

2015 FRA **Rail Program Delivery**



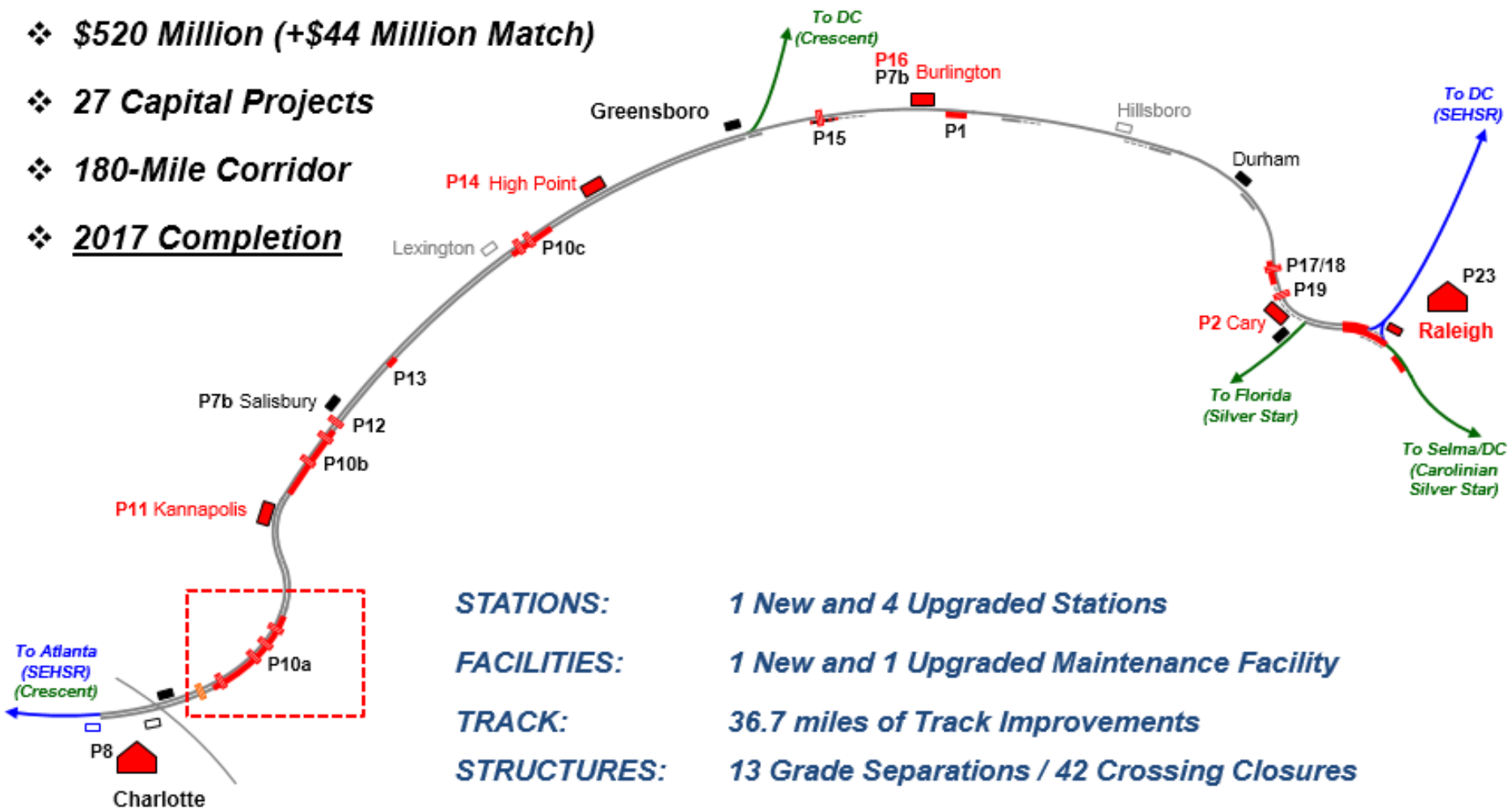
Managing Project Schedule

Randy Brown

Project Manager, Southeast High-Speed Rail

NCDOT Piedmont Improvement Program

- ❖ **\$520 Million (+\$44 Million Match)**
- ❖ **27 Capital Projects**
- ❖ **180-Mile Corridor**
- ❖ **2017 Completion**



