed in a formalized way; Concurrence Point Number 2 was addressed through the steering committee meetings previously mentioned. Concurrence Points 3 and 4A were addressed through three additional meetings. The following agencies were involved in the NEPA/404 Merger meetings:

- Federal Highway Administration
- NC Department of Transportation
- US Army Corps of Engineers
- US Fish and Wildlife Service
- US Environmental Protection Agency
- NC Department of Environment and Natural Resources, Division of Water Quality
- NC Department of Environment and Natural Resources, Wildlife Resources Commission
- NC Department of Cultural Resources (State Historic Preservation Office)

The following is a summary of steering committee and Merger meetings held to date.

April 21, 1995 Steering Committee Meeting. The primary purpose of this meeting was to establish the purpose of and need for the project and to review the initial preliminary Build alternative corridors (see Exhibit 2-4). These alternatives were shown on mapping which included land use, recreational areas, streams, wetlands, floodplains, community facilities, and known archaeological and historic sites, so that attendees would be aware of the constraints influencing the corridor locations. As a result of discussions held concerning the proposed locations of the corridors, the following revisions were made to the preliminary alternatives; the reasons for these revisions are discussed in detail in Section 2.4.3 (Preliminary Bypass Corridors) and are shown on Exhibit 2-5:

- Segments A-R, D-Q, F-G, E-H, H-I, and H-M were eliminated.
- Portions of Segment L-N-O were shifted west.

Additional issues discussed at this meeting included:

1. Potential impacts to the Moss Lake Water Quality Critical Area.

- 2. Differences in traffic volumes, if any, for any alternatives substantially more distant from Shelby.
- 3. Viability of the Upgrade alternative.

September 22, 1995 Steering Committee Meeting. This meeting was held to evaluate the preliminary corridors established to date and to select the detailed study alternatives for the project. Corridor modifications made prior to the September 22, 1995 steering committee meeting, and subsequent corridor decisions made at this meeting are described in greater detail in Section 2.4.3 (Preliminary Bypass Corridors), and are shown in Exhibits 2-6 and 2-7. Corridor decisions made at this steering committee meeting are as follows:

- The Segment C'-G corridor was widened to the east in the vicinity of Washburn Switch Road (SR 1313).
- The Segment B-G corridor was widened to the north in the vicinity of McSwain Road (SR 1322).
- The Segment B-L corridor was eliminated.
- A portion of the Segment G-J corridor width was eliminated in the vicinity of North Lafayette Street (SR 1005).

Additional issues discussed at this meeting included:

- 1. Public input received to date on the project.
- 2. Potential extension of the project limits to the west.
- 3. The presence of a minority neighborhood near Node N.
- 4. The potential for protected species in the project area.

June 10, 1997 Steering Committee Meeting. This meeting was held to reevaluate the detailed study alternatives previously selected and to update steering committee members on the status of the study and preliminary conclusions reached following analysis of the detailed study alternatives. The Upgrade alternative was eliminated from consideration as a Tier 2 detailed study alternative due to excessive anticipated relocations, potential involvement with three National Register-eligible historic sites, anticipated design and traffic circulation problems, and high projected cost (note: only the portion of the Upgrade alternative from Node D to Node P [see Exhibit 2-13 for the locations of these nodes] was eliminated. Other Upgrade segments associated with Bypass alternatives were retained).

Additional issues discussed at this meeting included:

- 1. The SHPO determination of effects for the National Register-eligible historic properties.
- 2. Potential extension of the project limits to the west, or creation of a separate project for the purpose of extending full control of access to Mooresboro.
- 3. The environmental justice ramifications of alternatives affecting Light Oak, a minority neighborhood on the east side of the project near Elizabeth Avenue (SR 2052).

March 19, 1998 Monthly Corps of Engineers Meeting. Representatives from the Corps of Engineers, DWQ, and WRC were present to review information concerning changes to project alternatives west of Moss Lake that resulted in longitudinal encroachment to a Buffalo creek tributary near the Light Oak community. The alternative changes were deemed necessary after agency concurrence was obtained for the detailed study alternatives because of the need to reduce relocations and minority impacts in that area. DWQ indicated that the stream in this area should be relocated rather than culverted.

May 5, 1999 NEPA/404 Concurrence Point Number 3 Meeting. A Merger meeting was held in Shelby on May 5, 1999 to achieve concurrence on the Least Environmentally Damaging Practicable Alternative (LEDPA). Representatives from the Corps of Engineers, US Fish and Wildlife Service, NCDENR DWQ, FHWA, NCDOT Division 12, NCDOT Project Development and Environmental Analysis Branch and NCDOT Roadway Design Unit were present at this meeting. As a result of discussions held at this meeting, and field visits to several wetland and stream sites along the project, Alternative 21 was selected as the LEDPA. At the time that this meeting was held, concurrence form signature had not yet been instituted as a part of the NEPA/404 Merger process; however, the Corps of Engineers issued a letter on behalf of the Merger Team verifying selection of Alternative 21 as the LEDPA (see May 25, 1999 letter in Appendix A, Section A.2). Additional information on the selection of the LEDPA is provided in Chapter 2.

January 4, 2001 NEPA/404 Concurrence Point Number 4 Field Pre-Meeting. A meeting was held in Shelby on January 4, 2001 to review several key wetland, stream, and dwarf-flowered heartleaf sites in the field prior to the January 17 Concurrence Point Number 4 meeting. The following issues were raised at this field review by the agency members in attendance:

- Potential further minimization of impacts (possibly through bridging) to dwarf-flowered heartleaf (DFHL) Site #32 and associated stream.
- Possible changes to the SR 2245 interchange near the eastern end of the project, to minimize wetland and stream impacts in this area.
- Potential further minimization of impacts to DFHL Site #31 through modification of the eastern terminus bypass interchange.
- Further minimization of impacts to DFHL Site #22, while still avoiding the NCDOT maintenance garage and impacts to stream and DFHL Site #24.

- Further minimization of wetland impacts north of NC 180 through use of a retaining wall or a shift in alignment.
- Avoidance of DFHL Site #15 and minimization of stream impacts in this area.
- Avoidance/minimization of wetland impacts at the existing NC 180/NC 150 intersection.
- Potential bridging of the stream to the east of the proposed NC 18 interchange.
- Reconfiguration of the NC 18 interchange to avoid wetland impacts on the eastern side of the interchange.
- Avoidance of stream impacts in the vicinity of Lithia Springs Road.
- Avoidance of stream impacts west of SR 1005 through bridging or use of a retaining wall.
- Consideration of bridging of DFHL Sites #10, 11, and 12, or use of a retaining wall to minimize impacts.
- Environmental commitments for First Broad River.
- Potential reconfiguration of the NC 226 interchange to minimize impacts to the stream on the western side of the interchange, and to minimize impacts to Brushy Creek and DFHL Site #9.
- Other measures to minimize impacts to Brushy Creek.
- Consideration of some DFHL and wetland sites as mitigation.

Appendix D includes additional information on these issues.

January 17, 2001 NEPA/404 Concurrence Point Number 4 Meeting. A Merger meeting was held on January 17, 2001 to discuss avoidance and minimization of project impacts with agency representatives. Issues raised at the January 4 field meeting were revisited and NCDOT and agency representatives agreed on the avoidance/minimization measures that could and would be implemented. Appendix D includes additional information on the decisions made at this meeting.

Sections A.2 and A.3 of Appendix A include Concurrence Point #4 sign-off sheets from the

agencies involved in this concurrence meeting.

Agency Comments on the Draft Environmental Impact Statement

The Draft EIS was approved by FHWA on October 1, 1998 and was distributed to Federal, State

and local agencies, as well as locations for public review. See Chapter 5 for a list of these

agencies. Various comments concerning the DEIS for this project were received from the

Federal, State and local agencies. Responses to these comments have been incorporated into the

environmental document where appropriate. The following is a summary of the comments and

responses for each agency. Copies of the comment letters are in Appendix B, and the page

numbers are referenced herein.

Agency:

United States Environmental Protection Agency

Letter Date: January 22, 1999 (see pages B-1 to B-5)

Comments/Responses:

Comment: PURPOSE AND NEED - "Economic development is one of the project objectives. It is stated that the new bypass would stimulate growth in the Shelby area. With Charlotte reasonably close, it could be that such a bypass would be a motivating factor for persons now working in Shelby to seek better jobs further from home. The economic stimulatory effects of the proposed bypass should be supported by

references."

Response:

As discussed in Section 1.3, Social and Economic Development, the improvement of US 74 would create benefits that could enhance the economic conditions of municipalities both within and outside the study area. These benefits would accrue because commercial and industrial traffic, such as transport trucks, would save travel time and fuel through an improved highway system. A substantial portion of commercial freight is moved on our nation's highways. According to the recent FHWA studies, truck freight revenues represent more than 75 percent of freight revenue for all modes. Trucks transport one-half the weight and nearly 25 percent of the ton-miles of all freight shipments in the United States. The number of

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commercial trucks on America's highways grew by 76 percent between 1982 and 1992, while the distance traveled doubled.

To be competitive in the regional economy, Cleveland County producers must maximize the efficiency of production and distribution. Reducing vehicle delays would translate into cost savings in terms of labor (faster, safer travel would allow drivers additional time for transportation of goods) and fuel consumption. Improving the US 74 corridor through Shelby could ensure that local businesses and industries would continue to thrive, and perhaps expand to compete with businesses in larger cities such as Charlotte. The goals of the Cleveland County Economic Development Commission and Chamber of Commerce is not to export the work force to surrounding counties but to retain and recruit industry to support the work force within the County.

Comment:

ALTERNATIVES – "1. Mass transit was considered but rejected because of several factors about the local area that make mass transit not beneficial. While low population density, cars per dwelling unit and dispersed employment centers are some valid factors to determine MT utility within the Shelby area, the analysis should also determine the numbers of potential MT users who would be commuting into the metropolitan Charlotte area that do not need their vehicles to do their jobs. It is important to do this on a much broader scale than just Shelby and Cleveland County, and Table 3-4 of Daily Commuting Patterns needs to be completed."

Response:

The 2025 Integrated Transit/Land-Use Plan for Charlotte-Mecklenburg (Draft Report - July 1998) indicated that Bus Rapid Transit (BRT) was the preferred transit mode for the Airport Corridor (US 74 west of I-77). The reason for this preference is that both job and housing numbers within station areas are comparatively low (air traffic noise and height restrictions limit land use opportunities in much of the Airport Corridor area). The cost of light rail within this corridor is double the cost for BRT, the projected ridership for BRT is higher than for rail, and the proposed BRT alignment is "technology neutral". The Airport Corridor BRT will be constructed in phases: Phase 1 (five-year plan), Phase 2 (ten-year plan) and Phase 3 (year 2025 plan). Phase 1 is BRT from Center City Transit Center (near I-77) to Morris Field and buses in mixed traffic from Morris Field to Little Rock. Phase 2 is extension of BRT from Morris Field to Billy Graham Parkway, and maintenance of buses in mixed traffic between Billy Graham Parkway and Little Rock. Phase 3 is extension of BRT from Billy Graham Parkway to I-485 (Charlotte Outer Loop).

Any transit mode proposed within or along the US 74 corridor between Shelby and Charlotte should be compatible with the Transit system proposed for Charlotte-Mecklenburg County. As discussed above, the mode that is proposed for the Airport Corridor (US 74 within Mecklenburg County) is BRT. In order for the Shelby-to-Charlotte commuters to benefit from a mass transit alternative, the BRT would need to be extended from I-485 (the Charlotte Outer Loop), through Gastonia in Gaston County, and into Cleveland County.

