



**COLORADO**  
Department of  
Transportation



# Managing Complex Projects

SH 59 Bridge Over I-70 Emergency Project

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April 12, 2018  
Day 1

## The Accident

A semi travelling East on I-70 drifted off the road, colliding with bridge G-25-K pier supports.



The force of the impact was so great that 2 of the 4 supports failed and collapsed.





## Location: Seibert Colorado





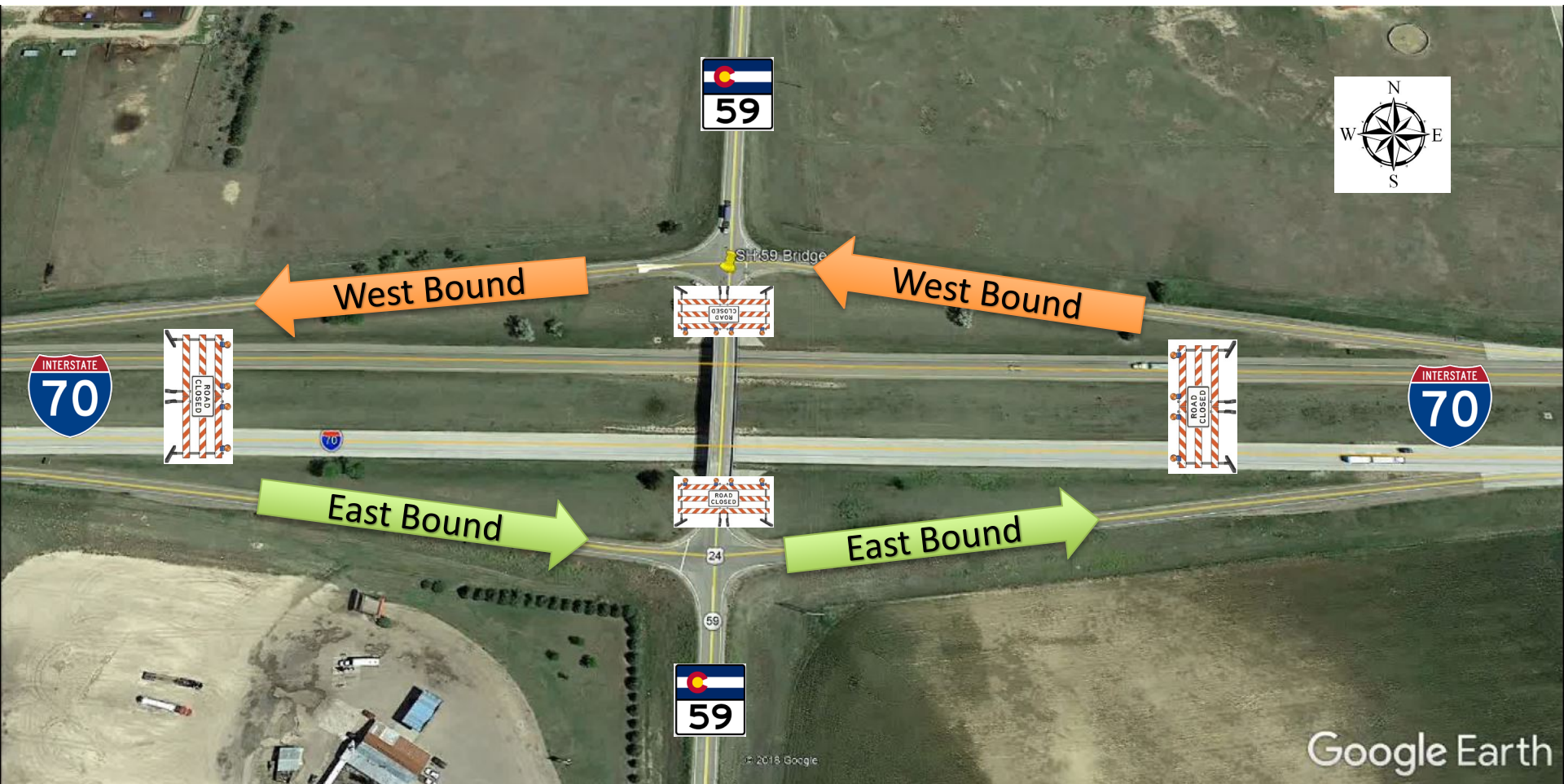
## Location







# Detour





April 12, 2018  
Day 1

## Assessment

- Fix or Replace?
- Contact contractors for bids
- Start design of new bridge







April 14, 2018  
Day 3

## Demolition







**April 16, 2018**  
**Day 5**

## **Demo Complete**





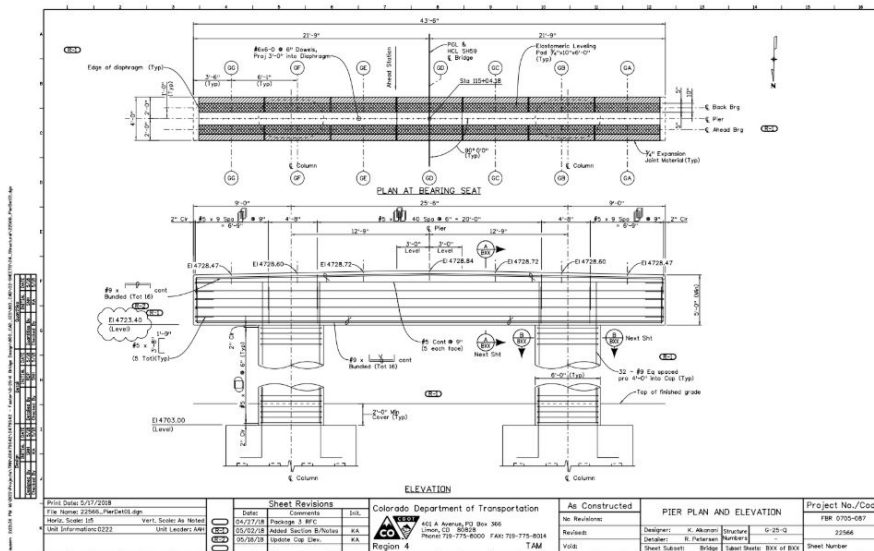
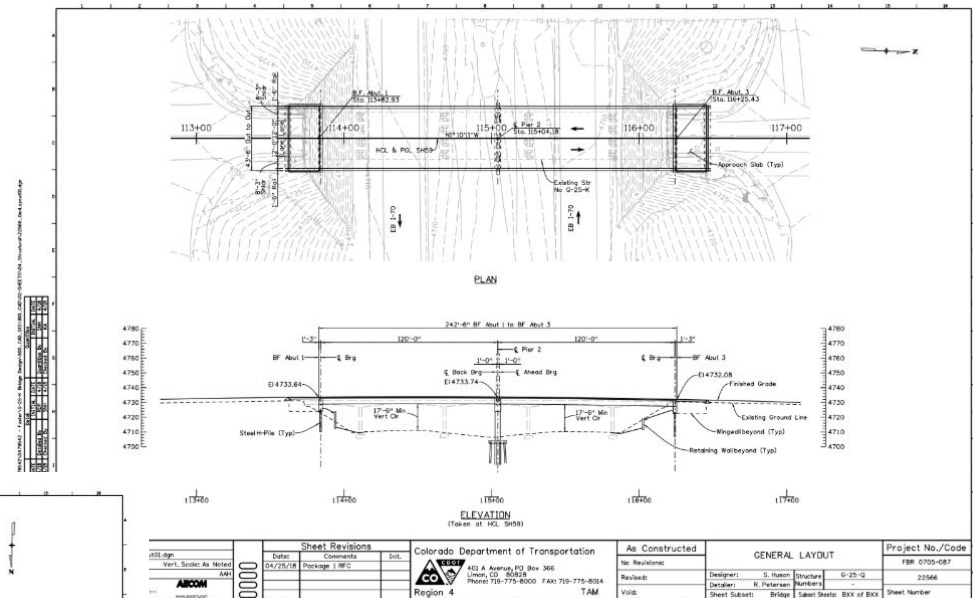


# April 18 – May 18 , 2018

## Day 6-36

## Design

- 1700 man hours
- Twice a week meetings
- 7 design packages released



- Package 1 contained a general layout
- Package 7 had more details and so on



**April 27, 2018**  
**Day 15**

## **Start Construction**







May 15, 2018  
Day 33

# Construction







May 30, 2018  
Day 48

## Construction





**April 27 – June 1, 2018**  
**Day 15-50**

## **Pier and Abutment Construction**







**May 31 – June 1, 2018**  
**Day 49-50**

## **Girder Set**





June 12, 2018  
Day 61

## Deck Pour







June 14, 2018  
Day 63

## Time Saving

- Flash Fill behind Abutments





**June 29, 2018**  
**Day 78**

## **Open to Traffic**

- 2300 Design hours
- 13 Design packages
- 31 Meetings







July 2 – August 17, 2018  
Day 81-127

## Retaining Walls

- Sheet Pile Driving completed on July 20
- Rebar and Form Walls July 21 through Aug 13
- Pour concrete Aug 14 through Aug 17







