

Recent Construction Highlights

Flatiron Constructors Intermountain finished construction of Pier 3 WB Pier Table and will begin falsework removal operations this week, followed by erecting the upstation form traveler. Construction of Span 5 WB CIP Superstructure continues and the falsework assembly at Pier 4 WB Pier Table began the week of January 5th. The following is a summary of the construction progress for the last month.

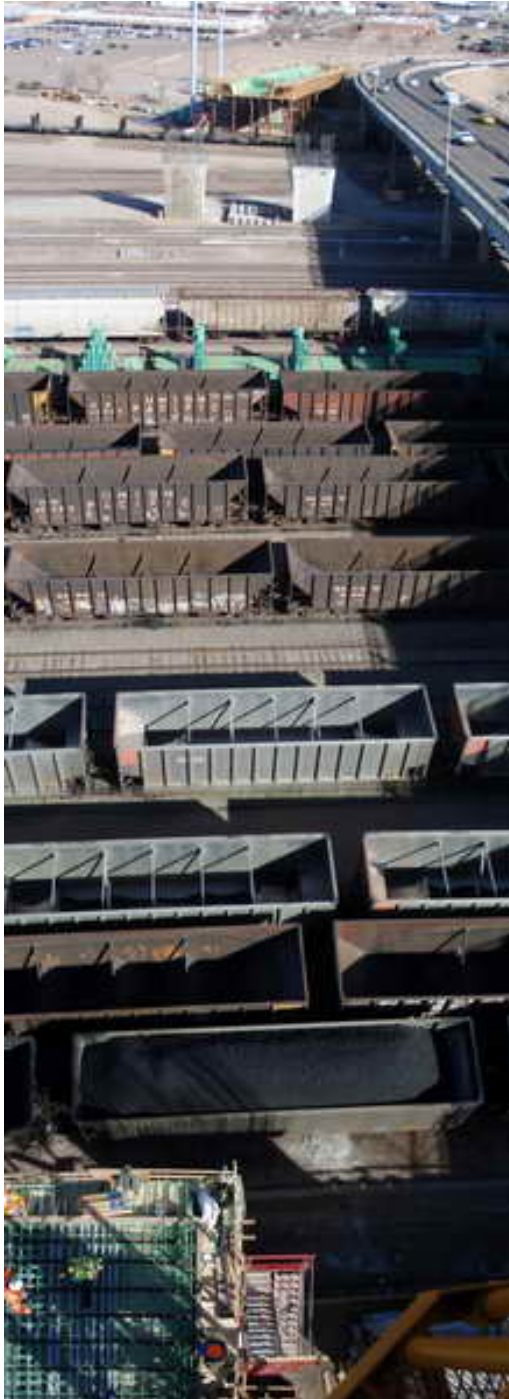


Figure 1 – Span 3 WB – December 29, 2008:

The picture to the left shows the main span as seen from the tower crane cab. Work continues at Span 5 WB CIP Superstructure construction in the background, as workers work in earnest to finish the top slab portion of Pier Table 3 WB in the foreground. A total of 23 UPRR tracks are crossed by the main span.

Figure 2 – Pier Table 3 WB Construction – December 31, 2008:

The picture below looks down on Pier Table 3 WB from the tower crane as Flatiron personnel begin to place and finish the top slab.