The BRT system within the Airport Corridor is not proposed for completion until the year 2025. The next phase would logically be to extend the BRT, or possibly to construct high occupancy vehicle (HOV) lanes around Gastonia. It is unlikely any transit system between Shelby and Charlotte would be operational before the year 2050. Therefore, the mass transit alternative would not be a viable alternative for the proposed improvement of the US 74 roadway corridor because the timing of such improvements would realistically be too late for Shelby's more immediate transportation needs.

Comment:

ALTERNATIVES – "2. The document should also define the highway level-of-service at and below which drivers would become disenchanted with car commuting. Since the US 74 corridor is considered a key intrastate route, please also define whether there is a future date when HOV lanes designation would be considered."

Response:

The effectiveness of HOV lanes has increasingly been called into question in a number of metropolitan areas during recent years. Despite operational and utilization data, the true benefits of HOV lanes is undiscovered because of the lack of "before-and-after" studies. Until such studies are conducted, it is not possible to define the level of congestion or the length of travel-time delay that would induce commuters to change modes or carpool.

However, several sections of I-40 in the Triangle area (Raleigh-Durham-Chapel Hill) operate at levels of service (LOS) E and F. Although the Triangle Transit Authority (TTA) offers vanpool and bus service, the corridor remains congested with single occupancy vehicles.

Comment:

ALTERNATIVES - "3. A bypass south of the Shelby central business district (CBD) was identified in the preliminary screening but not included in the 10 reasonable and feasible corridors. Surprisingly, neither this corridor nor any other south of the CBD was included in a total of 25 alternatives considered for detailed evaluation. EPA is requesting that preliminary corridor A-R or an appropriate alternative south of the CBD be considered to the same extent as the 10 reasonable/feasible alternatives. The Final EIS should present the comparison in terms of the land use, socio-economic and environmental criteria used to derive the final alternatives. The rationale for eliminating a south bypass (Segment A-R) on page 2-18 is extremely brief. We think the positive developmental aspects of planning a freeway within close proximity to the Shelby Airport (southwest of the CBD) would be a definite positive factor rather than a hindrance to airport expansion."

Response:

As discussed in Chapter 2, two southern bypass alternatives were evaluated during the preliminary alternatives phase of the project. These alternatives were eliminated for the following reasons:

- The southern bypass alternative was recommended in the 1979 Thoroughfare Plan prepared by the NCDOT. However, the Shelby Thoroughfare Plan adopted in 1984 by the City of Shelby and the NCDOT included a northern bypass based on the greater traffic volumes anticipated north of town and on input received from the citizens of Shelby. Therefore, a southern bypass of Shelby did not conform to the adopted thoroughfare plan.
- Land use and demographic data indicate residential growth is anticipated to occur primarily to the north of Shelby. A southern bypass would not provide highway access for this anticipated growth. Traffic from the developing northern sections of town would be required to travel through the urban area and cross existing US 74 to access a southern bypass.
- A southern bypass of Shelby would not preclude the need for a northern bypass. The major industrial and commercial areas of Shelby are located north of existing US 74 in the vicinity of the Norfolk-Southern and CSX railroads. Currently industrial-commercial traffic is required to travel through the central business district along NC 226, NC 18 and NC 150 to access existing US 74. A northern arterial would disburse the east-west bound traffic without encroaching into the more suburban, residential oriented sections of town. The removal of this traffic, which consists of high volumes of truck traffic, would benefit the air quality and noise levels within the city limits.

As indicated in Section A.2, <u>Agency Coordination</u>, Federal and State environmental regulatory and resource agencies concurred with eliminating the southern bypass from further consideration.

Comment:

ALTERNATIVES – "4. A proposed major thoroughfare is shown on Exhibit 1-2 as a blue dashed line. However, it appears that it was not considered in any alternative configuration to meet the transportation purpose of the proposed US 74 bypass. Upgrading this design of this proposed future roadway should receive consideration. Further, it is important for the projected traffic (ADT) volumes to be factored into the evaluation because this major roadway is likely to serve as a shorter US 74 thrutraffic bypass. The Year 2020 traffic volume data (Exhibit 2-12) does not show this roadway. This oversight should be explained."

Response:

As discussed in Section 1.4.2., 1994 Shelby Thoroughfare Plan, four segments of new roadway are identified in the plan which, in conjunction with existing area roads, would form a continuous loop around the southern portion of town. The proposed roadway section would be two-lane arterials and would intersect with the northern bypass both east and west of the city. Upgrading these sections to serve as a southern bypass (full-control of access freeway) would be extremely disruptive to the established neighborhoods they are designed to serve. In addition, as discussed above, a southern bypass would not preclude the need for a northern arterial. Both facilities shown on Exhibit 1-2 are needed to meet anticipated traffic demand in design year 2020.

Although the design year traffic volumes for the local roadways forming the southern loop roads are not shown on Exhibits 2-11 and 2-12, the model used to generate future traffic for the No-Build, the Upgrade Existing and the Build alternative assumed all other projects programmed were in place in the design year.

Comment:

ALTERNATIVES – "5. The Alternatives chapter defines the lengths of several crossover segments, and a total project length of approximately 19 miles. There is very little difference in length for the north alternatives. A comparison in the EIS of a bypass to the south of Shelby is justified because it could be much shorter and potentially present less impacts to the man-made and natural environments."

Response:

The total length of the Upgrade Alternative is approximately 16.2 miles. average total length of the northern bypass alternatives is approximately 19 miles. Two southern bypasses were also studied during the preliminary alternatives analysis phase (see Exhibit 2-4); these were 16.0 miles and 17.1 miles in length, respectively. Tables 2-5(a) and (b) (new tables) in the FEIS illustrate that these southern bypasses were not particularly competitive despite their shorter lengths. and did not solve the need for a northern arterial. As indicated in Table 2-4 of the DEIS, the impacts associated with the Upgrade Alternative would be considerably greater than those associated with the northern bypass alternatives. These increased impacts would result from the proximity of established development to existing US 74 and the cost of maintaining traffic during the construction period. The other available option, a southern bypass alternative along the alignment shown on Exhibit 1-2, would be expected to result in impacts similar in magnitude to those associated with the Upgrade Alternative. The four segments of new roadway (discussed in Section 1.4.2, 1994 Shelby Thoroughfare Plan) would connect four segments of existing two-lane, local arterials through older, established neighborhoods. Constructing a four-lane, controlled access freeway along these alignments would result in extensive relocations and community impacts. addition, see previous discussions of need for a northern arterial.

Comment:

Air Quality Impacts – "1. Air quality conditions are addressed in Chapter 3 where it is stated that Cleveland County is in attainment. Data from the nearest air quality monitors should be given for the project area to support this conclusion."

Response:

As stated in Section 3.6, <u>Air Quality</u>, since there are no monitoring stations for any NAAQS pollutants in Cleveland County, the information used to determine attainment is from monitoring sites in nearby counties. Monitoring data is given in the text for 2006. Based on this information, all pollutants except ozone would appear to be in attainment. Due to the lack of monitoring information in Cleveland County, it cannot be determined whether ozone is actually in violation in Cleveland County or not.

Comment:

Air Quality Impacts – "2. We note the selection of the future location of NC 18 and the proposed bypass interchange for modeling the worst case air impacts. Please explain why this interchange was selected in deference to NC 150 where heavy design year traffic on NC 180, in apparent close proximity to the interchange, could contribute to local conditions. Also, the design year level of service at the proposed Washburn Switch Road (SR 1313) interchange is LOS D, indicative of heavy congestion and potentially degrading air quality. Washburn Switch Road is projected to serve a growing industrial area and this could change the car-truck pollutant mix, increasing the particulates and NOx parameters."

Response:

Traffic data available for NC 180 at the time of the air quality analysis was not at a level of detail sufficient to identify potential delays at NC 150 and the subsequent cumulative effect it would have in conjunction with the NC 150 interchange, and so could not be factored into the analysis. Given the relatively low traffic volumes at both locations, neither interchange would approach the eight-hour CO standard level. Due to the planning-level nature of this study, the car-truck pollutant mix was not modified to reflect future vehicle-mix percentages. Rather, a standard vehiclemix for the region was used for the analysis.

Comment:

Air Quality Impacts - "3. On page 3-51 it is indicated that a temperature of 49 degrees F as the minimum and maximum daily temperature for modeling. Because NCDOT intended to model worst case scenarios during winter, we suggest that this temperature may not be the minimum for worst case winter conditions. If NCDOT wishes to continue to use the 49 degrees temperature, the agency should submit documentation supporting that decision."

Response:

The 49-degree F temperature utilized in this study was provided by the NC Department of Environment and Natural Resources in their publication, "Guidelines for Evaluating the Air Quality Impacts of Transportation Facilities." This model value was used in coordination with the NCDOT Project Development and Environmental Analysis Branch staff.

Comment: Noise Impacts – "1. Part of the analysis included the measurement of ambient noise levels at 13 receptors identified in Table 3-14. It is noted that all but one receptor is located at a uniform 25 feet from mostly busy roadways. These were the only data used to calibrate the model and it is unclear why other sites distant from major/minor thoroughfares (but potentially close to the proposed bypass) were not monitored. How were such receptors accounted for with much lower ambient noise levels?"

Response:

For the DEIS noise studies, STAMINA/OPTIMA 2.0 was used with existing geometric and traffic conditions to calibrate noise level calculations to actual noise measurements; the calculated noise levels were within -1.8 to +1.7 dBA of the actual measured existing noise levels for all measurement locations, indicative that the calibration was within acceptable parameters. The differences were used to calibrate the noise model results relative to each modeling location. Calibration of the model to predict values at any distance from a noise source, and subsequent utilization of this calibration to predict noise levels at other locations, is the whole point of the modeling effort; it prevents the necessity for excessive amounts of field data being required.

Comment:

Noise Impacts – "2. Referencing the list of 25 preliminary corridors developed, noise impacts of a north bypass would be experienced by 137 to 205 sensitive receptors. Of alternatives determined to be reasonable and feasible, those that could be receive cost-effective mitigation would be only 8 to 32, depending on alternative. NCDOT is encouraged to continue to consider further mitigation if a north bypass is selected. It is not indicated in the document how many of those receptors impacted are considered minorities or low income."

Response:

NCDOT will consider further mitigation during final design, when more concise information is available to predict the effectiveness of any such measures. Minority and low-income receptors were not identified in the DEIS because this information was not available during the noise analysis effort; receptors are typically identified from aerial photos or other reasonably current mapping, and such mapping provides no clue as to the socioeconomic make-up of the homeowners potentially affected.

Comment:

Relocations – "1., 2. There is considerable differences between the total (residence, business, non-profit) relocations for the 10 reasonable and feasible alternatives included in Table 2-4 listing of the 25 detailed study alternatives, and those same 10 alternatives listed in Table 4-2. While this perhaps is attributed to refinement of the corridor width, it is not explained. For some alternatives, the difference is more than 100 relocations."

Response:

Following detailed environmental studies and functional engineering designs, several modifications were made to the Southern Corridor to reduce the potential for relocations along the western portion of US 74 and to a subdivision and the Light Oak minority community west of Moss Lake (see Section 2.4.6, Reasonable and Feasible Alternatives). As illustrated in the table on Page 2-28 of the Draft Environmental Impact Statement (DEIS), these modifications resulted in 23 to 73 less relocation impacts in portions of the Northern and Southern Corridors. The modifications west of Moss Lake resulted in a single Northern/Southern corridor through the area and served to reduce potential relocations along the northern corridors also. The merger of the Northern and Southern Corridors reduced the number of possible corridors from 25 to 17. Following the modification of the Southern Corridor, the Upgrade Alternative and the corridors using crossovers A-A'-B and D-K' were eliminated from further consideration based on the reasons discussed on Pages 2-28 and 2-29 of the DEIS.

