

## **2 ALTERNATIVES**

### **2.1 INTRODUCTION**

Alternative development for this SDEIS incorporated existing information from previous studies along with updated information obtained through agency scoping, public officials meetings, and public involvement meetings. Figure 2.1-1 illustrates a simplified flow chart of the processes followed.

### **2.2 ALTERNATIVES DEVELOPMENT**

The Notice of Intent for preparation of this SDEIS (Appendix F), published in April 2004, stated that the entire length of the project would be reassessed due to the amount of time that had passed since the ROD was signed in 1994. The reassessment of the project area began with a meeting with Army National Guard officials regarding Camp Robinson's current and future plans. As a result of this and subsequent meetings, the officials updated their preferred alignment through Camp Robinson related to land use changes and future development plans. The original agreement with these officials included a realignment of a section of Batesville Pike that would locate its interchange with the proposed facility outside the Camp's boundary. It was decided this proposal will remain part of the current project after discussions with Army National Guard officials. A corridor was developed for the alignment through Camp Robinson and added to an area east of Camp Robinson to create the project area for the SDEIS (Figure 2.2-1). An Agency and Public Officials Scoping meeting was held in March 2005 to obtain information about current issues and constraints in the proposed project study area.

Preliminary alignment alternatives were developed in the project area based upon information from previous environmental documents, existing highways, facilities, landforms, and other known constraints (Figure 2.2-2). The option for construction of either a grade separation or an interchange was included for the alignment alternatives that crossed Oneida Street in response to public and community comments. The preliminary alignment alternatives were presented for public comment in November 2005. Revisions to the alignment alternatives presented at the public involvement meetings were made after analyses of public comments

and preliminary constraints (Figure 2.2-3). A public officials meeting was held on January 12, 2006 to discuss the revised alignment alternatives.

### **2.3 ALTERNATIVES CONSIDERED AND NOT ADVANCED**

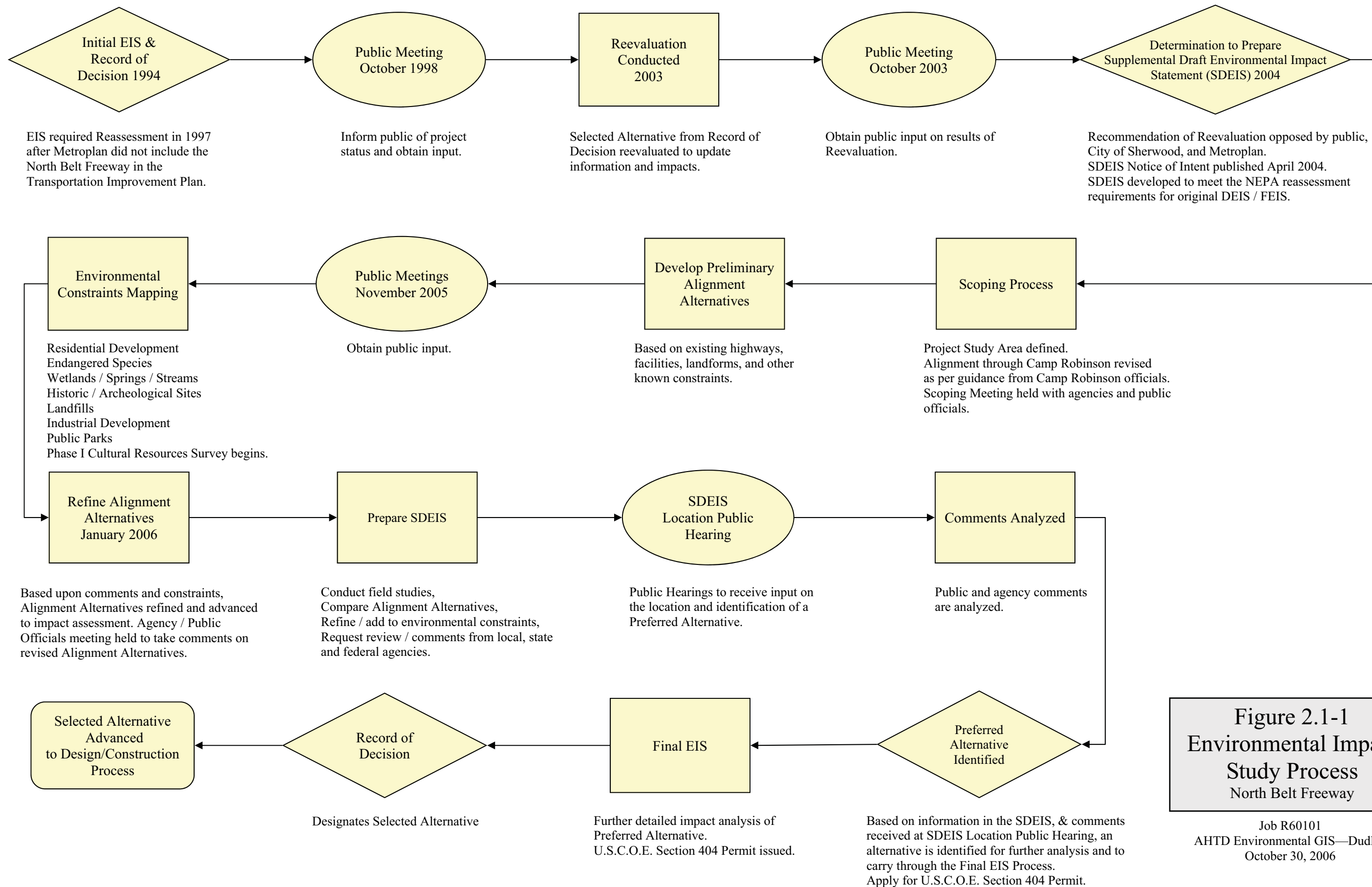
The previous DEIS and FEIS analyzed and eventually discarded several alternatives for the North Belt Freeway project including: Transportation System Management, Mass Transit, and Road Reconstruction. From these studies, it was determined that a new location alignment alternative was the only viable alternative to meet the purpose and need of the project. Current land use development within and adjacent to the study area has not altered this determination. The No-Action Alternative was retained throughout the study as a basis of comparing the relative benefits and impacts of the alternatives.

#### **2.3.1 Camp Robinson Alignment**

At the initial meeting with Army National Guard officials in March 2004, they proposed a new alignment through Camp Robinson for the AHTD's evaluation. The proposed alignment crossed Camp Robinson north of the cantonment and continued down the west border of the Camp. A preliminary evaluation of the new alignment was conducted, and it was found to be more costly than the existing alignment and would attract less traffic. For these and other reasons, this new alignment alternative was not found to meet the purpose and need for the proposed project. Army National Guard officials were informed of the AHTD's intentions to drop the new alignment from consideration at a meeting in February 2005. At that time, they reaffirmed their commitment to allow the AHTD to utilize the original alignment with slight modifications. These modifications were incorporated into the freeway's alignment shown in this SDEIS.