STATIONS:

1 New and 4 Upgraded Stations

FACILITIES:

1 New and 1 Upgraded Maintenance Facility

TRACK:

36.7 miles of Track Improvements

STRUCTURES:

13 Grade Separations / 42 Crossing Closures

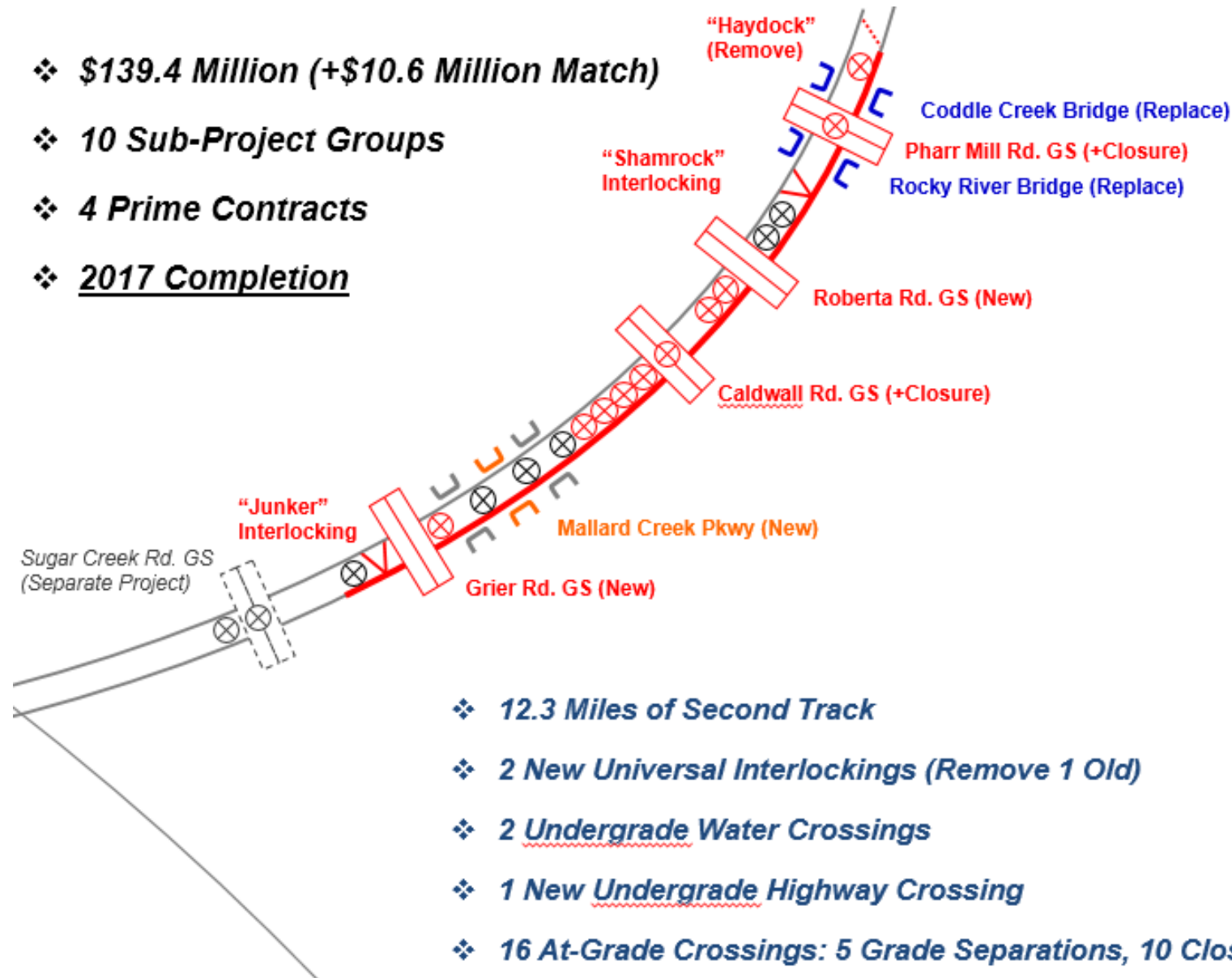
EQUIPMENT:

7 Rehabilitated Locomotives

5 Cab-Control Cars / 12 Coaches

P10a: Haydock to Junker Double Track

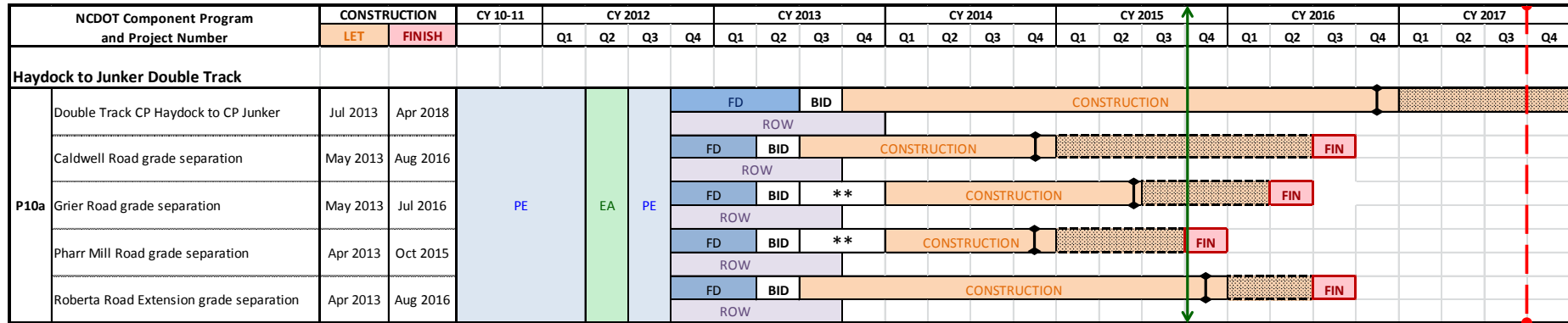
- ❖ **\$139.4 Million (+\$10.6 Million Match)**
- ❖ **10 Sub-Project Groups**
- ❖ **4 Prime Contracts**
- ❖ **2017 Completion**



- ❖ **12.3 Miles of Second Track**
- ❖ **2 New Universal Interlockings (Remove 1 Old)**
- ❖ **2 Undergrade Water Crossings**
- ❖ **1 New Undergrade Highway Crossing**
- ❖ **16 At-Grade Crossings: 5 Grade Separations, 10 Closures, 6 Upgrades**