Comment: Relocations - "3. Relocation impacts to minority or low income groups would not

be disproportionate compared to the community as a whole, based on the data in the

EIS."

Response: It is not anticipated low-income and minority impacts will be disproportionate in

comparison to the overall impacts for the proposed project.

Comment: Water Resources - "1. The greatest adverse impacts from this project would be to

streams from destroying natural stream-beds and relocating the streams by converting floodplain or upland to aquatic habitat. While it may not be possible to reduce the number of stream crossings for a north bypass, the stream relocations appear to be excessive and in need of further consideration. Alternatives 3, 9, 15, 18 and 21 have the lesser degree of impact to the collective wetland/surface water resources. Additionally, it is extremely poor siting to select a route that requires two crossings of the First Broad River. Ways to avoid the need for stream

relocations and mitigation of unavoidable impacts were not well addressed, other than to commit to coordination with resource agencies. It may be difficult to find

suitable mitigation projects for stream impacts."

Response: Only one crossing of the First Broad River will be required for the Preferred

Alternative, Alternative 21. The length of stream relocation anticipated along the eastern portion of the project near Light Oak was minimized through judicious preliminary design. The other anticipated stream relocation, a tributary of the First Broad River, was minimized also during preliminary design. Mitigation for unavoidable wetland and stream impacts is discussed in general terms in Sections

4.12.3 and 4.13.1 of the FEIS.

Comment: Water Resources – "2. For only one stream (Buffalo Creek, 3600-foot segment) is

the linear distance of stream relocation impact stated in the text. Expressing stream

impacts only as acreage makes it difficult to realize the extent of the impact."

Response: The linear impacts of all affected streams for the Preferred Alternative are discussed

in Section 4.12.3 (Water Resources, "Stream Delineation for Preferred Alternative")

of the FEIS.

Comment: Water Resources – "3. It is noted that all of the north bypass alternatives would traverse two water supply watersheds but avoid the zones of critical water quality

protection. Ideally, this is the type area that highway location should avoid or communities should mitigate maximally through stringent zoning that precludes dense or otherwise incompatible development with water supply protection. Development control capability by the City of Shelby is indicated on page 4-13, but it is not indicated for the county. Accordingly, long term degradation of surface

waters in these watersheds north of Shelby is a concern to EPA."

Response:

Comprehensive land use plans and zoning for the City of Shelby and Cleveland County are discussed in detail in Section 3.1, <u>Comprehensive Land Use and Transportation Planning</u>, of the Draft Environmental Impact Statement.

Comment:

Water Resources – "4. Wetlands impacts appear to not be great. Based on the analysis in the EIS, EPA believes it should be possible to reduce those impacts to essentially zero. Otherwise, NCDOT should contact the North Carolina Wetlands Restoration Program (WRP) as soon as possible to determine whether the program has restoration projects planned in this watershed, and whether the WRP will accept contributions from NCDOT in this case."

Response:

Wetlands were delineated for the Preferred Alternative, Alternative 21. These data are more detailed, and have a greater degree of accuracy, than the planning-level data presented in the DEIS for the Tier 2 detailed study alternatives. The wetlands impacts based on delineation of the Preferred Alternative are discussed in Section 4.13.1 (Wetlands and Surface Waters) and are quantified in Tables 4-23(a) and 4-23(b) in the FEIS. As discussed above, the final mitigation plan will be prepared for the subject project. The appropriate mitigation for unavoidable wetland and stream impacts will be determined in consultation with the U. S. Army Corps of Engineers, the U. S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the North Carolina Department of Environment and Natural Resources and Wildlife Resources Commission. At this time, the NCDOT has not determined use of the Wetland Restoration Program (WRP) is the appropriate mitigative action. Wetland and stream impacts were avoided and minimized to the fullest extent practicable during preliminary design in accordance with the FHWA's step-down procedures and the EPA's Section 404(b)(1) Guidelines.

Comment:

"EPA believes the adverse impacts to surface water quality from stream relocation, and lack of county development controls are the greatest concerns presented by this project. Additionally, the estimated total displacement of persons and facilities within a north bypass right-of-way and the significant noise impacts, collectively, are enough reason to reconsider a bypass south of Shelby. The document did not provide enough technical and environmental rationale supporting the decision to discard such an alternative. For the north alternatives, EPA does not have a great preference for any particular one of the 10 final alternatives. That decision should await further analyses of a south bypass, as EPA is requesting, and details about minimization of surface stream relocation impacts. Accordingly, EPA is rating the project EC, meaning we have environmental concerns that should be avoided to fully protect the environment. Corrective measures or alternative alignments are likely available to adequately reduce the identified impacts. Further, the adequacy of the document is rated "2" because there is insufficient information about a south bypass, and the full scope of the stream impacts are not defined."

Response:

Additional information on the consideration of a southern bypass is included in Section 2.4.3 (Preliminary Bypass Alternatives, "Preliminary Alternatives

Evaluation") and Tables 2-5(a) and 2-5(b) of the FEIS. Stream impacts are discussed in Section 4.12.3 (Water Resources, "Stream Delineation for Preferred Alternative") of the FEIS.

Agency: United States Department of the Interior, Fish and Wildlife Service

Letter Date: January 21, 1999 (see pages B-6 to B-9)

Comments/Responses:

Comment:

"Listed Species. Since each alternative evaluated in the draft EIS will directly impact Hexastylis naniflora, the Federal Highway Administration should request consultation with our office. Requests for consultation must include: (1) a description of the action to be considered; (2) a description of the specific area that may be affected by the action (we now request that this include accurate latitude/longitude coordinates); (3) a description of the listed species affected by the action; (4) a description of the manner in which the action may affect the listed species and an assessment of any cumulative effects; (5) reports, which should include any updates to the draft EIS or biological assessment; and (6) any other relevant available information about this action, the affected listed species, or critical habitat. We believe that selection of the upgrade alternative or a southerly alternative would minimize or potentially avoid impacts to Hexastylis naniflora. Therefore, we do not believe these alternatives should be dropped from consideration at this time. As we indicated in our November 21, 1997, letter, the potential recovery of Hexastylis naniflora depends on the protection and management of populations across the species' range, including Cleveland County. If an alternative for this project is selected that will affect this species, we will then likely focus on measures that will lead to the recovery of Hexastylis naniflora."

Response:

As discussed in Sections 3.13.2 and 4.13.3 (<u>Protected Species</u>), <u>Protected Species</u>, all the Tier 2 detailed study alternatives will impact known populations of the Dwarf-flowered heartleaf (*Hexastylis naniflora*). Due to the abundance of the species in the project area, it will not be possible to avoid all of the sites. However, the Federal Highway Administration (FHWA) and the North Carolina Department of Transportation will avoid and minimize impacts to the Dwarf-flowered heartleaf populations to the extent practicable during preliminary design. Appropriate mitigation for unavoidable impacts will be determined in consultation with the U. S. Fish and Wildlife Service (USFWS) and the North Carolina Wildlife Resources Commission (WRC). If it is determined necessary, the NCDOT and the FHWA will establish a conservation area for the Dwarf-flowered heartleaf and/or relocate impacted plants from the existing sites to pre-selected, USFWS approved alternate sites or disperse seeds.

Since the January 21, 1999 letter was prepared, the US Fish and Wildlife Service has issued the biological opinion that "the project as proposed is not likely to

jeopardize the continued existence of *Hexastylis naniflora*. No critical habitat has been designated for this species; therefore, none will be affected." (May 11, 2004 letter; see Appendix A.2).

The Southern Bypass alternative was eliminated from further consideration in September 1995 following preliminary studies and the Upgrade Alternative was eliminated in June 1997 following detailed studies based on the considerations discussed in Chapter 2 of the Draft Environmental Impact Statement. Either of these alternatives could result in lesser impact to the Dwarf-flowered heartleaf; however, the impacts to residential and business communities would be extensive and increase construction costs substantially.

At interagency meetings during the preliminary alternatives elimination process, the USFWS representatives indicated the agency was preparing to delist the Dwarf-flowered heartleaf. This process was dependent upon the establishment of a preserve and a final study of the status of the species. The NCDOT and FHWA established a conservation area in Catawba County. The Murray's Mill *Hexastylis Naniflora* Preserve encompasses a 26.0-acre tract and includes a population of approximately 20,000 plants. A buffer zone surrounding the population was included to protect the plants in the event the adjacent lands were developed. The North Carolina Department of Transportation agreed to the long-term maintenance of the preserve. A 1,079-acre tract of land known as the Broad River Tract (formerly known as International Paper Tract) has been purchased as well by NCDOT. This tract, which includes 47 acres of dwarf-flowered heartleaf habitat with 10,796 confirmed dwarf-flowered heartleaf plants, is located approximately one mile southwest of Boiling Springs. These factors were one of the primary considerations in the selection of detailed study alternatives.

Comment:

"<u>Stream and Wetland Impacts</u>. The Service recommends that streams and wetlands be avoided whenever possible. If this is not feasible, we recommend minimizing impacts to jurisdictional waters through designs that include bridges which span the bankfull width and the flood plain.

Although the draft EIS includes a listing in Table 3-21 of the potential stream and wetland crossings associated with the proposed project, it would be helpful to have additional information about the linear extent of the streams impacted (rather than acreage), their watershed area, stream type, and biotic community. The information presented is not adequate to compare the alternatives, except as an index of potential impacts; we suspect that actual impacts may depart from these figures by a factor of one or more. According to Exhibit 4-2, there has been a selection of crossing structures, denoted as culverts or bridges. As requested in our January 3, 1995, letter, we would appreciate receiving an analysis of the structure(s) evaluated at each of the crossings and the rationale for selection. Do the impacts described in Table 3-21 accurately reflect an actual design, or do they assure a maximum (or minimum) extent of estimated fills?

We will recommend compensatory mitigation for any unavoidable stream and wetland impacts. Because we believe that compensatory mitigation should focus on the replacement of functional values lost or diminished, it is important that you consider options for mitigation early during the final design stages. A successful stream mitigation plan will need to first describe what the natural channel design is relative to the principles of fluvial geomorphology. We will likely recommend the following elements be included in any stream mitigation for this project:

- 1. Riparian vegetation should include native woody species, such as leucothoe, alder (Alnus spp.), black willow, and dogwood, as well as Arundinaria, sedges, grasses, and rushes, as appropriate to the area. Exotic vegetation should be screened from any plant material. Large woody species will provide thermal cover as well as deep bank-stabilizing root systems along the constructed/reconstructed stream channel.
- 2. Stream channel construction and vegetation establishment should take place prior to the diversion of water into the new channel. Sequential construction of segments and temporary pipe diversions can be utilized to ensure channel stability. We would like to have an opportunity to inspect stream segments for stability prior to the water diversion.
- 3. Stream channel design should mimic slope, riffle slope, pool slope, valley slope, meander geometry, sinuosity, cross-sectional dimensions, entrenchment ratio, bed material (pebble count), and bankfull discharge of a nearby reference reach of a stable stream of the same classification (Rosgen 1996). Bankfull dimensions should be generated based on those of an appropriate reference reach and/or the latest discharge/channel dimension relationship developed for the piedmont (we can supply a copy of these relationships if needed). We would like to review the final design of the stream channel restoration and relocations.
- 4. Monitoring should continue for at least 5 years following channel construction. Annual reports should be submitted to the resource agencies, and those agencies should be notified of problems with regard to stream mitigation within 30 days of detection.
- 5. An appropriate regional conservation organization should hold title to the deed restrictions on the mitigation site. The title to the conservation easement should be conveyed along with an endowment for future monitoring, management, and any contingencies to ensure a perpetual net increase in stream channel function in the project area.
- 6. The final mitigation plan should provide details relative to what measures will be taken to control watershed conditions and prevent sediment pollution and increased water discharge that would potentially negate efforts at the stream mitigation site(s).