#### **2.3.2 Segments Modified or Eliminated**

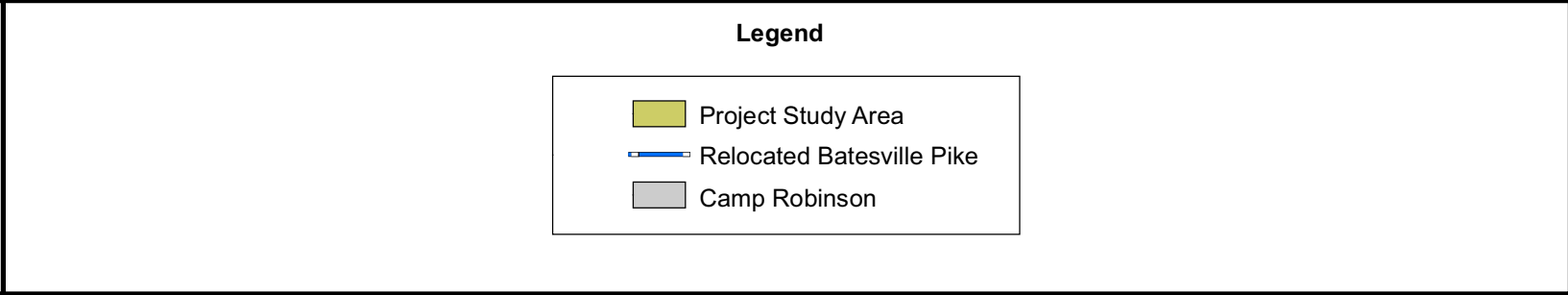
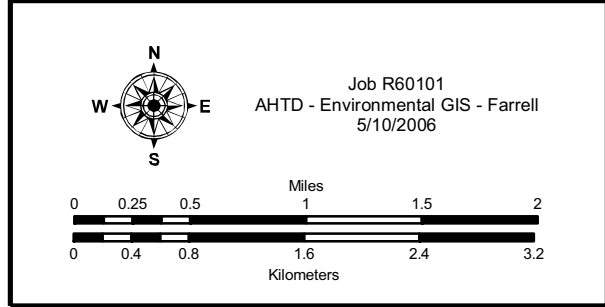
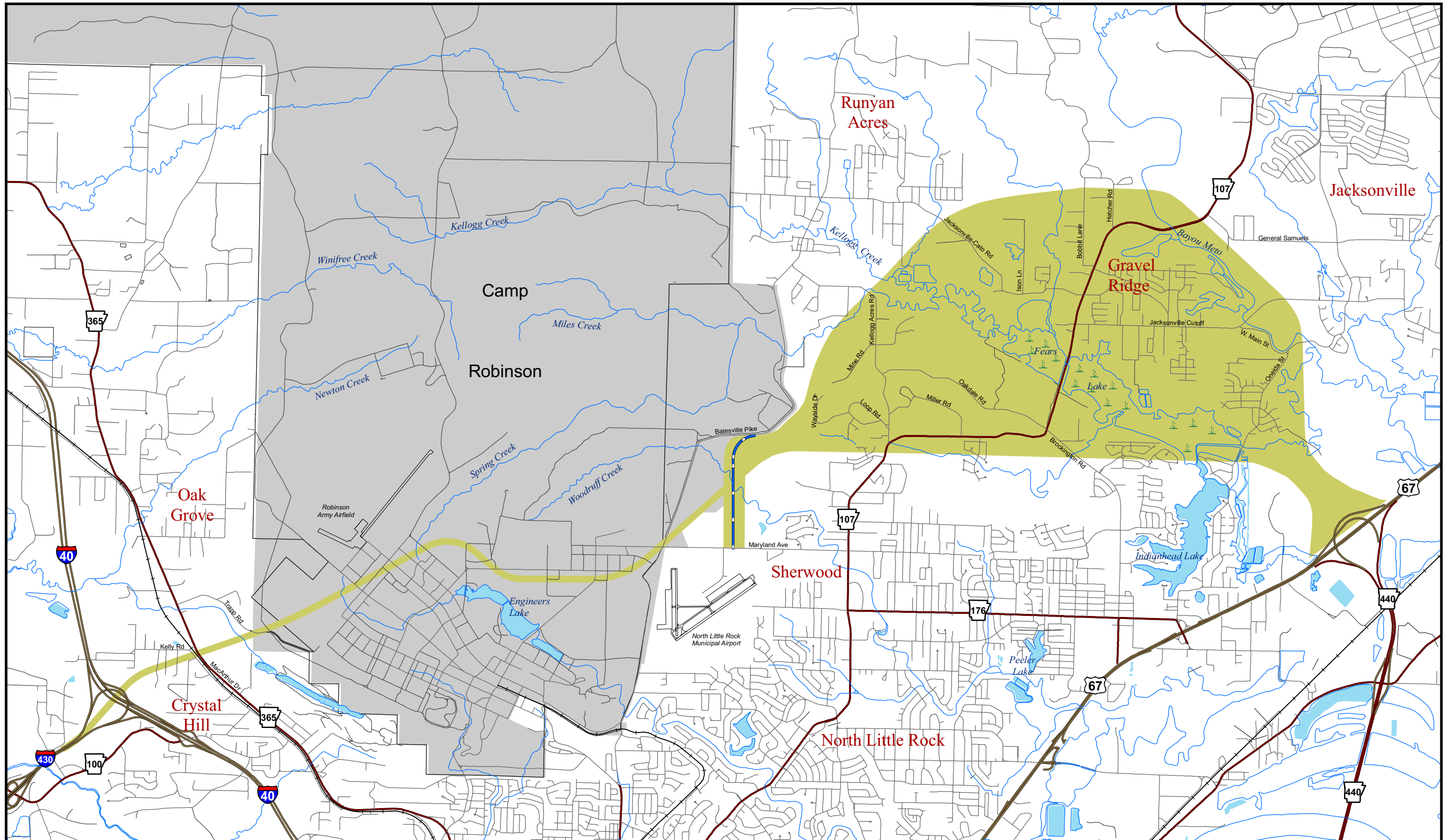
From the preliminary alignment alternatives presented at the public involvement meetings (Figure 2.2-2), several were either modified or eliminated. Segment 11 was eliminated due to the low level of public support and because the Highway 107 Interchange location would be in a developed area resulting in multiple business relocations. Segment 12 was shifted



**Figure 2.1-1  
 Environmental Impact  
 Study Process  
 North Belt Freeway**

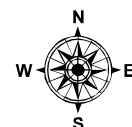
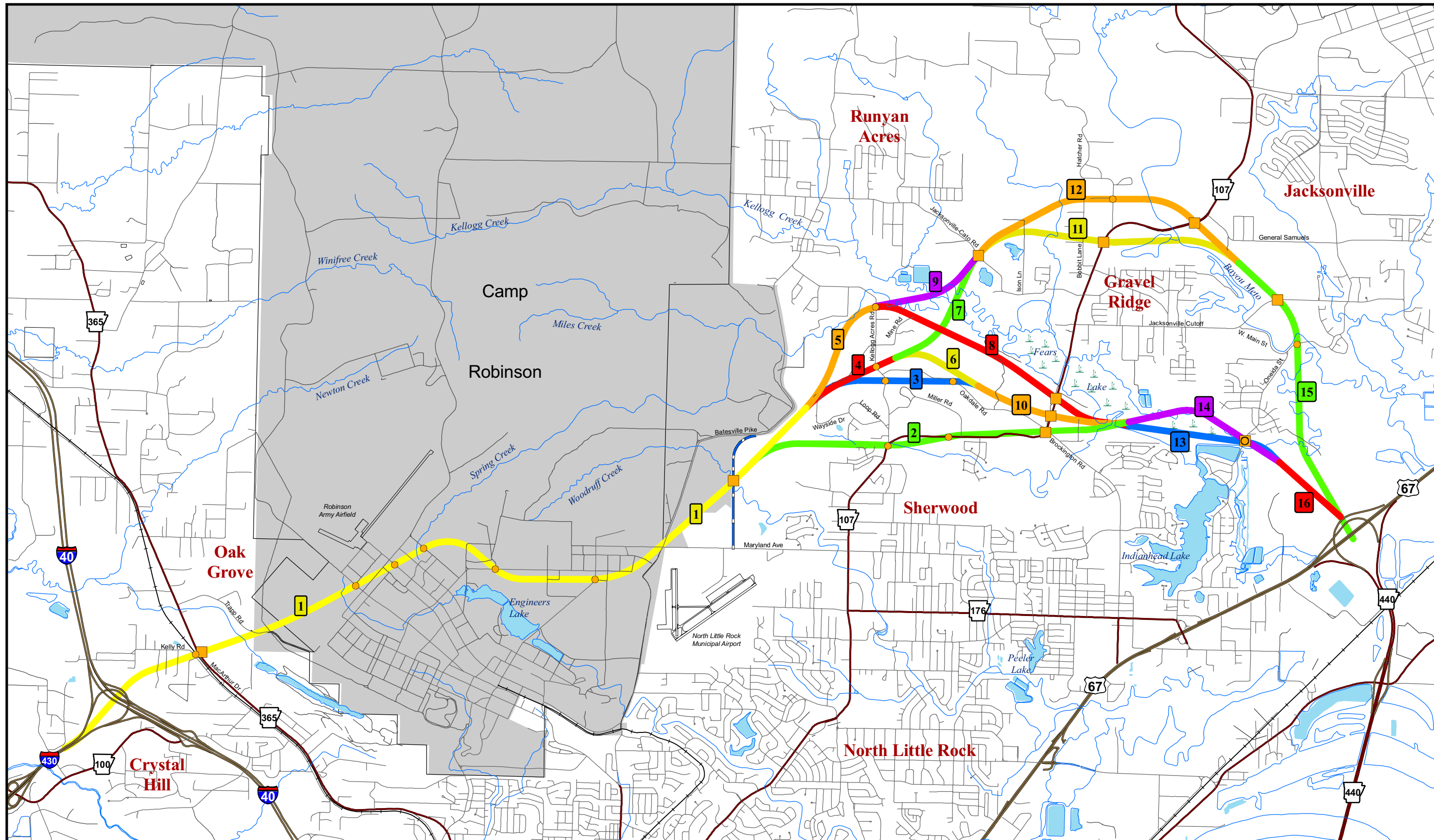
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 AHTD Environmental GIS—Dudley  
 October 30, 2006

