

Maintenance of Traffic (MOT)

Boyero US 40/US 287: Ports to Plains Highway

Lincoln County, Colorado

Project Overview

This two-lane rural highway is a critical element of the Colorado portion of the Ports to Plains Highway, which spans from Laredo, Texas, to Denver, Colorado. Because of high truck traffic and high maintenance costs of asphalt, the Colorado DOT specified concrete pavement for the entire length. Most of the corridor uses a 10.75" concrete overlay on existing asphalt, although 12" concrete was used for full depth repairs of structures and for transitions to existing surfaces.

MOT Factors

- Pilot car operations were used for traffic control, as detours would have presented site-distance issues and a three-phase lane closure strategy would have increased the project duration and would have presented safety issues.

- Construction equipment or materials were not allowed to use lanes open to traffic.
- Pilot cars were required to complete a full cycle in 25 minutes or less to minimize user delays.
- Exceeding the time limit would have resulted in fines or even work stoppage.

Traffic Control

- Workers, contractors, suppliers, etc. were required to use proper traffic control before entering the roadway.
- Flaggers and the pilot car driver were in constant communications with radios.

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Fast Facts

Owner

Colorado DOT

Contractor

Castle Rock Construction

<http://www.castlerockconstructionco.com/>

Facility

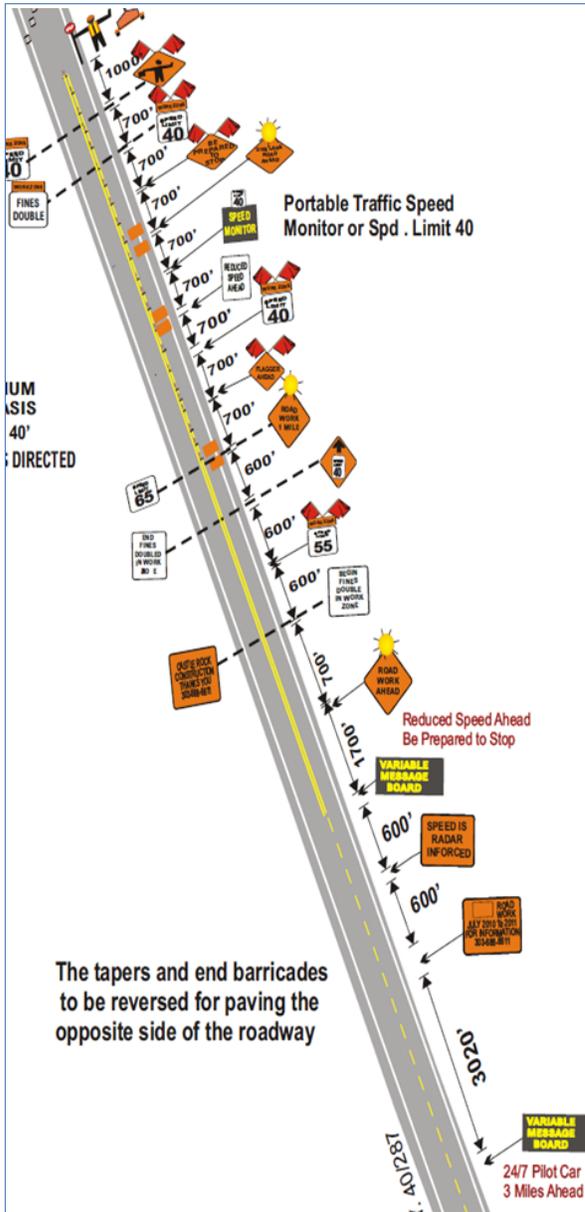
Two-lane rural highway

Project Type

- Bonded concrete on asphalt
- Included reconstruction

Project Dimensions

- 8.28 miles long
- 40- ft. wide route was paved in 20 ft. passes



- Advanced warning measures included centerline controls to prevent passing, radar speed board, and temporary strips applied to pavement helped keep drivers aware and to slow traffic from 65 mph to complete stop.
- All work was required to be performed during daylight hours.
- Flagger (using an air horn) was placed at the paver to warn crews of approaching pilot car.
- Wide load restrictions were in place and limited widths to 12-ft. wide.

Construction Factors

- Existing asphalt was pulverized and recompacted.
- Contractor had to maintain a minimum of 10 ft. for traffic, which meant no room for stringline at the center line.
- Contractor used ski attachment to allow more room for traffic. Ski ran on trimmed, profiled full-depth reconstructed pavement.

Other Factors

- Average daily traffic was 910 with 25% truck traffic.
- Farm equipment and oil truck traffic also presented challenges. All other truck traffic was detoured around the project.



Presented by the

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