The latest draft "Guidelines for stream relocation and restoration in North Carolina," by the North Carolina Wildlife Resources Commission, is a good guide to proper stream restoration and relocation work."

- Response In accordance with current NCDOT policy, all high-quality, riverine systems will be bridged to minimize impacts to associated wetlands to the fullest extent practicable. These sites are indicated in Table 4-21(a) of the FEIS.
 - Table 3-21 in the DEIS indicates the surface waters and wetlands sites identified within the approximately 1,000 foot-wide corridors for the ten reasonable and feasible Build alternatives (now termed Tier 2 detailed study alternatives). The acreages shown for each site indicate the entire surface water or wetland area occurring within the corridor, not the area of potential impact. Table 4-22 in the DEIS showed the acreages of potential impact for each site based on an approximate right-of-way width of 325 feet within the corridor. Total anticipated jurisdictional areas of impact within each Tier 2 detailed study alternative were quantified in Table 4-23 of the DEIS. However, these impacts were based on Following selection of the Preferred Alternative, functional level designs. preliminary designs were prepared and impacts to jurisdictional surface waters and wetlands were further avoided and minimized as practicable.
 - Exhibit 4-2 shows the location of the proposed drainage structures. Table 4-20(a) of the FEIS indicates the anticipated bridge crossings for each Tier 2 detailed study alternative. Table 4-20(b) of the FEIS indicates the proposed major culverts for each Tier 2 detailed study alternative. These structure sizes are estimates based on generalized planning-level data. The structure sizes for crossings along the Preferred Alternative were reevaluated and refined during preliminary design and are presented in Tables 4-21(a) and 4-21(b) of the FEIS.
 - A final mitigation plan will be developed in consultation with appropriate Federal and state environmental regulatory and resource agencies.

Comment:

"Wildlife Habitat. We agree with the very general description of potential impacts to wildlife identified in section 4.12.2 of the draft EIS. However, we believe additional details are needed to minimize these effects. The effects of highways such as that proposed here can be characterized as: (1) habitat fragmentation, (2) direct mortality, (3) direct habitat loss, (4) displacement and avoidance, and (5) problems associated with human development. We believe it is important to reduce the impacts of the proposed road construction on local populations and to preserve the ecological processes that are related to landscape continuity and metapopulation dynamics. One obvious measure to minimize unavoidable fragmentation effects of highways to wildlife is to provide crossings. Wildlife crossings may effectively reduce impacts to wildlife populations, reduce mortality due to vehicles, and reduce corresponding hazards to human life and property. Wildlife crossings should be planned so as to take advantage of current wildlife movement corridors to maximize their potential efficacy. Openness factors should be calculated for underpasses so that target species are not repelled. General designs for wildlife passage include overpasses, underpasses, viaducts, expanded bridges, upland culverts, and/or fencing. Other measures, such as habitat conservation, may offset the direct loss of

habitat as well as the indirect effects of fragmentation and noise/edge effects for area-sensitive species. Therefore, we believe successful minimization/mitigation features depend entirely upon a clear definition of species- and natural community-level objectives. What wildlife species will be affected by the proposed project? Which natural communities? Which guilds? How will fragmentation affect resident wildlife? What area-sensitive species inhabit the largely undeveloped areas of the northern bypass alternatives? Monitoring is a critical element of any plan for mitigation of highway impacts to wildlife; what plan do you have for monitoring? We believe each of these questions should be addressed in the final EIS."

Response:

The provision of wildlife crossings was determined during preliminary design and is addressed in Section 4.12.2 of the FEIS.

Comment:

"Land Use Secondary Impacts. We are pleased to see the acknowledgment at 4.1.4 in the draft EIS of the secondary impacts that can result from the construction of road facilities on a new location. We agree that improved access to the north of Shelby would lead to increased residential development in that area, which would likely include some common adverse impacts to forests, wetlands, and streams, as well as the fish and wildlife resources that occupy these habitats. Since secondary impacts resulting from such construction may be significant, what measures do you propose to minimize or mitigate for these impacts? Could land acquisition and conservation management offset these impacts? Would strict zoning controls minimize the impacts?"

Response:

Induced development would likely result from the construction of any one of the Tier 2 detailed study alternatives. Changes in land use and development patterns would be expected to occur mainly in the vicinity of interchange areas and progress outward. The extent of this development would depend to a large extent on whether county-wide zoning is instituted and whether convenient and sufficient infrastructure is provided at the interchange locations. Indirect and cumulative effects, which includes induced development, is now discussed in Section 4.17 of the FEIS.

The North Carolina Department of Transportation is not authorized to regulate land use and development, nor can the Department require local government to institute land use and development controls. The Department can exercise control of access along the proposed roadway, which discourages development of land in areas other than the vicinity of an interchange where access to the freeway is allowed, as in the case of this project.

Comment:

"The information on the potential effects of the proposed alternatives presented in the draft EIS is not sufficient, especially in terms of wetland and stream impacts, to accurately recommend a particular alternative. However, based on a consideration of the potential effects of the various alternatives as presented in Table 2-4, we prefer the alternative of improving the existing facility (Upgrade Alternative 25) instead of the alternatives that would be primarily on a new location. We do not believe it is appropriate to drop the upgrade or southern alternatives from further consideration."

Response:

Additional information is included in this document concerning the southern bypass alternative and the reasons for its elimination. The Upgrade alternative was analyzed to the level of detail of the Tier 2 detailed study alternatives. It was not considered viable due to its extensive relocation impacts and right-of-way cost. Additional information is available in the DEIS and this document.

Agency: Department of the Army, Wilmington District, Corps of Engineers

Letter Date: January 27, 1999 (see pages B-10 to B-12)

Comments/Responses:

Comment:

"The proposed project is located in Cleveland County, which is a participant in the National Flood Insurance Program (NFIP). Based on a review of several panels of the July 1991 Cleveland County Flood Insurance Rate Map, one or more of the reasonable and feasible alternatives appear to cross or affect identified flood hazard areas. Streams affected include Sandy Run and unnamed tributary, Beaverdam Creek, Brushy Creek and unnamed tributary, First Broad River, Buffalo Creek, Muddy Creek, and Potts Creek. These flood plains are shown on Exhibit 3-13 of the Draft Environmental Impact Statement (DEIS).

Of these streams, all are approximately mapped except for Buffalo and Muddy Creeks, which are detailed study streams with 100-year flood elevation determined but no floodway defined. Although no floodways have been shown or computed for study streams in the county's jurisdiction, the county must ensure that cumulative effects of development in the flood plain will not cause more than a 1.0 feet increase in base (100-year) flood elevations. We note that these increases have been computed for proposed bridge crossings and are shown on page 4-67 of the DEIS.

The project should be designed to meet the requirements of the NFIP, administered by the Federal Emergency Management Agency, 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.

Incidentally, we would like to commend your agency on the rather extensive discussion of flood plains contained in the DEIS."

Response:

Hydraulic calculations will ensure that the base flood elevation will not be increased. NFIP requirements will be met, and compliance with local ordinances will be maintained.

Comment:

"Generally we find the subject document to be thorough and well written. Based on the information presented in the DEIS, the Corps could support several of the 10 reasonable and feasible alternatives. The Corps preferred alternatives include Nos. 9, 18, and 21. These alternatives have minimal wetland impact, the lowest number of stream crossings, and the least amount of impacts to surface waters. Their total cost is also relatively low. We recognize, however, that alternatives 18 and 21 have some of the highest projected numbers of relocations resulting in potentially higher levels of social impact. The Corps could also potentially support Alternative No.3 which has lower numbers of relocations and minimal wetland impact, provided that surface water impacts could be reduced to levels comparable to these other alternatives through minimization efforts. The NCDOT should seek to further minimize the projected impacts through design considerations. To assist in further comparisons of these alternatives, we recommend that an additional impact category be developed that would account for the linear feet of channel impacted through piping and/or relocation."

Response:

The Least Environmentally Damaging Practicable Alternative (LEDPA), or Preferred Alternative, selected for this project is Alternative 21, consistent with the Corps' recommendation. Impacts to both natural resource features (i.e., waters and wetlands) and to social impacts such as relocations have been minimized whenever possible through judicious placement of right-of-way during the preliminary design for this project. Linear stream impacts have been quantified for the Preferred Alternative and are presented in Section 4.12.3 (Water Resources, "Stream Delineation for Preferred Alternative") and Tables 4-19(b) and 4-19(c) of the FEIS.

Comment:

"We anticipate that an individual Department of the Army permit will be required under Section 404 of the Clean Water Act of 1977, as amended, for construction of this project, based on the projected stream channel relocations. Channel relocations should be designed in accordance with current North Carolina Wildlife Resources Commission (WRC) guidelines. Designs for lengthy relocations should be coordinated with the Corps and the WRC prior to a submission of a permit application. We recommend that unavoidable channel losses be mitigated onsite to the maximum extent possible. A lack of onsite opportunities should be documented."

Response:

Channel relocations will be designed in accordance with current NCDENR WRC guidelines. Designs for lengthy relocations will be coordinated with the Corps and the WRC prior to a submission of a permit application. Unavoidable channel losses will be mitigated onsite to the maximum extent possible, and a lack of onsite opportunities will be documented.

Comment:

"We recommend that a mitigation plan for wetland and stream losses be submitted with any permit application. We would not be able to reach a final permit decision until a mitigation plan is approved."

Response: A mitigation plan for wetland and stream losses will be submitted with any permit

applications. It is understood that this will expedite the permitting process.

Comment:

"As indicated in the document, this project will be processed under the integrated NEPA/404 process. To this end, a project team should be assembled as soon as possible and a field review of the corridors conducted to initiate the required coordination."

Response:

A project team was assembled for this project, in accordance with the NEPA/404 merger process. The Concurrence Point #3 meeting was held on May 5, 1999 to select the Preferred Alternative, or LEDPA; Alternative 21 was selected at this meeting as the LEDPA after review of the project and alternatives with attending resource agencies and field visits to some wetlands sites. A concurrence team field review meeting was held on January 4, 2001 to visit wetland, stream and dwarf-flowered heartleaf sites identified by resource agencies prior to the Concurrence Point #4 meeting. The Concurrence Point #4 meeting was held on January 17, 2001, to enable the project team to discuss and agree upon avoidance and minimization for natural resource issues. Concurrence was obtained from the project team on Concurrence Point #4 on June 15, 2001. Concurrence Point #4 meeting materials are included in Appendix D of this FEIS.

Agency: United States Department of Agriculture, Natural Resources Conservation

Service

Letter Date: November 30, 1998 (see page B-13)

Comments/Responses:

Comment: "The Natural Resources Conservation Service does not have any comments at this

time."

Response: No response required.

Agency: United States Department of Commerce, National Geodetic Survey

Letter Date: November 25, 1998 (see pages B-14 to B-15)

Comments/Responses:

Comment:

"All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the NGS home page at the following Internet World Wide Web address: http://www.ngs.noaa.gov. After entering the NGS home page, please access the topic "Products and Services" and then access the menu item "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the NGS data base for the subject area project. This information be should reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

If there are any planned activities which will disturb or destroy these monuments, NGS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any relocation(s) required."

Response:

Comment has been noted. Section 4.16 of both the DEIS and FEIS notes that the North Carolina Geodetic Survey should be notified prior to construction to allow ample time for relocation of affected geodetic markers. This has been included in the FEIS as an environmental commitment.