**July 7 – October 7, 2018**  
**Day 86-178**

## **Embankment Build**







**August 8 – August 24, 2018**  
**Day 118-134**

## **Slope and Ditch**







**August 20 – October 26, 2018**

**Day 130-197**

## **Hot Mix Asphalt Paving**







**August 20 – October 26, 2018**

**Day 130-197**

## **Hot Mix Asphalt Paving**







**August 20– November 6, 2018**

**Day 130-208**

## **Landscaping**



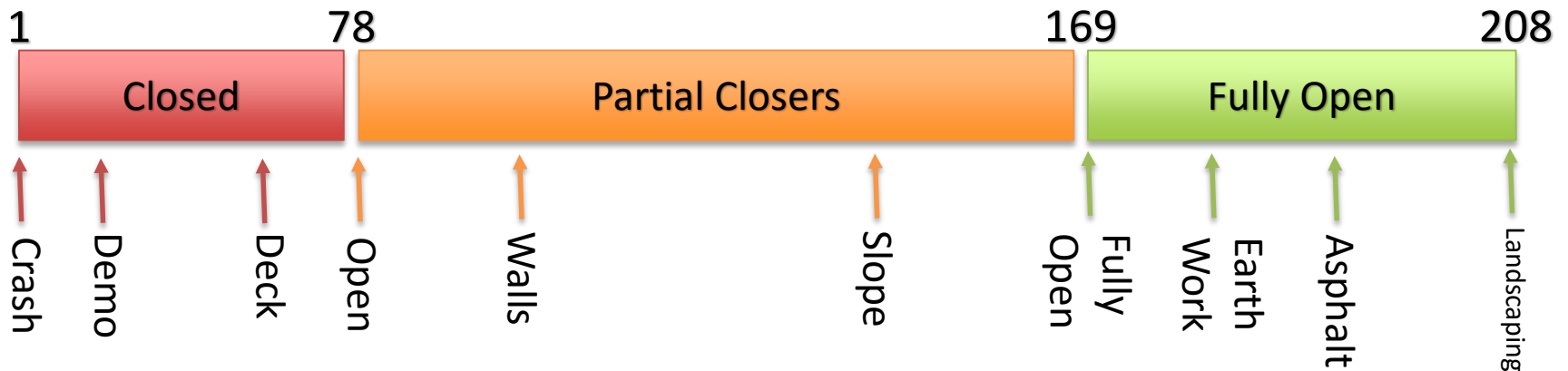




April 12 - November 6, 2018

## Project Timeline

- Just over 200 days to complete



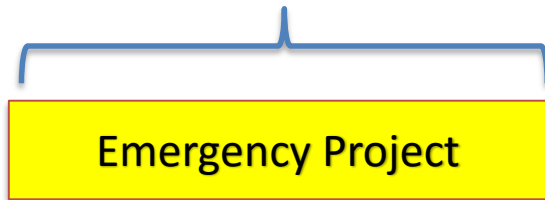


April 12 - November 6, 2018

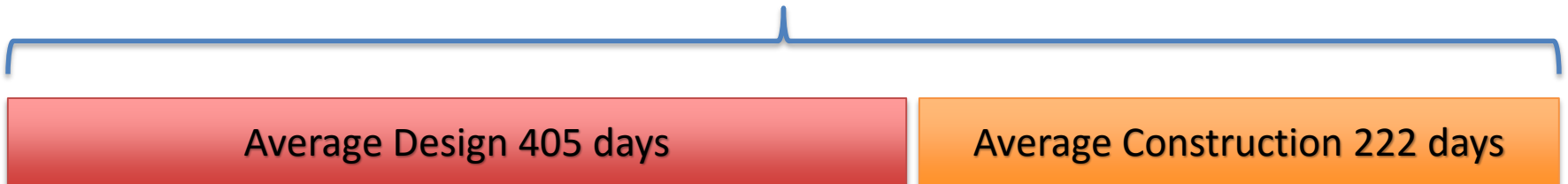
## Project Timeline Comparison

- Emergency bridge project just over 200 days
- Standard bridge project just over 600 days

7 months



20 months







# Questions