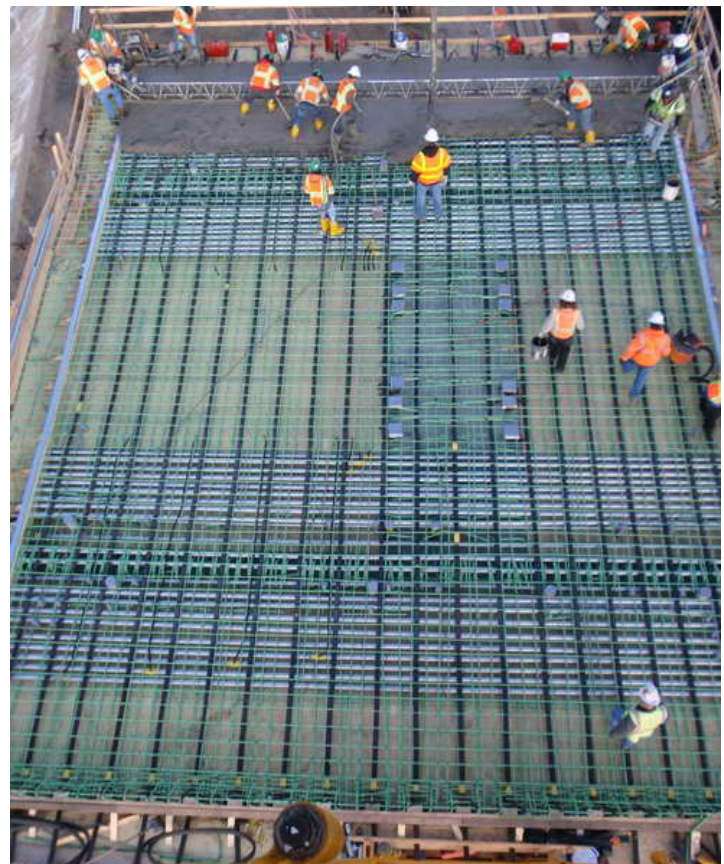




Figure 3 – Pier Table 3 WB Construction – December 31, 2008:

Placement of the top slab concrete for Pier Table 3 WB is performed using a concrete pump staged in the Rail Yard. This picture shows the right wing/web with 25 cantilever tendon ducts, the transverse post-tensioning ducts running over the cantilever tendons, and the form traveler tie-downs placed between both sets of ducts.

**Figure 4 – Pier Table 3 WB Construction –
January 5, 2009:**

A post-tensioning crew member tightens the ratchet on the PT bar jack as one of the 1 3/8" diameter vertical PT bars in the diaphragm is stressed to the initial jacking force. Lift-offs are required on all of the PT bars to verify that design forces are achieved.





Figure 5 – Span 5 WB CIP Superstructure Construction – January 7, 2009:

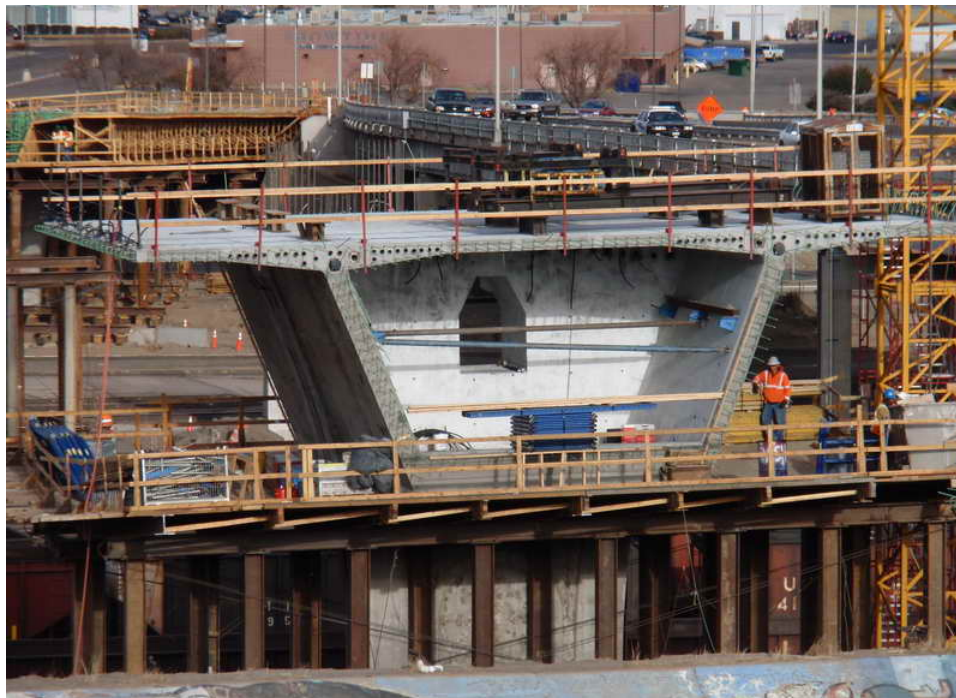
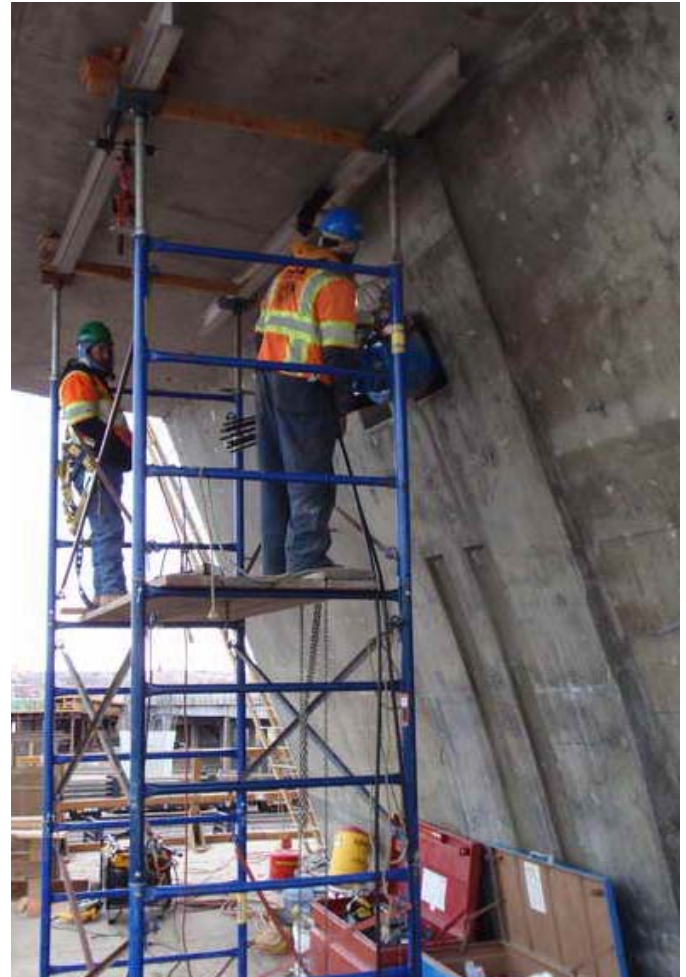
With nearly all of the reinforcing and post-tensioning elements installed, Flatiron plans to install the interior web and diaphragm forms the week of January 12th.