Agency: North Carolina Department of Environment and Natural Resources

Letter Date: December 21, 1998 (see page B-16)

Comments/Responses:

Comment:

"The Department of Environment and Natural Resources has reviewed the Draft Environmental Impact Statement for the proposed project. We concur with the findings of this document provided careful consideration be given to the concerns made by the N.C. Wildlife Resources Commission and the Division of Water Quality. I encourage the Department of Transportation to continue coordinating with these agencies prior to circulation of the final document. This will help avoid unnecessary delays."

Response: Ongoing agency coordination will be maintained as suggested, to expedite the project.

Agency: North Carolina Department of Environment and Natural Resources, Division

of Water Quality

Letter Date: December 14, 1998 (see page B-17)

Comments/Responses:

Comment:

"The referenced document has been reviewed by this office. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities which impact waters of the state including wetlands. The project will involve up to 0.53 acre of fill in wetlands and 2.44 acres of fill in open waters. Up to 38 perennial stream crossings will be required. DWQ offers the following comments based upon review of the document:

DOT has provided a thorough listing of potential crossing structures to be placed at each stream crossing. It would be helpful to include the linear distance of stream impact at each crossing. DOT has also committed to providing an opportunity for field review of the wetland and stream impact areas. We recommend that this review should occur as early as possible during the planning process, so that stream relocations and structures can be discussed. A determination of stream mitigation requirements can also be made at that time. DOT is reminded that new crossings and/or channel changes requiring losses in excess of 150 feet linear distance of any single perennial stream will require mitigation in accordance with DWO Wetland Rules {15A NCAC 2H.0506(b)(6)}. DOT should be aware that a stream mitigation plan suitable to replace the functions and values of the existing streams will be required with the permit application. Therefore, we advise DOT to pursue development of a stream mitigation plan during the design process, if necessary. DOT is also reminded that in accordance with 15A NCAC 2H.0506(h)(3), the Wetland Restoration Program will be available to use for stream mitigation."

Response:

Linear stream impacts were identified for the Preferred Alternative and are included in Section 4.12.3 (Water Resources, "Stream Delineation for Preferred Alternative") and Tables 4-19(b) and 4-19(c) of the FEIS. Field reviews will be held as early as possible, to expedite the project. A stream mitigation plan will be developed to compensate for losses of perennial stream distances per DWQ Wetland Rules during the design process. Stream mitigation will be provided if necessary.

Comment:

"Based upon the project description provided in the Draft EIS, an Individual 401 Water Quality Certification will be required for this project: Final permit authorization will require formal application by NCDOT and written concurrence from DWQ. Please be aware that this approval will be contingent upon evidence of avoidance and minimization of wetland and stream impacts to the extent practical, and provision of wetland and stream mitigation where necessary."

Response:

Avoidance and minimization of wetland and stream impacts is documented in this document, and wetland and stream mitigation options will be provided as needed, as a part of the NCDOT application for a 401 Water Quality Certification.

Agency: North Carolina Wildlife Resources Commission

Letter Date: December 14, 1998 (see pages B-18 to B-19)

Comments/Responses:

Comment:

"NCDOT proposes to construct a four-lane, controlled access freeway on new location to bypass the existing four-lane section of US 74 through Shelby. The project length varies with alternative. A range of alternatives is under consideration, which meet the stated project purpose and need. The adverse effects on wildlife and fishery resources also vary with each alternative.

We have reviewed the DEIS for this project and have found several alternatives which were retained for detailed study that may be acceptable alternatives. However, NCDOT should be reminded that there is insufficient detail provided to formally endorse a preferred alternative. Details regarding stream relocations and stream channel impacts will be a deciding factor in this project due to the large number of streams crossed by each alternative. After reviewing the information provided regarding the environmental and social impacts of each alternative we could endorse 3, 9, or 18, provided that stream channel impacts are similar and minimization measures are sufficient."

Response:

The Least Environmentally Damaging Practicable Alternative (LEDPA), or Preferred Alternative, selected for this project is Alternative 21. The selection is discussed in Section 2.4.7 <u>Preferred Alternative</u>. The NCDENR WRC was a concurring party in the selection of the LEDPA.

Comment:

"We request that NCDOT include more detailed information regarding stream channel impacts for the alternatives mentioned above. This information should include length of channel lost, channel relocated in an open channel and any areas where topography will not allow natural stream channel to be designed. Information should also be included regarding options for stream and wetland mitigation."

Response:

Linear stream impacts were quantified for the Preferred Alternative and are presented in this document in Section 4.12.3 <u>Water Resources</u> and Tables 4-19(b) and 4-19(c). Wetland and stream mitigation is addressed also and will be further addressed during permitting.

Comment: "At this time we concur with the DEIS for this project. NCDOT should include the

information requested above in any subsequent documents prepared for R-2708"

[R-2707].

Response: Comment has been noted.

Agency: North Carolina Department of Environment and Natural Resources, Division

of Parks and Recreation

Letter Date: December 21, 1998 (see page B-20)

Comments/Responses:

Comment: "The Draft Environmental Impact Statement for the US 74 Shelby Bypass indicates

that there are a number of colonies of dwarf-flowered heartleaf (*Hexastylis naniflora*), federally listed as Endangered [Threatened], within the project area.

The Natural Heritage Program (NHP) recommends avoiding impacts to populations of dwarf-flowered heartleaf. In the case of unavoidable impacts, consultation with the USFWS is required and consultation with the Department of Agriculture and Consumer Services Plant Conservation Program and with the NHP is

recommended."

Response: Impacts to the Threatened dwarf-flowered heartleaf were avoided wherever

possible. However, since there will be unavoidable impacts to this species, a Section 7 consultation has been held with USFWS. This issue is discussed in

Section 4.13.3 (Protected Species) and Tables 4-25 and D-4 (in Appendix D).

Agency: North Carolina Department of Environment and Natural Resources,

Intergovernmental Review (Permits Checklist)

Letter Date: December 14, 1998 (see pages B-21 to B-22)

Comments/Responses:

Comment: "Abandonment of any wells, if required must be in accordance with Title 15A,

Subchapter 2C.0100."

Response: Comment has been noted.

Comment: "Notification of the proper regional office is requested if "orphan" underground

storage tanks (USTs) are discovered during any excavation operation."

Response: Comment has been noted.

Comment: "Open burning of land clearing debris must be performed in compliance with the

open burning vegetation."

Response: Comment has been noted.

Comment: "Findings at haz. waste/UST sites from Preliminary Site Assessments should be

reported to appropriate sections."

Response: Comment has been noted.

Agency: North Carolina Department of Cultural Resources

Letter Date: January 20, 1999 (see page B-23)

Comments/Responses:

Comment: "No comment."

Response: No response required.

Agency: City of Shelby

Letter Date: January 7, 1999 (see page B-24)

Comments/Responses:

Comment: "1. Section 1.1.1, page 1-1: The July 1, 1997 population for the City, according to the

Office of State Planning, is 19,953."

Response: Due to the passage of time since the publication of the DEIS, the text was changed

to reflect the year 2000 Census.

Comment: "2. Table 1-1, page 1-10: Population information should be updated to reflect 1997

estimate."

Response: Due to the passage of time since the publication of the DEIS, Table 1-1 (as well as

other parts of the document) has been altered to include year 2000 Census data.

Comment: "3. Section 3.1.2, page 3-10, second paragraph: Shelby's ETJ does extend more than

1 mile in several areas."

Response: The text was changed to reflect that the ETJ is a mile or greater.

Comment: "4. Watershed Protection section, page 3-10: The City of Shelby Zoning Ordinance

also contains a Watershed Overlay District applicable to all property located within the designated water supply watershed. Since proposed bypass alternatives pass through or nearby the "critical" and "protected" areas around our water intake at the First Broad River, please be reminded that whenever there is a conflict between the City's Zoning Ordinance and Federal or State laws or regulations, the stricter

requirements shall apply."

Response: This is noted in the document.

6.2 PUBLIC INVOLVEMENT

Coordination with the public was initiated early in the study and has been maintained throughout the project. Two Public Officials' meetings were held, on May 9, 1995 and November 30, 1995. Three Citizens Informational Workshops were held, on May 9, 1995, November 30, 1995, and July 27, 2000, to keep the public informed and to allow a forum for comments concerning the project. The Corridor Public Hearing, a formal forum for comments, was held on January 26, 1999, and was preceded by an informal pre-hearing Citizens Informational Workshop on January 19, 1999. A computerized mailing list consisting of elected officials, civic and business groups, local governmental agencies, and interested citizens was compiled at the study's outset and has been continually updated throughout the study. Newsletters were sent out to the persons on the mailing list to keep the public informed and to announce Citizens Informational Workshops.

Workshops and the hearing were advertised in the local Shelby newspaper as well as in the project newsletters.

At the conclusion of the environmental study, this document is made available for public inspection. A pre-hearing Open House will be held and a Design Public Hearing will follow to allow citizens to state concerns and opinions as a matter of public record.

6.2.1 Public Officials' Meetings

To date, two Public Officials' meetings have been held for the subject project. These meetings were held to apprise local officials of the status of the project and to allow officials the opportunity to provide input in the study process. At each meeting, large scale aerial photographic and US Geological Survey maps were displayed showing current project alternatives, and a brief overview of project progress and status was given. Both of the public officials' meetings were held at Jefferson School on Wyke Road in Shelby.

<u>Public Officials' Meeting #1</u>. This meeting, held on May 9, 1995, was conducted primarily to allow local officials to view the preliminary Build alternative corridors developed and modified per April 21, 1995 steering committee meeting. Approximately 10 public officials were in attendance at this meeting; issues raised included:

- 1. Modifications made to the original 1994 Thoroughfare Plan Alternate A alignment, and the fact that such modifications were implemented to potentially minimize impacts at an oxbow on the First Broad River.
- 2. Relationship of the mall access road shown on the 1994 Thoroughfare Plan to the US 74 Shelby Bypass study.

- 3. Need to determine the type of environmental document which would be required for the subject study.
- 4. The project schedule.
- 5. Presence of a sewage treatment plant along one of the project alternatives (currently designated the Northern Alternative).
- 6. Effect of alternative length on cost and usage of the bypass.
- 7. The elimination of alternatives south of Shelby.

<u>Public Officials' Meeting #2</u>. This meeting was held on November 30, 1995; its main purpose was to present the initial detailed study alternatives established at the September 22, 1995 steering committee meeting. Approximately 10 officials were in attendance at this meeting; issues raised included:

- 1. Provision of information or project updates to the local newspaper.
- 2. The possibility of further change to the alternatives at that juncture in the study.
- 3. The project schedule.

6.2.2 <u>Citizens Informational Workshops</u>

Four citizens informational workshops have been held since the beginning of the project. The citizens informational workshops included displays of large-scale mapping, including aerial photographic and/or US Geological Survey mapping showing the current project alternatives. A slide presentation was presented at the first two workshops for interested citizens who wished to learn more about the project and the environmental study process in general. The format of these workshops was informal; project team members were available at each workshop to answer questions about the project on a one-on-one basis. Comment forms, newsletters, handouts, and sign-in sheets were available at each workshop so that attendees could give written input on the

project, obtain general project information, and/or sign up for the project mailing list if necessary.

