

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DIVISION

SUITE 700, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-2414

BUTCH ELEY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE GOVERNOR

May 16, 2024

MEMORANDUM

PROJECT: PIN 124688.00 Rutherford County

SR 10 (U.S. 231, South Church Street) Bridge over CSX Railroad, L.M. 12.63 S.P. 75005-2232-94, BR-NH-10(80)

SUBJECT: CONSTRUCTABILITY REVIEW MEETING SUMMARY

DATES: April 19-22, 2024

NOTES BY: Matt Lesko, P.E.

TDOT Construction Division

A Constructability Review meeting was held on April 19th & 22nd with Construction Industry Representatives, the Consultant Design Team, TDOT Headquarters Construction, TDOT Region 3 Operations and Project Development staff. The scope of the review was to integrate construction expertise early into the project development process for the 0.31-mile project that includes one bridge, four retaining walls, complex construction phasing, railroad coordination, and numerous utility relocations.

The final right-of-way plans, utility layout and traffic control phasing were reviewed as part of the meeting.

AGENDA:

- 1. Introductions
- 2. Purpose: Existing Conditions
- 3. Project Overview: Roadway, Right-Of-Way/Utilities, Bridge, Retaining Walls, Traffic Control, Railroad
- 4. Work Session

PIN 124688.00 - Rutherford County SR-10 Bridge over CSX Railroad, L.M. 12.63 May 16, 2024

ACTION ITEMS:

- 1. Roadway Closure Timeframe
- 2. Construction Phasing
- 3. Traffic Control
- 4. Utilities
- 5. Right-of-Way
- 6. Railroad Difficulties
- 7. Retaining Walls

SUMMARY:

All attendees at the SR-10 constructability reviews concurred that there is no way to build the project without a complete closure of the roadway. TDOT targeted a closure period of 3-4 months, but this number was deemed unfeasible by all 4 contractors in attendance. The estimated closure periods ranged from 6-12 months, with 8-9 months being the most common estimate. The total project is projected to take around 2 years to build.

This project is likely to take much longer than would be possible since CSX is planning to continue use of the railroad throughout the project. Some ideas presented to mitigate this setback included working on weekends to avoid high train traffic volumes, and it was even suggested to shut down CSX on either weekends or holidays to increase the amount of bridge arches that can be placed in a day without interruption. It was also noted that it would be best to start demolition in March, since there is a higher volume of train traffic from November through February 15th.

The equipment for the project will be stored on the west side of the tracks. Two cranes will be needed for this project to move the tunnel arch pieces into place. One of the cranes will likely need to be larger than 22' wide and rated for a higher load. All attendees agreed that the bridge tunnel should be constructed before the retaining walls, although it was mentioned that some of the east wall could be built prior to road closure. An additional easement was suggested by multiple contractors to speed up the construction process. GMGC was generally seen as a good option for this project.