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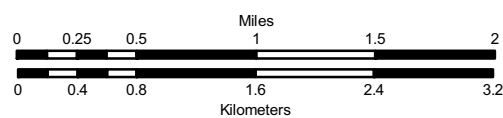


**Figure 2.2-1**  
**Project Area**  
North Belt Freeway

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**Legend**

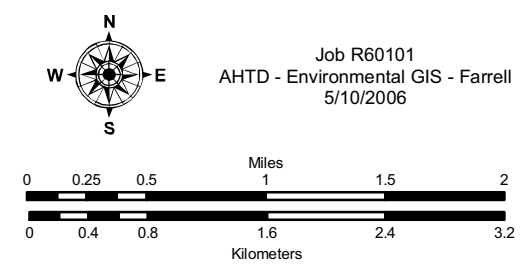
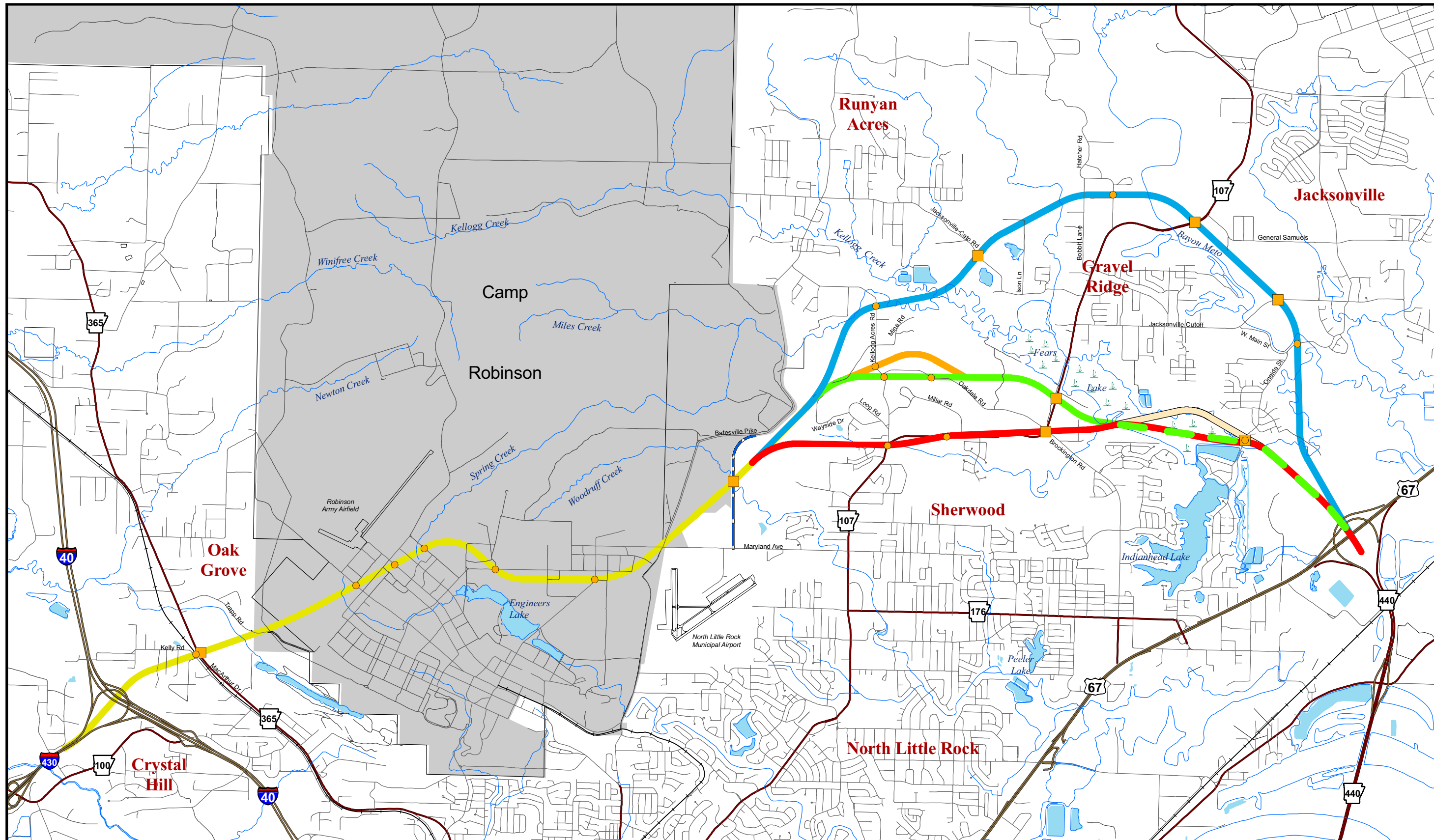
- |                                 |   |
|---------------------------------|---|
| Alignment Alternative Segments* | Interchange or Grade Separation (...to be determined) |
| Interchange                     | Relocated Batesville Pike                             |
| Grade Separation                | Camp Robinson   |

\*Colored Lines Represent a 300 ft. Wide Corridor

**Figure 2.2-2**  
**Preliminary Alignment Alternatives**  
 North Belt Freeway

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**Legend\***

	Common Alignment		Interchange
	Alignment Alternative A		Grade Separation
	Alignment Alternative B		Interchange or Grade Separation (...to be determined)
	Alignment Alternative C		Relocated Batesville Pike
	Segment a		Camp Robinson
	Segment b		

\*Colored Lines Represent a 300 ft. Wide Corridor

**Figure 2.2-3**  
**Revised Alignment Alternatives**  
North Belt Freeway

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slightly to the north in order to reduce the number of relocations. Segment 7 was eliminated and Segment 8 was shortened and modified in order to reduce residential and mining area impacts.

The nature of the mining area as an engineering, environmental, and historical constraint is discussed more fully in sections 3.2.1.1 and 3.7.1 and Appendix L. Segment 10 was eliminated due to its reduced utility as a result of the modification of Segment 8. These changes resulted in the revised alignment alternatives that were carried forward for analysis in the SDEIS (Figure 2.2-3).

#### **2.4 THE NO-ACTION ALTERNATIVE**

Included in the study process for the proposed project is the No-Action Alternative. The No-Action Alternative consists of no improvements to the present system and no expenditures other than regular maintenance of the existing streets. As a result, the LOS and safety issues identified in the Purpose and Need Section would remain and deteriorate to the point at which nearly the entire system in Northern Pulaski County would provide poor service to the traveling public. Delays along the highways would be more severe than exist currently and the number of crashes would be expected to increase.

There are costs involved with the No-Action Alternative and they include the following:

- Maintenance of the roadway system – conducting maintenance on highways at or near capacity is difficult and costly;
- Increased vehicle operating costs on substandard, inadequate facilities;
- The monetary value of time lost due to congestion;
- The intangible costs associated with the inconvenience and annoyance provoked by the above deficiencies;
- Increased travel time for emergency services;
- Costs associated with an increase in the number of crashes;

- Improved access to business centers would not be realized, outlying rural and suburban communities would be difficult to reach, accessibility to job centers for commuters would not improve, and potential industries may not consider the study area as a possible site without an improved transportation facility to transport raw materials and finished products.