Citizens Informational Workshop #1. This workshop was held on May 9, 1995, from 5:00 p.m. to 8:00 p.m., at Jefferson School on Wyke Road in Shelby. Approximately 175 persons attended this workshop session. A handout was distributed to attendees (see Appendix A.3). The preliminary Build alternative corridors displayed were those reflecting the modifications suggested at the April 21, 1995 steering committee meeting. Comments received from attendees included the following:

- 1. Anticipated start date of construction, duration of planning study, and anticipated time frame for decision on a preferred alternative.
- 2. The absence of bypass alternatives to the south of Shelby.
- 3. Deviation from the original 1994 Thoroughfare Plan Alternate A alignment due to avoidance of an oxbow in the First Broad River, and identification of a new subdivision (Williams Creek) in the vicinity of SR 1005 and the oxbow.
- 4. Identification of another new subdivision (Carriage Run) within a project alternative.
- 5. The lack of new development in the Shelby area in the last forty years.
- 6. Requests for information concerning right-of-way acquisition and relocation procedures.
- 7. Presence of a sewage treatment plant along one of the project alternatives (currently designated the Northern Alternative).
- 8. Potentially extensive impacts to existing development from the Upgrade alternative.
- 9. Discussion of the corridor versus right-of-way concept.
- 10. Potential interchange and grade separation locations.

11. Potential impacts to a proposed commercial/office development on NC 18 (Dedmon's Harvestore).

Citizens Informational Workshop #2. This workshop was held on November 30, 1995, from 4:00 p.m. to 7:00 p.m., at Jefferson School on Wyke Road in Shelby. Approximately 200 persons attended this workshop session. A handout was distributed to attendees (see Appendix A.3). The detailed study alternatives established at the September 22, 1995 steering committee meeting were displayed for viewing by meeting attendees. Comments received from attendees included the following concerns:

- 1. Project schedule.
- 2. Positive commentaries on changes to the corridor in the vicinity of Williams Creek Subdivision.
- 3. Requests for copies of the traffic reports for the project.
- 4. Potential impacts to a proposed commercial/office development on NC 18 (Dedmon's Harvestore).
- 5. Potential impacts to Carriage Run Subdivision.
- 6. Both positive and negative comments concerning the Upgrade alternative.
- 7. Requests for information concerning right-of-way acquisition and relocation procedures.
- 8. Identification of several community facilities.
- 9. Potential interchange and grade separation locations.
- 10. The need for local street names on the meeting mapping.

<u>Citizens Informational Workshop #3</u>. A pre-hearing citizens informational workshop was held for the subject project on Tuesday, January 19, 1999 from 4:00 p.m. to 8:00 p.m. at the Cleveland

Community College Gymnasium at 137 South Post Road in Shelby, North Carolina. The workshop was informal; no presentations were made. Approximately 350 to 400 persons attended the workshop. A pre-hearing handout was distributed to attendees (see Appendix A.3). Comments received from attendees included the following:

- 1. Identification of the Gardner Family Cemetery and John Ware Cemetery (these did not appear on the Corridor Public Hearing Map).
- 2. Concerns that a citizen was being "held hostage" by delays in the project.
- 3. Support for the Southern Alternative by the Town of Lattimore.
- 4. Concerns about continued access to various subdivisions and areas via grade separations and interchanges.
- 5. Opposition to the portion of the Northern Alternative from US 74 (western project terminus) to NC 226; this was indicated through submission of a petition signed by approximately 425 residents.
- 6. Identification of McBrayer House, near SR 1163 (Broadway Road) at the western end of the project, as a National Register-eligible site.
- 7. Questions regarding the dwarf-flowered heartleaf (federally threatened species) which has been found along the project.
- 8. Support for the Upgrade alternative, which was eliminated as a Tier 2 detailed study alternative earlier in the project study.
- 9. Concerns that the proposed improvements would eliminate the Spake Concrete Block Products plant on NC 180.
- 10. Concerns about possible impacts to the Cleveland Vocational Institute building site on Lowman Road (SR 2125).
- 11. Right-of-way acquisition and relocation procedures, including disposition of uneconomic remnants, and proximity damages (multiple comments received).
- 12. Project schedule.
- 13. Questions concerning the corridor concept, such as the significance of the corridor width versus the actual required right-of-way width, reasons for wider corridor areas, etc.
- 14. Questions regarding the Corridor Public Hearing: its purpose and format, presigning at the workshop to speak at the hearing, etc.

Citizens Informational Workshop #4. A citizens informational workshop was held for the subject project on Thursday, July 27, 2000 from 4:00 p.m. to 7:00 p.m. at the Cleveland Community College Gymnasium at 137 South Post Road in Shelby, NC. The workshop was informal; no presentations were made. Approximately 200 persons attended the workshop. A handout was distributed to attendees (see Appendix A.3). Working copies of the preliminary design plans for the Preferred Alternative were displayed. Concerns/issues raised by attendees included the following:

- 1. Concerns about the Johnson Road community on the east end of the project being completely surrounded by bypass and interchange improvements.
- 2. Potential impacts to Eskridge Grove Church and Cemetery and related church buildings due to the bypass improvements and proposed interchange at Washburn Switch Road.
- 3. Modification of the Carter Road (SR 1927) realignment.
- 4. Potential impacts to Spake Concrete Products plant on NC 180.
- 5. Reevaluation of Peachtree Road/McBrayer Homestead Road (SR 1162) interchange configuration.
- 6. Attempting to keep West Lee Street (SR 1161) open to traffic.
- 7. Locations of gravesites in potentially impacted areas.
- 8. The need for a loop ramp in the southwest quadrant of NC 150 to handle future projected traffic.
- 9. Access to property, particularly in cases where that property is to be developed and access is not provided directly onto the main highway.
- 10. Avoidance of impacts to McBrayer House National Register-eligible property west of Broadway Road (SR 1163) on the western end of the project, and provision of access to this property via a service road.
- 11. Traffic safety, particularly in the vicinity of Bethware School at the east end of the project.
- 12. Avoidance of impacts to a quarry on Anthony Farm Road (SR 2168).
- 13. Provision of access to large parcels near the eastern bypass terminus.
- 14. Avoidance of impacts to residences and churches through minor right-of-way limit modifications, etc.

- 15. Inclusion of improvements to the bridge over the First Broad River on Metcalf Road (SR 1850) as a part of this project.
- 16. Concerns about right-of-way acquisition and relocation procedures, valuation of property value, etc.
- 17. Project schedule.

6.2.3 Corridor Public Hearing

The Corridor Public Hearing was held on January 26, 1999 at 7:00 p.m. at the Cleveland Community College Gymnasium at 137 South Post Road in Shelby, North Carolina. The purpose of this hearing, which took place following publication and distribution of the Draft Environmental Impact Statement, was to provide a formal forum for comments concerning the US 74 Shelby Bypass project. The Corridor Public Hearing Map was displayed at the meeting; this showed the corridor alternatives, proposed interchange locations, existing road designations, projected traffic volumes, and other features of the study area.

The proceedings of the hearing were recorded and transcribed into a written record. The moderator briefly reviewed the Corridor Public Hearing Map and several other aspects of the project, and then entertained comments from the attendees.

Both verbal comments made at the Corridor Public Hearing and written statements received during the post hearing comment period form part of the formal public comment record for the project. The Corridor Public Hearing transcript is included in Appendix A.3. The verbal and written comments from the hearing are summarized in Table 6-1.

6.2.4 Written Comments from Private Citizens

Comment sheets distributed at the workshops and letters received from local citizens have provided insight into the concerns and desires of area residents. Responses indicating a variety of opinions concerning the various project alternatives were received from all portions of the study area.

Written Comments Received During the Preliminary Corridor Evaluation Phase. Many comments were received during the early stages of the study as a result of the alternatives presented to the public at the May 9, 1995 workshop. A questionnaire (see Appendix A, Section A.3) was distributed as a part of this phase of the project for completion by interested parties wishing to apprise the study team of their opinions and priorities regarding the project. Table 6-2 is a summary of alternative preferences indicated in all written correspondence (including the questionnaire) submitted through September 20, 1995 (prior to Steering Committee Meeting #2).

Table 6-3 is a summary of the commentary provided by respondents during the preliminary corridor evaluation phase of the project. Comments were compiled from approximately 70 project questionnaires and letters.

Table 6-4 summarizes the results of the questionnaire distributed with the May 1995 workshop handout.

Written Comments Received After the Preliminary Corridor Evaluation Phase. The written comments received following the preliminary corridor evaluation phase and selection of the detailed study alternatives are summarized below (Note: These are pre-Corridor Public Hearing comments).

- The bypass should be located further from town to avoid promoting excessive development and the creation of traffic problems similar to those which have developed on the existing US 74 highway.
- The Upgrade alternative should not be selected because it would be cost prohibitive due to the excessive relocations and other impacts to property parcels.
- NCDOT should stay within the identified, published corridors, since people are using those corridors to make decisions about their lives.
- Two Upgrade alternative concepts were suggested:
 - ♦ The Upgrade should be implemented by constructing a median barrier down the center of existing US 74, which would provide enough width for the additional required widening. Businesses would be accessed primarily from the rear; the need for access roads would be limited. Aesthetics would not and should not be an issue; appearance is not as important as providing a safe, efficient roadway.
 - Since the US 321 Bypass provides an alternate route, a new location bypass would not be necessary. The existing roadway should be limited access with interchanges, stoplights should be removed, and historically dangerous intersections should be improved.
- Relocations, noise impacts, and potential destruction of wildlife habitat were concerns mentioned in correspondence.
- A shorter routing would use less land and would result in cost savings both from a standpoint of right-of-way acquisition and construction cost.
- The decision-making process for the project should be expedited as much as possible.
- One respondent expressed a preference for a routing which used (from west to east): the western portion of the Northern Alternative; Crossover J-K; the Southern Alternative to NC 150; and the Northern Alternative to the eastern project terminus.

• Commercial development resulting at interchange areas may negatively affect proximate preexisting residential development.

6.2.5 <u>Small Group Informational Meetings</u>

In addition to the informal informational workshops, small group meetings are included in environmental studies to apprise local interested groups of the progress of the study.

<u>Chagrin Farms/Williams Creek Subdivisions Residents' Meeting.</u> A meeting was held between representatives of the study team and homeowners from the Chagrin Farms and Williams Creek subdivisions on July 13, 1995 to inform the attendees of project progress and status. This meeting was held at a home in the Chagrin Farms Subdivision. The format of the meeting was informal, with attendees asking impromptu questions and voicing comments. The following comments were made by attendees at this meeting:

- 1. An interchange at Lafayette Street (SR 1005) would be undesirable.
- 2. In general, the alternatives should be located much further north than those under study at the time of the meeting; alternatives close to Shelby would have too many impacts on existing and proposed development.
- 3. The conceptual bypass line included on the 1994 Thoroughfare Plan is too close to Shelby, and should not have been endorsed by the local representatives responsible for review of and input to the plan.
- 4. It was believed by many of the attendees that one of the functions of the bypass was to provide economic development opportunities for northern Cleveland County; the alternatives under consideration were not far enough north to achieve this.
- 5. The bypass would most likely not attract much local traffic even if it was located relatively close to town, despite the fact that serving as a northern arterial for local traffic is supposed to be one of the functions of the bypass, in addition to serving through traffic.
- 6. Several attendees felt that the traffic model and data generated by the model were not necessarily accurate.

- 7. Impacts to the Williams Creek and Chagrin Farms subdivisions would still be an issue to residents even if an interchange was not included at SR 1005.
- 8. The general location of Wellmon Road would be a better location for the bypass than its then current location nearer to Williams Creek Subdivision.
- 9. The Upgrade alternative should be given adequate consideration.
- 10. There is a potential interest with some residents in attending steering committee meetings, if open to the public.