Project Schedule

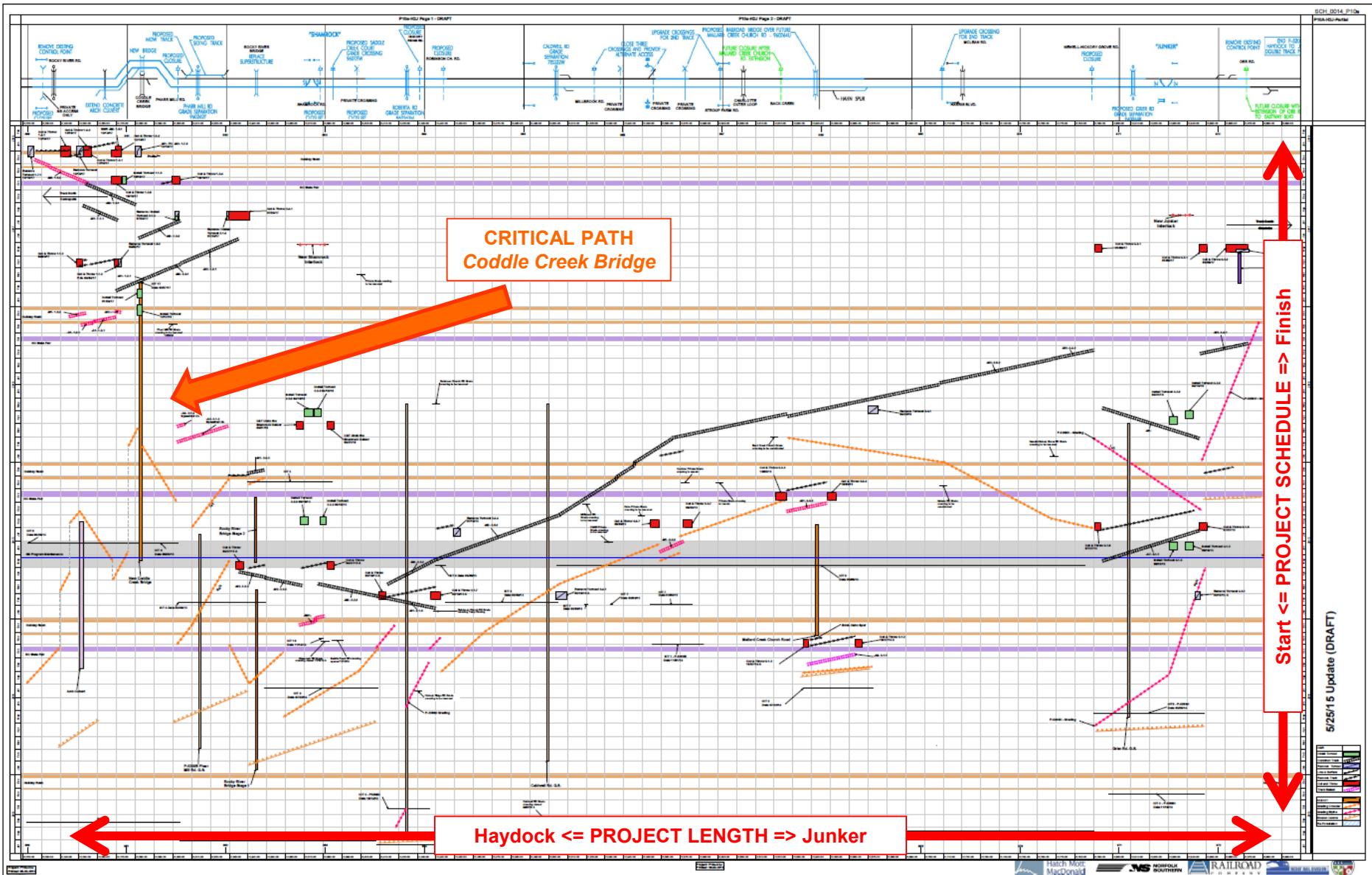
- ❖ **2010-2012: Preliminary Engineering and Environmental Review**
- ❖ **2012-2013: Final Design, ROW Acquisition and Utility Relocation**
- ❖ **2013: NTP for Railroad Roadbed and Grade Separations**
- ❖ **2014: NTP for Track and Signals**



- ❖ **Initial Completion Date:** **December 2016**
- ❖ **Delayed Completion Date:** **February 2018 (+ Invoice Processing)**
- ❖ **Estimated Financial Risk:** **Appx. \$5 Million (beyond Sep. 30, 2017)**
- ❖ **Contract Risk (NCDOT):** **NS Track and Signal Components**