In all but no-growth scenarios, No-Action is a deferral of difficult choices. Northern Pulaski County is experiencing significant growth with diminishing options for improvement of the east-west travel in the region and access to the local Interstates. Growth will eventually cause congestion to be so problematic and intolerable that action will not be avoidable or growth will slow. When that time comes, right of way acquisition will be more difficult and costly because of increased development in the corridor and the overall increase in property values as development continues to occur in northern Pulaski County. The result will be an increase in cost to the community, state, and nation in social, economic and environmental values.

Although the No-Action Alternative avoids the impacts that could be caused by the proposed construction, the identified need for an east-west, four-lane, controlled access facility to serve the area remains valid. Selection of the No-Action Alternative would avoid the major state and federal expenditures and initial impacts to the social, economic, natural and cultural environment, including residential displacements, which could ensue from the selection of a construction alternative. However, the costs associated with the No-Action Alternative, along with the adverse impacts related to traffic congestion such as air pollution, noise, and decreased vehicular and pedestrian safety, could create an undesirable environment that could have more long-term adverse impacts than the anticipated construction impacts. Additional impacts that would result from the selection of the No-Action Alternative can be found in the Affected Environment & Environmental Consequences Section of this SDEIS.

The concept of No-Action remains a viable alternative until the decision-making process has been completed. Each alternative developed and advanced through the EIS process will be compared to the No-Action Alternative.

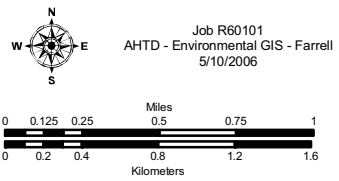
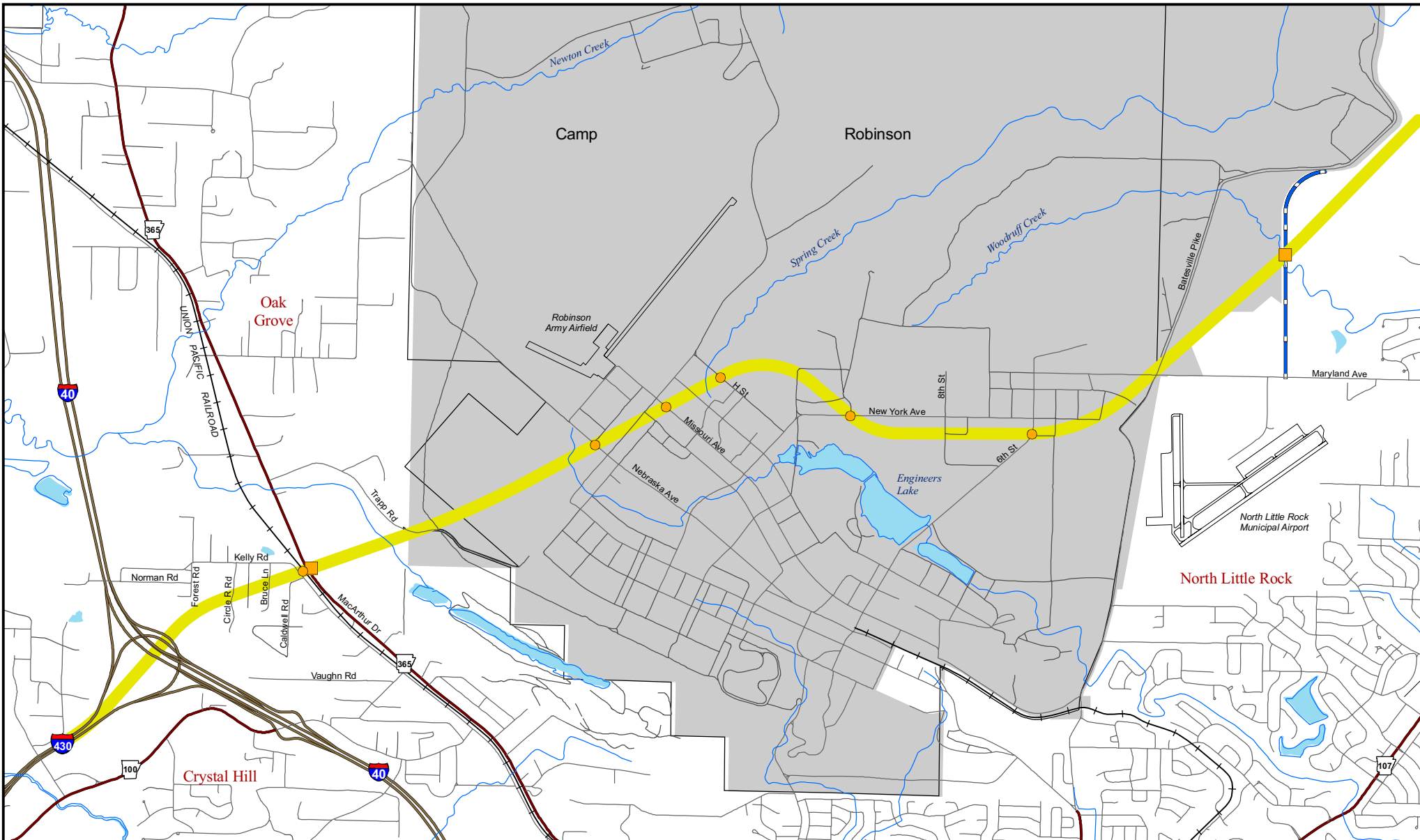
**2.5 NEW LOCATION ALTERNATIVES**

The portion of the route from Interstate 40/430 Interchange through Batesville Pike will be referred to as the “Common Alignment” throughout the SDEIS. From the western end of the proposed project at Interstate 40, all new location alignments share a common alignment to the northeast through the Crystal Hill community to an interchange at Highway 365 (Figure 2.5-1). From there, the proposed facility continues to the northeast into Camp Robinson, passing to the southeast of the Camp Robinson National Guard Airport. Briefly turning to the southeast then east, the route passes to the north of Engineers Lake before turning to the northeast again to cross Batesville Pike just to the north of Maryland Avenue and the North Little Rock Municipal Airport. Part of the Common Alignment includes relocating a portion of Batesville Pike outside of the Camp, as shown in Figure 2.5-1 and discussed in Section 2-2. From the Batesville Pike Interchange, the alignments take separate routes and will be discussed individually as alignment alternatives. Table 2.5-1 lists general information about the Common Alignment, such as length and locations of interchanges and grade separations.

<b>Table 2.5-1 Common Alignment Information, Proposed Interchange and Grade Separation Locations</b>		
<b>General Information</b>	<b>Proposed Interchange Locations</b>	<b>Proposed Grade Separations (Overpasses)</b>
6.9 miles (11.1 kilometers) 3 Interchanges 6 Grade Separations	Interstate 40 Highway 365 Batesville Pike	Union Pacific Railroad Nebraska Avenue Missouri Avenue H Street New York Avenue 6 <sup>th</sup> Street

**2.5.1 Alignment Alternatives A and Ab**

Alignment Alternative A was developed to mirror the Selected Alternative from the original FEIS while avoiding the most recent residential developments, such as the Miller’s Crossing



**Legend**

- Common Alignment\*
- Interchange
- Grade Separation
- Relocated Batesville Pike
- Camp Robinson

\*Colored Lines Represent a 300 ft. Wide Corridor

**Figure 2.5-1**  
**Common Alignment**  
**North Belt Freeway**

subdivision. As shown on Figure 2.5-2, Alignment Alternative A continues to the northeast from the Batesville Pike Interchange to avoid Sherwood’s sports complex. The route then continues east, passing just north of the Sylvan Hills Junior/Senior High School complex and through the subdivisions of Hidden Creek, Windridge and Amber Oaks. Alignment Alternative A crosses to the south of Highway 107, then crosses to the north of Highway 107 and Miller’s Crossing subdivision, before interchanging with Highway 107 and traversing Fears Lake. It then crosses Oneida Street on the south side of the Northlake Estates subdivision and travels southeast to the Highway 67 Interchange. Evaluations were conducted for both a grade separation and an interchange at the Oneida Street crossing. Alignment Alternative Ab would utilize Segment “b” taking a route just to the north of Fears Lake.

