

Reconstruction of I-75 in Chattanooga, TN

Tennessee Concrete Pavement Conference

January 21, 2009



VOLKERT
& ASSOCIATES, INC.

Concrete Pavement in Chattanooga

Present

- I-75 at the Hwy 153 Interchange North to Ooltewah
- I-75/I-24 Interchange to the “Ridge Cut” on I-24
- I-24 at Rossville Blvd. through the I-24/US-27 Interchange

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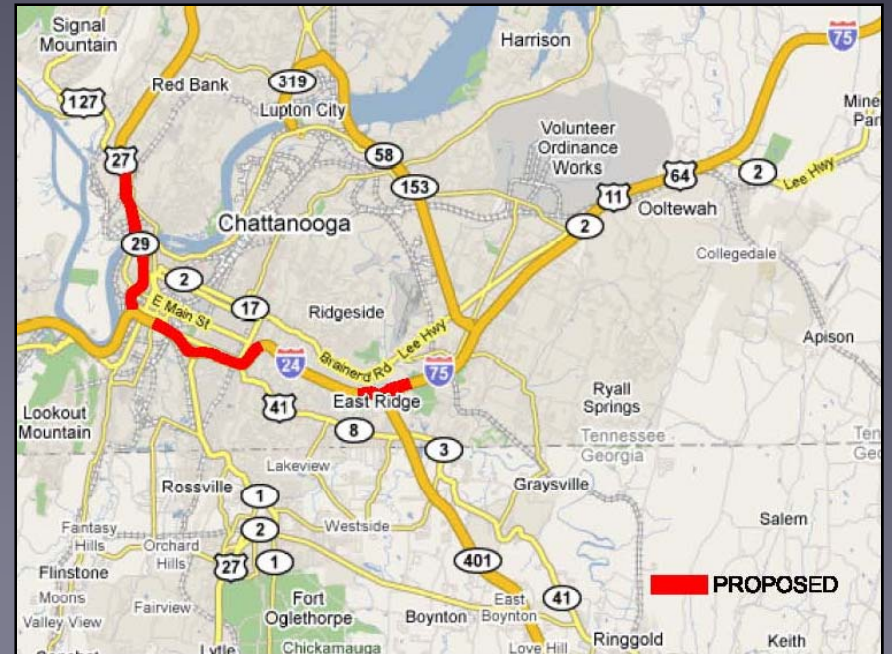
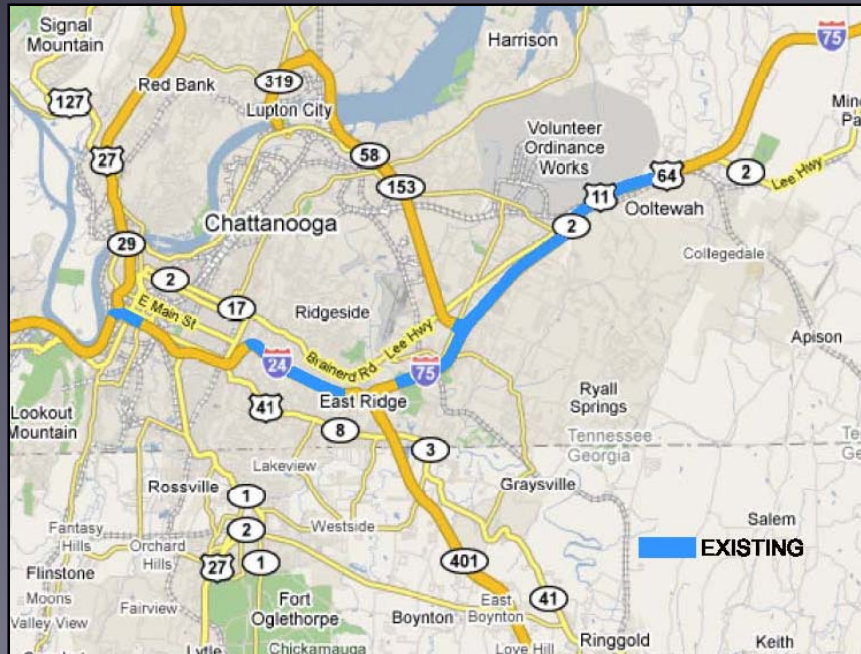
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Proposed

- Complete I-75 through Ooltewah
- I-24/US-27 Interchange to Signal Mountain on US-27
- I-75/I-24 Interchange

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I-75 Improvements and Enterprise South Interchange

- \$20 Million Project
- Widening of 1.7 miles of I-75 to total of 8 lanes of concrete pavement plus shoulders
- Charles Blalock & Sons Construction-Prime Contractor
- APAC-Southeast-Concrete Paving Subcontractor under the direction of Gary Richert

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I-75 Improvements and Enterprise South Interchange



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I-75 Improvements and Enterprise South Interchange

- Project started March 2004
- With 75,000 ADT, 2 lanes of traffic each direction (NB & SB) were to be maintained at all times, with the exception of short-term lane closures at night
- Project Construction Managers identified potential to reduce project traffic phases and to utilize the existing I-75 asphalt surface as a base for proposed permeable base and concrete paving and presented to TDOT for approval

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I-75 Improvements and Enterprise South Interchange

Proposed Changes:

- Minimized construction traffic from entering/exiting I-75 traffic flow
- Saved time and money by eliminating the removal of existing asphalt, re-grading and new base stone placement
- Extended concrete paving where temporary asphalt was proposed, thereby eliminating removal of temporary measures on future adjoining project

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I-75 Improvements and Enterprise South Interchange

TDOT Concerns:

- Safety and minimizing interference of traffic
- Project costs
- Environmental impacts
- Quality product (Smooth ride)

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I-75 Improvements and Interchange Reconstruction at SR-2 in Ooltewah

- \$50+ Million project involving 4.4 miles of interstate widening and concrete paving
- Project started in November 2007
- Bell and Associates-Prime Contractor
- APAC (Tennessee)-Concrete Paving Subcontractor
- 75,000 ADT, 2 lanes of traffic must be maintained in each direction (NB & SB) at all times

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I-75 Improvements and Interchange Reconstruction at SR-2 in Ooltewah



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I-75 Improvements and Interchange Reconstruction at SR-2 in Ooltewah

Project is More Complicated Involving:

- Reconstruction of 2 interstate bridges
- 3-4 foot grade differences in areas of I-75 between existing and proposed
- Entrance and exit ramps at the interchange to be tied into areas with grade differentials on I-75
- Off-set proposed I-75 centerline alignment at I-75 ESIP project is transitioned to meet existing I-75 centerline alignment at the interchange at SR-2 in Ooltewah

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I-75 Improvements and Interchange Reconstruction at SR-2 in Ooltewah

Traffic Control and Phasing Development Considerations

- Impacts to the public/safety
 - Minimizing shifts and changes throughout project
 - Try to keep traffic (NB & SB) together
 - Taper lengths
- Quality
 - Make work areas as long as possible and avoid having to piece a project together

I-75 Improvements and Interchange Reconstruction at SR-2 in Ooltewah

Traffic Control and Phasing Development Considerations

- Production
 - Consider the time required to construct and weather restrictions
- Sequencing
 - Factor in all elements of roadway construction required, assuring constructability in each phase

QUESTIONS?



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