Eskridge Grove Church Coordination. A meeting was held between representatives of Eskridge Grove Baptist Church, NCDOT, and the consultant at the church on Tuesday, August 28, 2001 to discuss the proposed US 74 Shelby Bypass. Of particular concern was where the proposed Bypass is crossing Washburn Switch Road and the proposed interchange. The following items were discussed at this meeting:

- 1. Right of Way acquisition is scheduled to begin in Fiscal Year 2004. Construction is scheduled to begin in Fiscal Year 2006.
- 2. Access to the church property is an issue since NCDOT typically has control of access along the crossroad in the area of an interchange. A 60-foot break in the fence could possibly be allowed to access the church and cemetery. Also, part of the existing road could be retained and used as a service road for the church and could possibly be tied into the proposed Washburn Switch Road.
- 3. The existing railroad crossing behind the church was discussed. The church has been trying to contact the railroad in order to get the railroad to allow them access across the tracks more often, currently trains regularly block this crossing. NCDOT will investigate the possibility of a retaining wall and/or service road in order to keep the existing railroad crossing and to avoid dealing with the railroad.
- 4. The church is concerned about the current lack of parking and if the proposed Bypass would impact their parking.
- 5. General right-of-way acquisition questions were answered.
- 6. NCDOT requested that the church make a decision within the next 1 to 1-1/2 years about whether they wanted to remain in their current location or relocate.

A follow-up letter to the August 28, 2001 meeting was sent to Eskridge Grove Baptist Church on November 19, 2001. The following items were detailed in the letter:

- 1. A revised design including maintaining the church's existing at-grade railroad crossing was attached to the letter. The design also detailed a retaining wall and a proposed driveway/service road just south of the cemetary to allow access from Washburn Switch Road to the at-grade railroad crossing. Two proposed breaks in the control of access were also shown along Washburn Swith Road one at the proposed driveway/service road and one at the church.
- 2. The letter asked for a decision on the relocation issue by February 2003.

Eskridge Grove Baptist Church responded to NCDOT on January 3, 2003.

- 1. The church still has not made a decision regarding the relocation issue. They have been investigating other options.
- 2. The church has learned that the railroad owns 100' of right of way on each side of the track centerline and that some of their graves are within this right of way.
- 3. The church has not been able to find another (better and more reliable) way to access their property on the other side of the tracks.

6.2.6 Newsletters and Handouts

Five project newsletters have been distributed to date in conjunction with this study:

- Newsletter Number 1 May 1995
- Newsletter Number 2 November 1995
- Newsletter Number 3 January 1999
- Newsletter Number 4 May 2000
- Newsletter Number 5 July 2000

These newsletters were mailed to all interested parties on the mailing list at that time, and were made available at workshops. In addition to providing information on upcoming workshops, these newsletters included study area and alternative mapping, and/or updates on the progress of the study. A copy of each newsletter is presented in Appendix A.3.

Informational handouts were distributed at each of the four citizens informational workshops held. The handout from the first workshop included a questionnaire to be used by interested parties to apprise the study team of their opinions and priorities (see Section 6.2.4 Written Comments from Private Citizens for the results of this survey). The third workshop (the prehearing workshop) included a handout which was also distributed at the Corridor Public Hearing. A copy of each of the four handouts (including the questionnaire from the first workshop) is presented in Appendix A.3.

Table 6-1

		Ι	TYPE OF COMMENT	MMC	TN		
		- 1	5		<u>.</u>	ī	
NAME	AFFILIATION OR REPRESENTING	Informal Workshop Comment	Hearing Speaker	Letter	Petition (# Signatures)	PREFERRED	REMARKS
Allen, Jim	Cleveland County Chamber of Commerce			<u> </u>		Did Not State	Do not delay funding.
Alsobrook, Gary	Property Owner	1				Did Not State	Made NCDOT aware of Gardner Cemetery on Northern Alt.
B(?), Tammy	Artee Industries		^			Did Not State	Use woods in front of Artee Industries.
Baber, Don	Home Builders Assn. Of Cleveland County			<u> </u>		Did Not State	Make a prompt decision and proceed without delay.
Bailey, Tom	Medical Office on N. Lafayette Street					Upgrade Existing	
Benfield, Chris	Property Owner		>			Northern	Construct earlier than proposed.
Benfield, Rhonda	Property Owner		^	_		Northern	Construct earlier than proposed.
Blanton, Mildred	Property Owner		<i>></i>			Upgrade Existing	"Why borrow from Peter to pay Paul?"
Branch, Ronda		_	`			Against Southern	Several of the other proposed routes would be less expensive.
Bridges, Michael	Property Owner		`	H		Did Not State	"Don't drag this out any longer."
Brooks, Norris	Property Owner		>			Upgrade Existing	Relocation would force him "over the edge."
Cabaniss, Joe	Cleveland Co. Board of Commissioners					Did Not State	"Get on with the selection."
Cardell, Dr. Mark	Business on N. Lafayette Street			`		Upgrade Existing	Understood that the Upgrade was not actually an option then.
Cash, Kenneth			,			Upgrade Existing	
Chambless, Bill	Lives in Fairview Farms	>			8	Did Not State	Requested that entrance to Fairview Farms connect to NC 180.
Champion, Mark	Property Owner			1		Did Not State	Owns potentially impacted rental properties; move on with project.
Chapman, Amy	Artee Industries			`		Against Southern	Do not affect Artee Industries.
Cook, A. Gail	Artee Industries		-	<u> </u>		Did Not State	Do not take Artee Industries.
Crawford, David	Citizens for Equitable Bypass		<u> </u>	_	423	Southern	
Crosland, John and Suzanne			_	7		Southern	Northern corridor is close to their property.
Crum, Blair	Property Owner	-	<u> </u>	<u>}</u>		Upgrade Existing	"Recycle the current bypass;" did not like the hearing time limit.
Davis, Dennis			`	_		Did Not State	Pick a route and move the project along.
Doty, Michael	Retired NCDOT Bridge Inspector			^		Against Upgrade	Against Upgrade.
Dover, Paul	Property Owner		`			Upgrade Existing	"But whatever you do, just get one with it."
Elliott, Charles	US Navy (Retired)			>		Northern	Upgrade would be disruptive and costly.
Fletcher, Richard			` `	$\frac{1}{2}$		Upgrade Existing	Feels new location would hurt businesses and environment.
Freeman, Dee	City of Shelby		>	-		Southern	
Gaught, David			$\frac{1}{\sqrt{2}}$	_		Did Not State	Concerned about proximity to new highway.
Gebel, Emile	Williams Creek, Shagreen Nursery		<u> </u>	`		Upgrade Existing	Revisit options for US 74.
Gilbert, Ralph	County Commissioner			\dashv		Did Not State	For Bypass.
Goode, Sandra	Artee Industries	\dashv	1	$\frac{1}{2}$	\dashv	Did Not State	Do not affect Artee Industries.

Table 6-1

		T	TYPE OF COMMENT	MMC	F		
			5				
		b Comme			ITES)		
		ısı Morksho	ng Speaker nent Sheet		 utsngi& #) no		
NAME	AFFILIATION OR REPRESENTING			Letter		PREFERRED CORRIDOR	REMARKS
Grimes, Steven	Shelby Star	^		_		Did Not State	Will dwarf-flowered heartleaf affect selection?
Guest, Wanda	Artee Industries		^			Did Not State	Go around Artee Industries.
Hamrick, Ed	Represented Group of Property Owners		`>			Upgrade Existing	R/W agents on NC 180 project are treating property owners unfairly.
Hanna, Boyce	Hanna Group Industries, Inc.			`		Did Not State	Southern Alt. could affect plans for WADA radio station property.
Hannah, Frank			_	-		Upgrade Existing	We need to look at improving our existing roadways.
Harrill, Edwin		<u> </u>				Did Not State	Would like interchange spacing reviewed more closely.
Holland, Roger	Property Owner		<u> </u>	`	$\frac{1}{2}$	Upgrade Existing	Feels Upgrade would be more cost effective and protect the environ.
Holtzclaw, Charlie	Lives Between Polkville and Lawndale		_	`		Upgrade Existing	New location does not use common sense.
Homesley, Wade & Orea	Property Owner		_	`		Did Not State	Do not leave uneconomic remnant if their land is used.
Hopewell Baptist Church	Hopewell Baptist Church			`		Did Not State	Please do not disturb church cemetery.
Horn, Jeri	819 Polkville Road, Shelby		^	Į į		Did Not State	Requires transcript and dwg. of NC 226 interchange on Southern Alt.
Howell, Billy	415 Borders Road		`			Did Not State	Built much of his house himself and does not want to move.
Hunt, John	Lives in Lattimore		`			Against Northern	Would like to keep rural setting of farm property.
Hunt, Mary	Lives in Lattimore		`	$\frac{1}{\sqrt{1}}$		Against Northern	Does not want bypass through family farm.
Hunt, Robert	Lives in Lattimore	1	`			Did Not State	Has large farm in Northern Alt.; if road is close to home, take home.
Hush, Thelma	Member of Hopewell Baptist Church			_		Did Not State	
Lail, Joseph	Property Owner	-	`			Upgrade Existing	_
Ledford, Bobby	Artee Industries		<u> </u>			Did Not State	Go around Artee Industries.
Ledford, Vickie	Artee Industries		<u> </u>	$\frac{1}{2}$	-	Did Not State	Go around Artee Industries.
Lindeman, James	4021 Polkville Road, Shelby		<u> </u>			Did Not State	Has home on Northern Alternative. Would like copy of transcript.
Lookadoo, J.A. and B.H.			\	+	-	Upgrade Existing	If Upgrade is out, follow powerline along Southern Alternative.
Lovelace, Rachel	Former Mayor of Lattimore	1	-	`		Southern	Letter dated July 1997.
Lowe, Annie	Member of Hopewell Baptist Church		-	`		Did Not State	100% against road going through church and cemetery.
Lowe, Curtis	Member of Hopewell Baptist Church		_	`		Did Not State	Please don't let this happen to our church.
Lowe, Dorothy	Member of Hopewell Baptist Church			<u> </u>		Did Not State	The road needs to be taken in a different direction.
Lowe, Edward	Member of Hopewell Baptist Church		-	`		Did Not State	Against highway coming through church and cemetery.
Mangum, Gary			_	`		Northern	Northern Alternative would help future growth.
Marshall, Judy	Artee Industries	1	\ 			Against Southern	Please advise in detail the advantages of the Southern Alternative.
Martin, J.V. and Eunice	Property on Lithia Springs Road		`	$\frac{1}{\sqrt{1}}$		Did Not State	Does not want to relocate.
McBrayer, Carolyn	McBrayer Historic Home		_	`		Northern	Protect McBrayer homesite at SR 1163 and US 74.
McBrayer, David	McBrayer Historic Home	-	_	$\stackrel{\cdot}{+}$	4	Northern	Protect McBrayer homesite at SR 1163 and US 74.