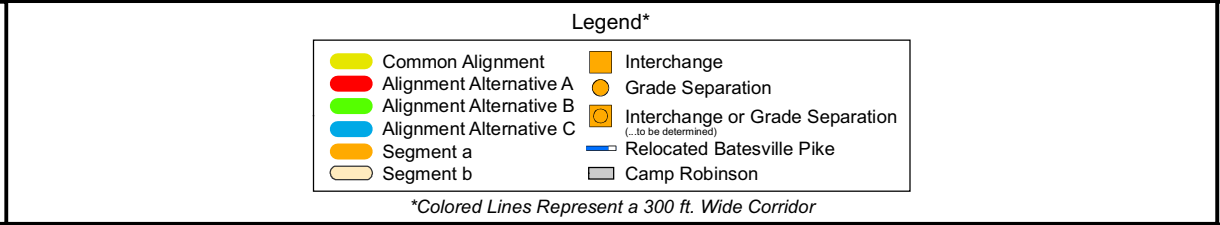
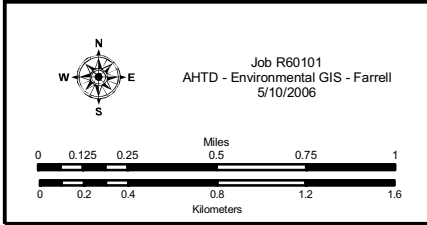
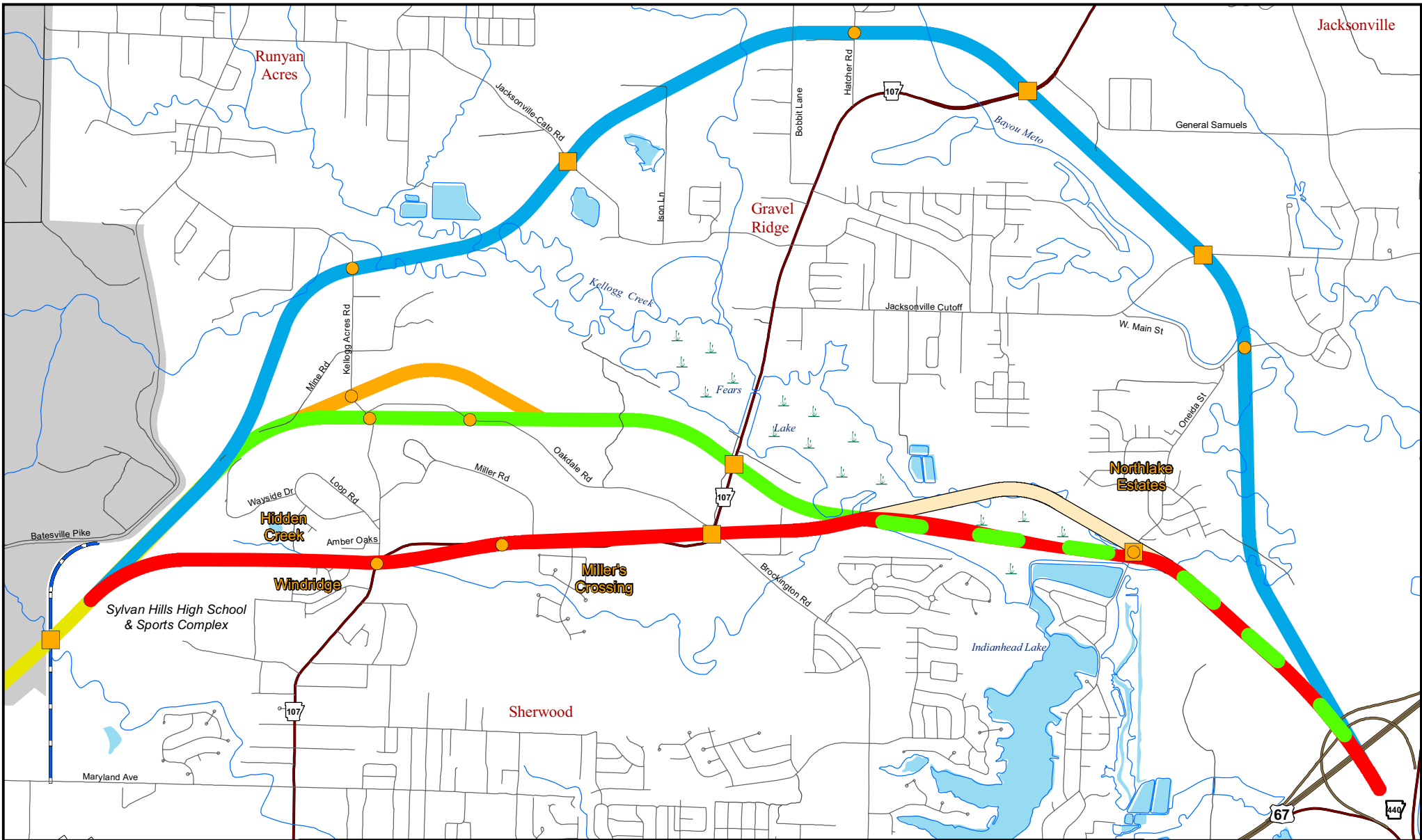
Table 2.5-2 lists general information about the Alignment Alternatives A and Ab, such as length and locations of interchanges and grade separations.

<p align="center"><b>Table 2.5-2</b>  <b>Alignment Alternative A and Ab Information,</b>  <b>Proposed Interchange and Grade Separation Locations</b></p>		
<p align="center"><b>General Information</b></p>	<p align="center"><b>Proposed Interchange Locations</b></p>	<p align="center"><b>Proposed Grade Separations (Overpasses)</b></p>
<p>A: 5.3 miles (8.5 kilometers)                      Ab: 5.4 miles (8.7 kilometers)                      2-3 Interchanges*                      2-3 Grade Separations*</p>	<p>Highway 107                      Oneida Street*                      Highway 67</p>	<p>Highway 107 -2                      Oneida Street*</p>

\*Evaluations both for an interchange and a grade separation will be conducted for the crossing at Oneida Street.

**2.5.2 Alignment Alternatives B, Ba, Bb, and Bab**

From the Batesville Pike Interchange, Alignment Alternative B turns further to the northeast than Alignment Alternative A as it passes to the west of Wayside Drive and turns east crossing Kellogg Acres Road just to the south of the intersection with Oakdale Road. Alignment Alternative B continues east crossing Oakdale Road and interchanges with Highway 107 before heading to the southeast where it joins Alignment Alternative A



**Figure 2.5-2**  
**Alignment Alternatives**  
North Belt Freeway



and follows the same alignment to the Highway 67 Interchange. Evaluations were conducted for both a grade separation and an interchange at the Oneida Street crossing. Segment “a” provides a route crossing Kellogg Acres Road just to the north of its intersection with Oakdale Road and continues on the north side of Oakdale Road. Segment “b” provides an alternate route that goes along the north side of Fears Lake. With these two segments, there are four possible B Alignment Alternatives (B, Ba, Bb, and Bab). Table 2.5-3 lists general information about Alignment Alternatives B, Ba, Bb, and Bab, such as length and locations of interchanges and grade separations.

<b>Table 2.5-3                      Alignment Alternatives B, Ba, Bb, and Bab Information,                      Proposed Interchange and Grade Separation Locations</b>		
<b>General Information</b>	<b>Proposed Interchange                      Locations</b>	<b>Proposed Grade                      Separations (Overpasses)</b>
B: 5.7 miles (9.2 kilometers) Ba: 5.8 miles (9.3 kilometers) Bb: 5.7 miles (9.2 kilometers) Bab: 5.8 miles (9.3 kilometers) 2-3 Interchanges* 2-3 Grade Separations*	Highway 107 Oneida Street* Highway 67	Kellogg Acres Road Oakdale Road Oneida Street*

\*Evaluations both for an interchange and a grade separation will be conducted for the crossing at Oneida Street

**2.5.3 Alignment Alternative C**

Alignment Alternative C is the northernmost of the alignments under consideration. From the Batesville Pike Interchange it follows the same path as Alignment Alternative B northward for approximately 1.5 miles (2.4 kilometers). From there it continues to the northeast, crossing Kellogg Acres Road, Kellogg Creek, and interchanging with Jacksonville-Cato Road before heading more easterly to another interchange at Highway 107 between Bayou Meto and General Samuels Road on the north side of Gravel Ridge. Alignment Alternative C then continues to the east and southeast traveling around the northeast side of Gravel Ridge until it reaches the next proposed interchange at Jacksonville Cutoff. From Jacksonville Cutoff the alignment alternative travels southeast across Bayou Meto and West

Main Street to the Highway 67 Interchange. Table 2.5-4 lists general information about Alignment Alternative C, such as length and locations of interchanges and grade separations.

