

**REGIONAL SUBCOMMITTEE 4  
DESIGN SECTIONS 6, 7, & 8  
MEETING #3 REPORT**

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**KNOXVILLE  
PARKWAY  
CONTEXT SENSITIVE  
SOLUTIONS**

**REGIONAL SUBCOMMITTEE 4**



**December 14, 2005**

**National Transportation Research Center  
Knoxville, TN**

# **Knoxville Parkway, Context Sensitive Solutions**

## **Subcommittee 4, Meeting #3**

### **INTRODUCTION**

The third Regional Subcommittee meeting for Regional Section 4 was held on December 14, 2005, at the National Transportation Research Center in Knoxville, Tennessee. David Lindeman, with Palmer Engineering, led the meeting.

Introduction by David Lindeman. Review of what has happened since the last meeting along with an explanation of the decision matrix and the process for recommending alternatives to the Resource Team.

### **DESIGN SECTION 6**

Alternative 6A has a diamond interchange at Clinton Highway. The elevation of Clinton Highway requires the southbound on-ramp and northbound off-ramp to be steep and long. This adds to the earthwork and expense of this alternative. This alternative also realigns a portion of Clinton Highway under the Parkway crossing.

Alternative 6E uses an access road to shift the interchange east of US 25W. This allows the Parkway grade to be flattened and raised to reduce earthwork. Some vertical realignment of Clinton Highway is required at the access road to improve sight distance.

Alternative 6E2 shifts the access road up to the existing US 25W intersection with Mehaffey. This moves the access road intersection out of a curve on US 25W that has limited sight distance.

Alternative 6E2Mod shifts the interchange further east to a relocated Strader Road that is used to connect to US 25W. This allows the Parkway grade to be flattened and raised more to further reduce earthwork. This alternative replaces a series of short curves on Clinton Highway with a single larger-radius curve with a uniform grade to improve sight distance.

### **RECOMMENDATIONS TO THE RESOURCE TEAM**

Because traffic simulations indicate operational problems with Alternatives 6E and 6E2, Subcommittee 4 recommends they not be considered.

Subcommittee 4 preferred Alternative 6E2Mod with the interchange at Strader Road for the following reasons:

- It is estimated to be cheaper to construct.
- It has flatter grades on the ramps. This should lessen air and noise pollution and improve safety.
- It fits better visually into the terrain.
- It requires only one signalized intersection on Clinton Highway.

# **Knoxville Parkway, Context Sensitive Solutions**

## **Subcommittee 4, Meeting #3**

### **DESIGN SECTION 7**

Alternative 7AC crosses Raccoon Valley Road in the center of the original study corridor then shifts to the east side of the corridor before going outside the west limit of the corridor to miss a church and the surrounding community on Wolf Valley Road.

Alternative 7B alternates between the center and northwest side of the study corridor. It also includes relocating a short portion of Wolf Valley Road where the Parkway crosses it.

### **RECOMMENDATIONS TO THE RESOURCE TEAM**

Subcommittee 4 prefers an Alternative 7BC that combines the west end of Alternative 7B up to Chestnut Ridge Road and the east (7C) portion of Alternative 7AC for the following reasons:

- It stays further from houses on the west (7B) end.
- It avoids a church and more houses on the east (7C) end.

### **DESIGN SECTION 8**

This section incorporates the I-75 & SR 475 (Knoxville Regional Parkway) interchange.

The main difference between the alternatives is the design of the ramp from northbound I-75 to westbound SR 475.

Alternative 8B uses a directional ramp with a design speed of 40 mph.

Alternative 8C uses a directional ramp with a design speed of 50 mph.

### **RECOMMENDATIONS TO THE RESOURCE TEAM**

Subcommittee 4 prefers Alternative 8C for the following reasons:

- It has a higher design speed and should be safer.
- By not requiring trucks to slow down and speed back up as much it should contribute less to air and noise pollution.

### **ADJUNCT RECOMMENDATIONS**

Subcommittee 4 has the following adjunct recommendations for the Resource Team to consider:

- Replace the railroad bridge over Raccoon Valley Road.
- Make the replacement railroad bridge long enough to accommodate future widening of SR 170.
- Use longer acceleration, deceleration, and merging lanes wherever possible to improve safety and help keep drivers from stopping on the ramps.

### **GOING FORWARD**

In the final design phase, Subcommittee 4 recommends:

- Use regional teams for each area.
- Have the Greenways group make a presentation at the Jan. 18, 2006 Resource Team meeting.

# Knoxville Parkway, Context Sensitive Solutions Subcommittee 4, Meeting #3

## ATTENDEES

17 people attended the meeting. The names and organizations of the people who attended the meeting are presented as follows.

### **Regional Subcommittee 4 Organization**

Jennifer Green	Regional Subcommittee 4
David Lambert	Better Roads In North Knoxville
Vicki Long	Regional Subcommittee 4
Don Madgett	Regional Subcommittee 4
Bill McMaster	Heiskell Community
Mac Post	Powell Community
Robert Shaw	Citizens Against the Beltway Orange Location
Sharon Todd	Claxton Community

### **TDOT**

### **Title**

Mike Russell	Transportation Manager, TDOT, Region 1, Project Management
Cliff Stewart	TDOT Design

### **Consultants**

### **Company**

David Lindeman	Palmer Engineering - CSS Consultant
Eric Fischer	Palmer Engineering - CSS Consultant
Stephen Sewell	Palmer Engineering - CSS Consultant
Pat Alexander	HMB Professional Engineers – Design Consultant
Becky Bottoms	Allen & Hoshall – Design Consultant
Greg Green	Robert B. Campbell & Associates – Design Consultant
Bill Davis	Vaughn & Melton – Cave Surveys