Table 6-1

		TYP	TYPE OF COMMENT	OMME	Þ		
,		ormaal Workshop Comment Speaker	p teeds sheet	etter	etition (# Signatures)	PREFERRED	
McRraver John	Owns McRayer Historic Home	╬	╬	1 >	4	Did Not State	Drotort McBrauer homeeite at SD 1163 and 115 74
McCowan, Barry	Owns Property on Northern Route	\ \ \		-		Did Not State	State is "holding him hostage" by delays in the project
McCoy, Corrine	Owns Property on Northern Route		-	>		Did Not State	"Leaving the decision in the hands of God and DOT."
McDaniel, Bill & Jane	Property Owner			>		Did Not State	Near Food Lion site - feels they should be bought also.
McEntyre, Jeff and Kim	Owns Property on Northern Route		^			Against Northern	Consider other options that would have less impacts.
McEntyre, Jimmy	Owns Property on Northern Route		>			Southern	Built home in 1998, unaware that he was in Northern Alt. corridor.
Morrison, Ben. and Jan.			>			Did Not State	Disabled - won't be paid enough to avoid house payments.
Neisler, Scott	Mayor of Kings Mountain			>	_	Did Not State	City of Kings Mountain endorses bypass.
Nye, Steve	Cleveland Co. Economic Dev. Comm.	`				Did Not State	Bypass is needed and should be completed ASAP.
Patterson, Jim		`		>		Upgrade Existing	
Pearson, Todd	Property Owner		>			Did Not State	Can we get to town from lake at Cross Creek via NC 150?
Phillips, Beverly	Property Owner	+	\ 	_		Did Not State	Delays have caused respondent financial hardship.
Pittman, Marshall		1	\ 			Did Not State	I need my job. They should not tear down my place of work.
Pruitt, Reggie	Property Owner			`		Northern	A southern route will cause him hardship.
Rogers, John		<u>}</u>				Southern	Northern Alternative too costly.
Rose, Sr., James	Lives in Fairview Farms		>			Did Not State	Do not close Fairview Road with bypass. Connect with NC 180.
Rucker, Will	Property Owner	1	\ -			Against Upgrade	Upgrade is a bad idea.
Sain, Lavada	Property Owner	_	-	>		Did Not State	"Please do not tear down my home"
Schafer, Barbara	Property Owner	_	<u> </u>			Upgrade Existing	Feels Independence Blvd. (in Charlotte) was a success.
Schafer, Dick		1	>			Upgrade Existing	Upgrade is the most prudent on a life cycle cost basis.
Schmid, Erich			>			Upgrade Existing	Finds it hard to believe that the Upgrade is more expensive.
Sewell, Ronnie		<u>}</u>		_		Did Not State	Corridor already picked - "muddy water."
Smith, Robert	Specialty Lighting	`				Against Southern	Bypass needed. Concerned about RR crossings and historic sites.
Southard, Edna	Lives Along Existing US 74			>		Against Upgrade	She is very much opposed to widening existing US 74.
Spake, Dan	Spake Concrete Products	`		>		Did Not State	Don't take bypass through his business
Sparks, Sandra	Lives on Northern Route		>			Did Not State	Any route is okay.
Spikes, Patricia	Artee Industries		>	_	_	Against Southern	Agrees with bypass idea - don't relocate Artee Industries.
Still, Alison				>		Upgrade Existing	Unfortunate that env. and natural resources pay the price for politics.
Towery, Ray	Mayor of Lattimore	>				Southern	
Truelove, Steve	Admin. Of Rest Home @ NC 150 & 180	`	_			Upgrade Existing	
Unidentified Female		_	_	_	_	Upgrade Existing	

Table 6-1

Ь			TY	TYPE OF COMMENT	COMIN	ENT		
	NAME	AFFILIATION OR REPRESENTING	Informal Workshop Comment	Неагілд Ѕреакег	Comment Sheet	Letter Petition (# Signatures)	PREFERRED	REMARKS
ليا	Unidentified Male	Owns Property on Northern Route		\ \			Southern	
	Waite, John Allen	Property Owner			\ \ \		Northern	Whatever the decision, we are looking forward to this change.
	Ware, Melvin	The John Ware Cemetery	<i>></i>		Ĺ		Did Not State	Graves in Southern Alt. corridor - date back to Revolutionary War.
<u>~1</u>	Weathersby, Sandy	Weatherspoon Group (Charlotte)		^			Did Not State	Associated w/NC 150/180 development; glad project is moving ahead.
<u>در</u>	Wilson, William	Member of Hopewell Baptist Church			Ĺ	<i>></i>	Did Not State	Please do not disturb church cemetery.
	Woodard, Eric	Property Owner			_		Northern	Southern Alternative does not allow room for growth.
	Wortman, John	Property Owner		~	,		Southern	Northern Alternative has too many social impacts.
<u></u> 1 5-4	Wray, Frank and Judy	Property on Lithia Springs Road					Did Not State	Does not want to relocate.
	Yelton, Eddie	Autumn Years Health Care					Southern	Southern Alternative will be less costly to build.
<u>_</u>	Young, Sr., Lamar	Lives at Moss Lake			/		Did Not State	What route will be provided for me to go to Shelby?

SUMMARY OF CORRIDOR PREFERENCES

	# OF RESP	# OF RESPONDENTS	Did Not State a
ALTERNATIVE	For	Against	Preference
Northern	6	3	
Southern	10	ည	
Upgrade	22	3	
Did Not State a Preference			51
Total Number of Respondents			103

Table 6-2
SUMMARY OF ALTERNATIVE PREFERENCES IN WRITTEN COMMENTS
RECEIVED DURING THE PRELIMINARY
CORRIDOR EVALUATION PHASE (1)

	NUMB	BER OF RESPONDE	NTS (3)
ALTERNATIVE (2)	For	Against	Other
Northern (A-B-L-M-N-P-S)	13	35	N/A
Middle (A-C-C'-G-J-K-M-P-S)	3	5	4 (4)
Inner (A-C-D-K'-K-M-N-P-S)	1	5	N/A
Upgrade (A-C-D-P-S)	8	2	N/A
Segment M-N-O-S	12	0	N/A
Segment M-P-S	1	12	N/A
Node M	0	2	N/A
Bypass to South of Shelby (5)	7	N/A	N/A

- (1) Derived from written comments and questionnaires received through September 20, 1995.
- (2) Alternative designations as used at the September 22, 1995 Steering Committee Meeting; the Northern Alternative for detailed evaluation is different from the preliminary corridor Northern Alternative indicated in this table. See Exhibit 2-6 to identify these alternatives using the indicated node letters.
- (3) Totals for and against different alternatives vary since respondents expressed multiple opinions (i.e., for and/or against two or more alternatives) and petitions were submitted with multiple signatures.
- (4) Requests for modifications to Middle Alternative.
- (5) Requested by respondents even though not presented as a viable option.

Table 6-3

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING THE PRELIMINARY CORRIDOR EVALUATION PHASE (1)

	REASONS GIVEN BY	RESPONDENT(S) (3)
ALTERNATIVE (2)	For	Against
Northern	 Provision of access to northern Cleveland County and Moss Lake Potential for new industry Favorable topography Less impacts to natural resources and neighborhoods Other routes are too close to Shelby Bypass is not needed to accommodate local traffic, so it does not need to be close 	 Disrupts and divides Zion and Double Springs churches and surrounding communities Greater cost due to greater length Impacts to wildlife Impacts to area farms Increased diversionary construction required and subsequent traffic congestion resulting from access supplied to PPG Industries Increased length will discourage use of new route, so congestion will not be relieved Division of area farms Impacts to two creeks More southerly route would have more favorable tax base that would attract more businesses
Middle	Closest to the preferred 1994 Thoroughfare Plan alignment, which was agreed to by the town and citizens Other routes are too close to Shelby	• Impacts to Williams Creek Subdivision and surrounding areas, including Shagreen Lake; concerns included watershed and wildlife impacts at lake, noise and aesthetic impacts to subdivision, and unfairness of impacting homes contributing substantially to county tax base

Table 6-3

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING THE PRELIMINARY CORRIDOR EVALUATION PHASE (1) (continued)

	REASONS GIVEN BY	RESPONDENT(S) (3)
ALTERNATIVE (2)	For	Against
Inner	• None	• Impacts to residential develop- ment, especially Chagrin Farms Subdivision
Upgrade	 Continued prosperity of existing business district Lower cost than new location alternative, even with business relocation costs New location alternative is unnecessary, since major growth is not expected for Shelby 	Destruction of residential areas Inability of Upgrade to solve Shelby traffic problems
Segment M-O-S	 Avoidance of impacts to Rucker Downs Subdivision (unlike Segment M-P-S) Avoidance of impacts to existing businesses along US 74 (unlike Segment M-P-S) Avoidance of impacts to the proposed site of Cleveland Vocational Industries, Inc. (unlike Segment M-P-S) 	Would not diverge from existing US 74 to the west of Buffalo Creek
Segment M-P-S	New location bypass should diverge from existing US 74 to the west of Buffalo Creek	 Impacts to Rucker Downs Subdivision Impacts to existing businesses along US 74 Impacts to the proposed site of Cleveland Vocational Industries, Inc.
Node M	• None	 Impacts to residential development along NC 150 and NC 180 Impacts to wildlife

Table 6-3

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING THE PRELIMINARY CORRIDOR EVALUATION PHASE (1) (continued)

	REASONS GIVEN BY	RESPONDENT(S) (3)
ALTERNATIVE (2)	For	Against
Bypass to the South of Shelby	 Maintains Shelby's industrial corridor Provides east-west traffic movement needed for project while causing less overall impact Loss of family property with northern bypass alternatives 	• None
Miscellaneous Comments	 (i.e., none of the proposed routed proposed routes would also resource and residential impacts. Segment J-L would potentially in The route should extend east of M The western bypass terminus should conflicts with Boiling Springs transfer. 	npact Carriage Run Subdivision. Moss Lake. ould be further to the west to avoid

- (1) Derived from written comments and questionnaires received through September 20, 1995.
- (2) Alternative designations as used at the September 22, 1995 Steering Committee Meeting; the Northern Alternative for detailed evaluation is different from the preliminary corridor Northern Alternative indicated in this table. See Exhibit 2-6 to identify these alternatives using the indicated node letters.
- (3) Reasons given for or against various alternatives were perceptions quoted from respondents, not verified facts; these comments are not necessarily all correct or accurate, and some may be contradictory.

Table 6-4

RESULTS OF PUBLIC OPINION QUESTIONNAIRES

			NUMBER OF RESPONDENTS	PONDENTS		
	Not	Mildly	Very	No	Total	Weighted
Topic	Important/No	Important	Important/Yes	Response	Responding	Response *
Need for Improvements						
Is there a need for improvements?	2		37	10	39	N/A
Improve Safety	0	7	32	6	39	9.10
Increase Traffic Capacity	1	13	26	8	040	8.13
Improve Traffic Flow	1	10	31	9	42	8.57
Provide 4-Lane Freeway Linking Cities	5	12	23	8	40	7.25
Corridor Evaluation Factors - Engineering	ring					
Travel Time		25	13	5	43	5.93
Traffic Capacity	4	13	30	5	44	8.30
Traffic Safety	0	8	35	5	43	9.07
Construction Costs	9	17	20	5	43	6.63
Corridor Evaluation Factors - Environmental						
	5	14	20	6	39	6.92
Noise	1	12	28	7	41	8.29
Protected Plant and Animal Species	10	11	20	7	41	6.22
Floodplains	11	8	22	7	14	6.34
Water Resources	4	4	33	7	41	8.54
Wetlands	10	10	22	6	42	6.43
Farmlands	6	17	16	9	42	5.83
Corridor Evaluation Factors - Social						
Neighborhoods	1	5	32	10	38	90.6
Community Facilities	5	25	10	8	40	5.63
Recreational Areas	4	25	13	7	42	6.07
Relocations - Residences	4	9	35	3	45	8.44
Relocations - Businesses	4	22	15	7	14	6.34
	12	20	8	8	40	4.50
Elderly, Handicapped, Minorities, etc.	9	20	15	7	41	6.10
Architectural/Archaeological Resources		22	15	7	41	6.34
Corridor Evaluation Factors - Economic						
Development Opportunities	8	11	21	8	40	6.63
Employment Opportunities	7	21	13	7	14	5.73
Established Business Districts	6	16	15	8	40	5.75
Highway-Related Businesses	14	19	6	7	42	4.40

^{*} Weighted response is the average of all "Not Important", "Mildly Important", and "Very Important" responses; values can range from 0 to 10. "Not Important" responses were each counted as a value of 5, and "Very Important" responses were each counted as a value of 10. The higher the weighted response, the greater the importance attached to that issue by area respondents. "No Response" answers were not counted in the weighted response.

Note: Total number of respondents varies due to the fact that on some questions, one or more respondents checked multiple answers. Total number of questionnaires was 48.