<b>Table 2.5-4                      Alignment Alternative C Information,                      Proposed Interchange and Grade Separation Locations</b>		
<b>General Information</b>	<b>Proposed Interchange                      Locations</b>	<b>Proposed Grade                      Separations (Overpasses)</b>
7.9 miles (12.7 kilometers) 4 Interchanges 3 Grade Separations	Jacksonville-Cato Road Highway 107 Jacksonville Cutoff Highway 67	Kellogg Acres Road Hatcher Road West Main Street

**2.6 ALTERNATIVE COMPARISONS**

**2.6.1 Traffic and Safety Comparisons**

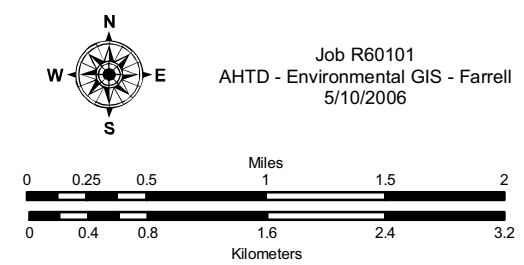
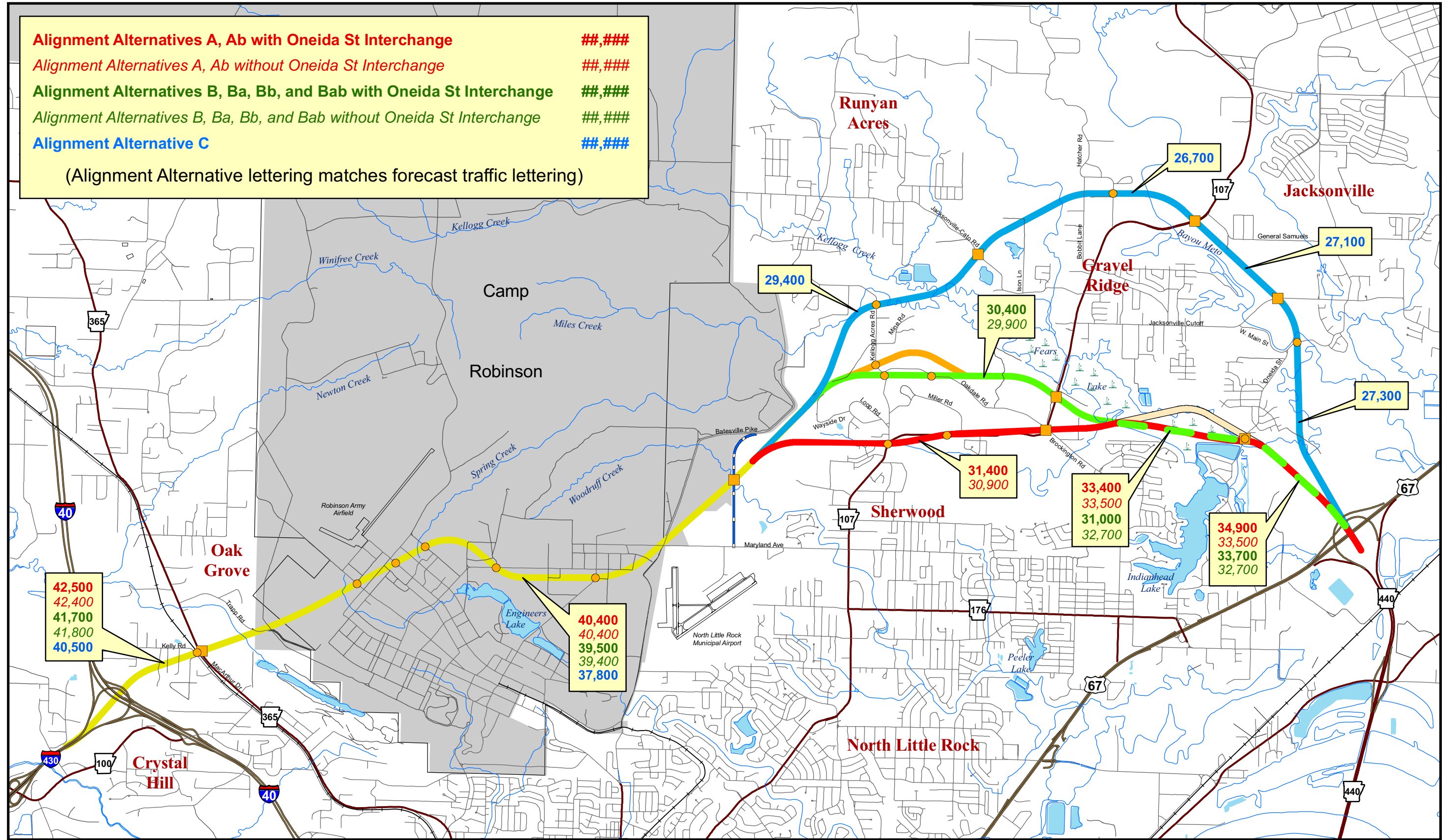
The forecast Year 2030 traffic volumes for the various alignment alternatives are illustrated in Figure 2.6-1 and listed in Table 2.6-1. These traffic forecasts were developed in conjunction with the CARTS regional traffic forecast model. Note that Alignment Alternative Segments “a” and “b” are assumed to have no detectable affect on traffic forecasts.

Traffic forecasts by highway link vary from a high of 42,500 vpd between Interstate 40 and Highway 365 on the west end of Alignment Alternatives A and Ab with an interchange at Oneida Street to 26,700 between Jacksonville-Cato Road and Highway 107 on Alignment Alternative C. Although those two volumes differ by 59%, this does not reflect the forecast traffic differences between parallel sections of different alignment alternatives.

For instance, on the same section of highway link that Alignment Alternatives A and Ab have the highest forecast traffic, Alignment Alternative C is forecast to carry only 2,500 fewer vehicles per day. Review of the weighted average daily traffic for each alignment alternative at the bottom of Table 2.6-1 indicates that the forecasts decrease as the alignment alternatives move farther to the north. This decrease as alignment alternatives are moved northward is

**Alignment Alternatives A, Ab with Oneida St Interchange**      **##,###**  
*Alignment Alternatives A, Ab without Oneida St Interchange*      **##,###**  
**Alignment Alternatives B, Ba, Bb, and Bab with Oneida St Interchange**      **##,###**  
*Alignment Alternatives B, Ba, Bb, and Bab without Oneida St Interchange*      **##,###**  
**Alignment Alternative C**      **##,###**

(Alignment Alternative lettering matches forecast traffic lettering)



**Legend\***

	Common Alignment		Interchange
	Alignment Alternative A		Grade Separation
	Alignment Alternative B		Interchange or Grade Separation (...to be determined)
	Alignment Alternative C		Relocated Batesville Pike
	Segment a		Camp Robinson
	Segment b		

\*Colored Lines Represent a 300 ft. Wide Corridor

**Figure 2.6-1**  
**Forecast 2030 Average Daily Traffic**  
North Belt Freeway

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expected, but modest, with the weighted average daily traffic varying by 4,579 from the southernmost to the northern most alignment alternative.