Project Schedule

❖ **TILOS: TiLoS “Time Location Planning Software”**



Project Schedule

ARRA DEADLINE
September 30, 2017

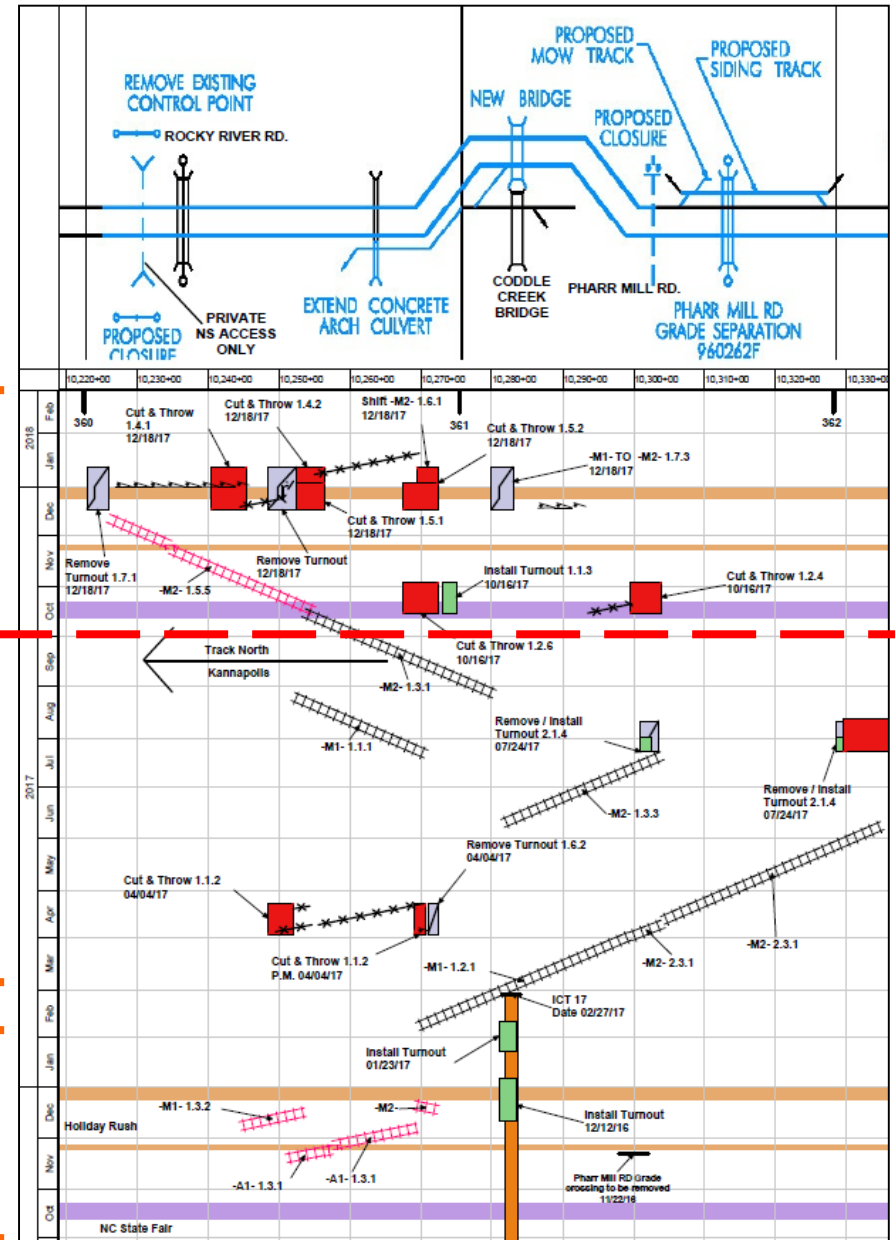
NS: Track & Signal

Start: Feb 2017
Complete: Feb 2018

Coddle Creek Bridge

Start: May 2015
Complete: Feb 2017

**Delayed by 1 Year*



What Caused the Delay?

- *Bridge Designed too Close to Active Railroad*
- *Unanticipated Poor Subsurface Conditions*
- *Final Design Modification*
- *Extensive Design Review Process*
 - *NCDOT Rail Division:* *Issue Design Contract*
 - *Norfolk Southern (NS):* *Design Review and Approval*
 - *North Carolina Railroad (NCRR):* *Design Review and Approval*
- *Three-Party Construction (Deferred Responsibility)*
 - *NCDOT Highway Division:* *Railroad Roadbed Contractor*
 - *Norfolk Southern (NS):* *Railroad Track and Signal Contractor*
 - *North Carolina Railroad (NCRR):* *Construction Acceptance*

Best Practices

❖ Project Development

- ✓ *Early NTP for Preliminary Engineering*
- ✓ *Early NTP for Environmental Review*
- ✓ *Early NTP for Final Design*
- ✓ *Early NTP for Right-of-Way Acquisition*
- ✓ *Early NTP for Utility Relocation*

❖ Construction

- ✓ *Accelerated NTP for Railroad Roadbed and Grade Separations*
- ✓ *Active Grantee Oversight (NCDOT Highway Construction & CEI)*
- ✓ *Active Communication Among Grantee, Contractor, and Host Railroad(s)*
- ✓ *Include Contingency in Schedule for Unexpected Conditions*
- ✓ *Reserve Contingency in Budget for Potential Contract Acceleration*

Commitment to Success

November 2014



July 2015



Thank You

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