	Alignment Alternatives				
	A, Ab		B, Ba, Bb, Bab		C
	With OSI*	Without OSI*	With OSI*	Without OSI*	No OSI*
Interstate 40 - Hwy. 365	42,500	42,400	41,700	41,800	40,500
Hwy. 365 - Batesville Pike	40,400	40,400	39,500	39,400	37,800
Batesville Pike - Jacksonville-Cato Road	-	-	-	-	29,400
Batesville Pike - Hwy. 107	31,400	30,900	30,400	29,900	-
Jacksonville- Road. - Hwy. 107	-	-	-	-	26,700
Hwy. 107 - Oneida Street	33,400	33,500	31,000	32,700	-
Hwy. 107 - Jacksonville Cutoff	-	-	-	-	27,100
Oneida Street - Hwy. 67	34,900	33,500	33,700	32,700	-
Jacksonville Cutoff - Hwy. 67	-	-	-	-	27,300
Weighted Average Daily Traffic	36,216	37,019	35,571	35,529	32,315
Difference from southernmost A, Ab	-	-125	-1,323	-1,365	-4,579

\* OSI= Oneida Street Interchange

Aside from alignment alternative location, the other factor potentially affecting forecast volumes an interchange at Oneida Street between Highway 107 and Highway 67. Alignment Alternative C is the only alignment alternative that does not cross this street. Table 2.6-1 indicates that the interchange would have very little effect on North Belt traffic west of Highway 107. East of Highway 107 the presence of an interchange on Oneida Street would attract an additional 1,000 to 1,700 vpd to the North Belt Freeway.

If an interchange is constructed on Oneida Street, the effect on Oneida Street itself is expected to be noticeable north of the proposed highway with an estimated 3,400 additional vehicles attracted into the Northlake subdivision to access the interchange (Table 2.6-2).

**Table 2.6-2**  
**North Belt Forecast 2030 Average Daily Traffic (ADT)**  
**Impacts on Other Roadways**

Roadway Section	No-Action ADT	Alignment Alternatives											
		A, Ab				B, Ba, Bb, Bab				C			
		With OSI*		Without OSI*		With OSI*		Without OSI*		With OSI*		Without OSI*	
		ADT	Difference from No-Action	ADT	Difference from No-Action	ADT	Difference from No-Action	ADT	Difference from No-Action	ADT	Difference from No-Action	ADT	Difference from No-Action
Brookington Dr.: north of Hwy. 176 (Kiehl Ave.)	27,700	-3,700	23,900	-3,800	23,700	-4,000	22,600	-5,100	21,300	-6,400			
Hwy. 107: at Kellogg Creek	32,600	4,200	37,900	5,300	38,800	6,200	39,000	6,400	17,900	-14,700			
Hwy. 365: east of Crystal Hill Rd.	18,600	-4,000	14,800	-3,800	15,100	-3,500	14,600	-4,000	15,300	-3,300			
Hwy. 67: south of Redmond Rd.	103,500	1,400	105,800	2,300	104,400	900	105,000	1,500	94,100	-9,400			
Hwy. 67: south of Hwy. 440	71,900	-4,300	64,300	-7,600	68,400	-3,500	65,800	-6,100	74,600	2,700			
Hwy. 67: south of McCain Blvd.	90,600	-6,500	83,800	-6,800	84,300	-6,300	84,000	-6,600	86,100	-4,500			
Hwy. 67: N. of I-40 and south of I-40 east ramps	82,200	-7,100	74,900	-7,300	75,100	-7,100	75,100	-7,100	76,600	-5,600			
I-40: east of Crystal Hill Interchange	90,100	-6,000	83,800	-6,300	83,600	-6,500	83,900	-6,200	83,700	-6,400			
I-40: east of I-30	139,700	-9,800	129,800	-9,900	130,100	-9,600	129,800	-9,900	131,000	-8,700			
Main St.: west of Redmond Rd.	17,700	-7,700	10,500	-7,200	10,000	-7,700	10,300	-7,400	13,000	-4,700			
Remount Rd.: north of Camp Robinson (Hwy. 176)	19,300	-5,500	14,000	-5,300	13,900	-5,400	14,000	-5,300	13,800	-5,500			
Oneida Street north of North Belt	3,500	3,400	3,300	-200	6,800	3,300	3,100	-400	4,400	900			
Oneida Street south of North Belt	3,500	200	3,300	-200	4,100	600	3,100	-400	4,400	900			

\* OSI = Oneida Street Interchange  
**Greatest decrease in forecast traffic for each location is in bold.**

Impacts to the south of the North Belt Freeway are expected to be minor as the interchange diverts some existing cut-through traffic and only local neighborhood traffic is attracted to the north due to the slow and winding route through Indianhead Lake Estates.

The distance between an interchange at Oneida Street and the freeway-to-freeway interchange at Highway 67/Highway 440 is an estimated 2,600 feet (792 meters) ramp-to-ramp. The *Highway Capacity Manual* provides procedures for estimating LOS for sections up to 2,500 feet in length where entering vehicles conflict with exiting vehicles. These sections are known as weaving sections. The *Highway Capacity Manual* acknowledges that weaving turbulence may exist in longer segments. With main lane volumes forecast to be operating at LOS B the distance is sufficient for the time being. However, long term at traffic grows beyond the current 20-year forecast there could be some congestion caused by weaving on the main lanes between these interchanges.

Forecast impacts of an interchange at Oneida Street were developed using the current CARTS Regional Traffic Forecast Model. This model does not include any possible future traffic that may be generated by the Legacy Center proposed by the Dupree family on land surrounding the North Belt Interchange with Highway 67/Highway 440. There has been some discussion of an access road between that proposed development and a North Belt interchange at Oneida Street. There are too many variables concerning that proposal to currently evaluate the impact on Oneida Street. The size, density and type of land use in addition to the prominence of other access points to the development would affect the traffic using the proposed Oneida Street Interchange. It is expected that impacts would still be the most significant to the north of the North Belt Freeway given the long and winding local street route through Indianhead Lake Estates that has a low speed limit, stop signs, and speed bumps.

The impact of the alignment alternatives shown in Table 2.6-2 indicates that each alignment alternative provides useful relief to traffic congestion and that there is no alignment alternative that makes a substantially larger difference than the others. Alignment Alternatives A and Ab create the greatest decrease in traffic in more areas than the other alignment alternatives, but the margin over the other alignment alternatives is small.

Although Alignment Alternative C has the smallest overall forecast traffic volume, it makes a significant impact on Highway 107 at Kellogg Creek and to Highway 67 south of Redmond road by diverting the Highway 107 traffic much farther to the north and by attracting some Jacksonville traffic westward to access the West Main Street/Jacksonville Cutoff Interchange.

In Section 1.4.4, a number of key arterial locations around the study corridor were forecast to have traffic operations reaching critical levels by the year 2030. Table 2.6-3 shows how the roadways that were forecast at LOS E or F in Table 1.4-4 are forecast to be impacted by the various alignment alternatives under study. All roadway segments forecast at LOS E or F in Table 1.4-4, but one, are expected to be improved by one level of service for all alignment alternatives. The one exception is Highway 67 south of Redmond Road. Alignment Alternative C is forecast to divert 9,400 vpd from this route, when the other alignment alternatives are forecast to actually add a minimal number of vehicles to this section.

Roadway Section	2030 No-Action LOS**	Alignment Alternatives Making Impact	2030 LOS with North Belt Freeway
Hwy. 365: east of Crystal Hill Road	E	ALL	D
Hwy. 67: south of Redmond Road	E*	C	D
Hwy. 67: north of Interstate 40 and south of Interstate 40 east ramps	F*	ALL	E
Interstate 40: east of Interstate 30	F	ALL	E
Main St.: west of Redmond Rd.	E	ALL	D
Remount Rd.: north of Camp Robinson Road (Hwy. 176)	E	ALL	D

\*Reflects widening planned or underway.

\*\*Reflects basic main lane freeway analysis. Weave, merge, and diverge levels of service may vary.

Comparison of forecast traffic on the North Belt Freeway alignment alternatives demonstrates that North Belt Freeway would have a beneficial impact on traffic operations in the northern part of Pulaski County, but no single alignment alternative stands out as having a more substantial impact than the others. Alignment Alternative C, alone, is forecast to make



a substantial impact on a critical roadway link that no other does by diverting traffic from Highway 67 south of Redmond Road. However, it is much longer and more expensive than the other alignment alternatives and would be much less of a freeway bypass, even for traffic traveling from Highway 67 to Interstate 430. This would especially be true for those avoiding incidents on Interstate 40 near Interstate 30 and traveling from Interstate 40 east to Interstate 40 west.

**2.6.2 Alignment Cost Comparisons**

Table 2.6-4 presents a comparison of the estimated costs for each alignment alternative. The total costs for the seven alignment alternatives range between \$266 million to \$340 million.

<p align="center"><b>Table 2.6-4</b>  <b>Alignment Alternative Cost Comparisons*</b>                      (in 2006 million \$)</p>							
Alignment Alternative	Length in miles (km)	Construction	Gross ROW	Utility	Relocation	Total Cost**	Total Cost** Common + Alignment
Common	6.9 (11.1)	127.2	6.9	0.5	0.7	135.3	-
A	5.3 (8.5)	122.3	12.1	0.4	0.8	135.6	270.9
Ab	5.4 (8.7)	116.6	12.8	0.4	0.8	130.6	265.9
B	5.7 (9.2)	136.7	8.9	0.2	0.6	146.2	281.5
Ba	5.8 (9.3)	136.5	8.8	0.2	0.2	145.7	281.0
Bb	5.7 (9.2)	130.6	9.6	0.2	0.6	141.0	276.3
Bab	5.8 (9.3)	130.6	9.5	0.2	0.2	140.5	275.8
C	7.9 (12.7)	191.9	11.9	0.5	0.8	205.1	340.4

\*Costs were estimated in 2006. Future development along the Alignment Alternatives could result in Right of Way costs escalating rapidly.

\*\*Costs include Oneida Street Interchange for Alignment Alternatives A, Ab, B, Ba, Bb, and Bab. Total costs for these Alignment Alternatives would be ~ \$4.7 million less for a grade separation only at Oneida Street.

## **2.7 THE PREFERRED ALTERNATIVE**

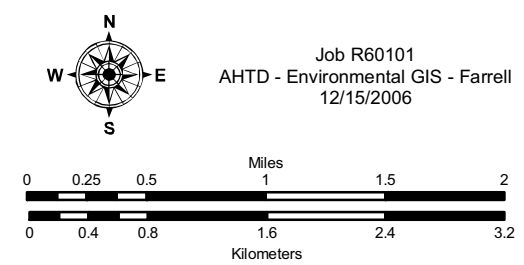
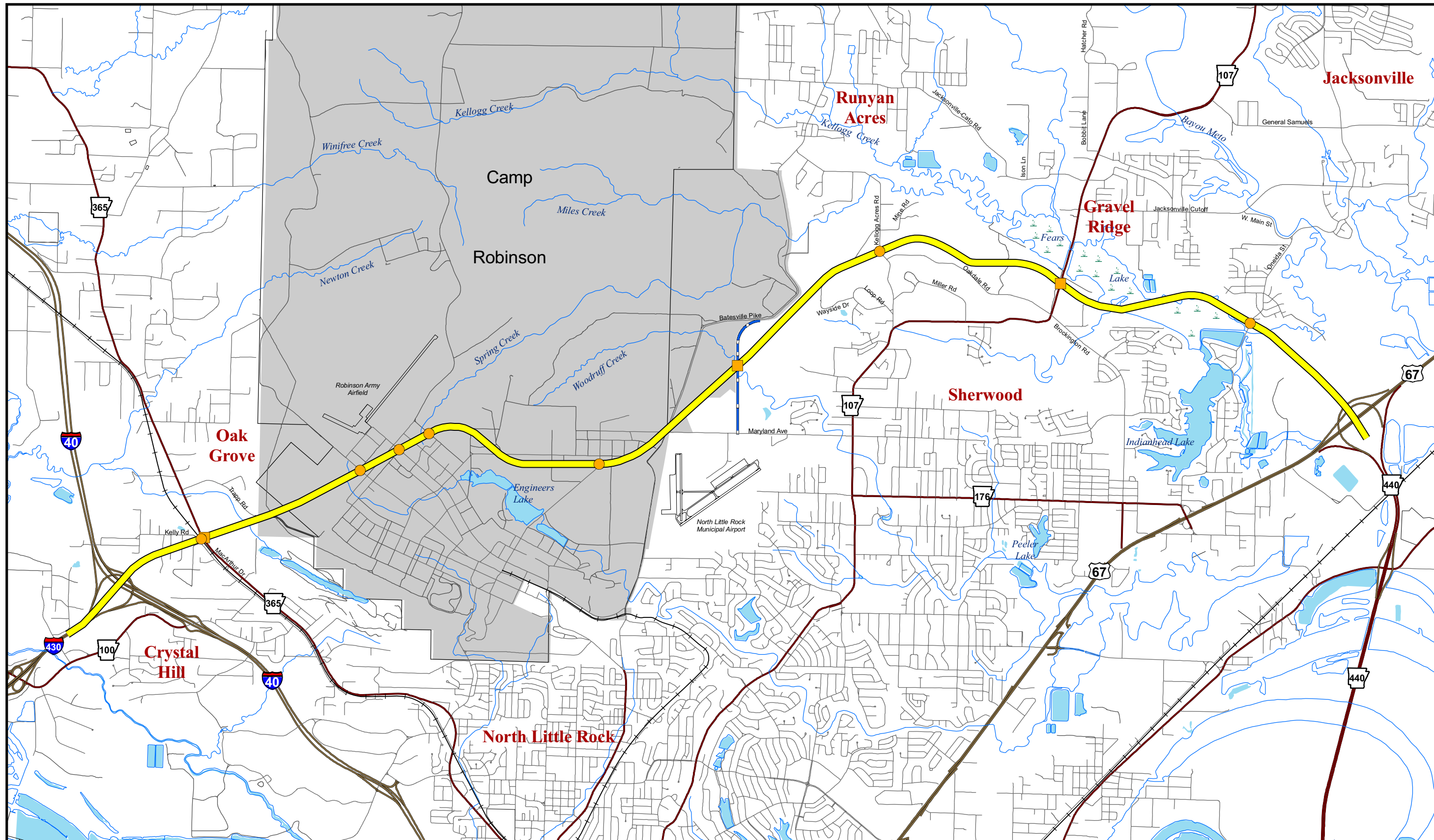
After a full evaluation of the information contained within this document, and as a result of participation by resource agencies, the local officials, the public, and the response gained through these avenues, sufficient information was available to identify a Preferred Alternative for the proposed facility.

The Interdisciplinary Staff, composed of representatives from various disciplines of AHTD and FHWA, reviewed the SDEIS. This staff met and considered the potential impacts, advantages, and disadvantages of the various alignment alternatives before coming to a recommendation. The impact information contained in Figures 3.21-1 and 3.21-2 of the Impact Summary Section, was utilized for the evaluation. The various alignment alternatives were compared and Alignment Alternative Bab was recommended for combination with the Common Alignment and designation as the Preferred Alternative. The Preferred Alternative is shown in Figure 2.7-1.

This Alternative:

- 5) Meets the project purpose and need;
- 6) Minimizes overall impacts;
- 7) Best balances the benefits expected from the project with the overall impacts; and
- 8) Provides good access to communities and other regional highway facilities.

The Preferred Alternative is 12.7 miles (20.4 km) in length, with five interchanges and eight grade separations proposed. An interchange is not proposed at Oneida Street in order to minimize residential relocations, wetland impacts, and impacts to the surrounding subdivisions. Additionally, interchange constructability issues exist due to the proximity of Kellogg Creek and Fears Lake, and spacing with the Highway 67 Interchange would not be optimal for traffic operations. The Preferred Alternative avoids recreation areas and the Kellogg Mine area, while minimizing relocations, wetland, and noise impacts to the maximum extent possible.



**Legend**

- Preferred Alternative
- Interchange
- Grade Separation
- Relocated Batesville Pike
- Camp Robinson

**Figure 2.7-1**  
**Preferred Alternative**  
North Belt Freeway

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The Preferred Alternative will undergo public, local official, and state and federal resource agency review during the public hearing(s) and comment period on the SDEIS. The comments will be assessed and, if necessary, the Preferred Alternative may be modified either through the choice of a different alignment alternative or through shifts or changes to the Preferred Alternative. After a complete evaluation of the comments received, an alternative will be chosen for documentation in the FEIS. The FEIS documentation will contain responses to the comments received on the SDEIS, and address comments and changes related to the Preferred Alternative.

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