Figure 6 – Pier Table 4 WB Falsework Assembly – January 8, 2009:

After grading and installing the timber falsework pads, crews begin erecting the falsework bents at Pier 4. Flatiron coordinates these picks with the Railroad flagmen to temporarily close the affected BNSF and UPRR tracks. Construction of Pier Table 4 WB will occur simultaneously with construction of Cantilever 3 WB.

Figure 7 – Pier Table 3 WB Construction – January 9, 2009:
Flatiron’s PT crew stresses the 12-strand transverse diaphragm tendons at Pier Table 3 WB.



**Figure 8 – Pier Table 3 WB
Falsework Removal–
January 12, 2009:**
With all of the post-tensioning stressed, Flatiron begins to set the winches on the deck for the falsework removal procedure. The falsework is planned for lowering later this week.



Project Summary:

January 13, 2009
 Day 394 of 1278

Substructure Construction	<u>To</u> <u>Date</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</u>
48" Diameter Drilled Shafts (Monuments)	3	of	4	Each	75%
48" Diameter Drilled Shafts (Abutments)	11	of	14	Each	79%
60" Diameter Drilled Shafts (Pier 2 & 5)	6	of	8	Each	75%
96" Diameter Drilled Shafts (Pier 3 & 4)	8	of	8	Each	100%
Type I Footings (Pier 2 & 5)	3	of	4	Each	75%
Type II Footings (Pier 3 & 4)	4	of	4	Each	100%
3'-6" Piers (Pier 2 & 5)	3	of	4	Each	75%
7'-1" Piers (Pier 3 & 4)	4	of	4	Each	100%
Abutments	3/4	of	2	Each	38%

Superstructure Construction	<u>To</u> <u>Date</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</u>
Westbound					
End Span CIP Westbound	1	of	2	Each	50%
Abutment Diaphragm Westbound	1	of	2	Each	50%
Pier Diaphragm Westbound	1	of	2	Each	50%
Pier Table Westbound	1	of	2	Each	50%
Cantilever 3 Segments Westbound	0	of	22	Each	0%
Cantilever 4 Segments Westbound	0	of	20	Each	0%
Closure Segments Westbound	0	of	3	Each	0%
Eastbound					
End Span CIP Eastbound	0	of	2	Each	0%
Abutment Diaphragm Eastbound	0	of	2	Each	0%
Pier Diaphragm Eastbound	0	of	2	Each	0%
Pier Table Eastbound	0	of	2	Each	0%
Cantilever 3 Segments Eastbound	0	of	22	Each	0%
Cantilever 4 Segments Eastbound	0	of	20	Each	0%
Closure Segments Eastbound	0	of	3	Each	0%



Project Summary:

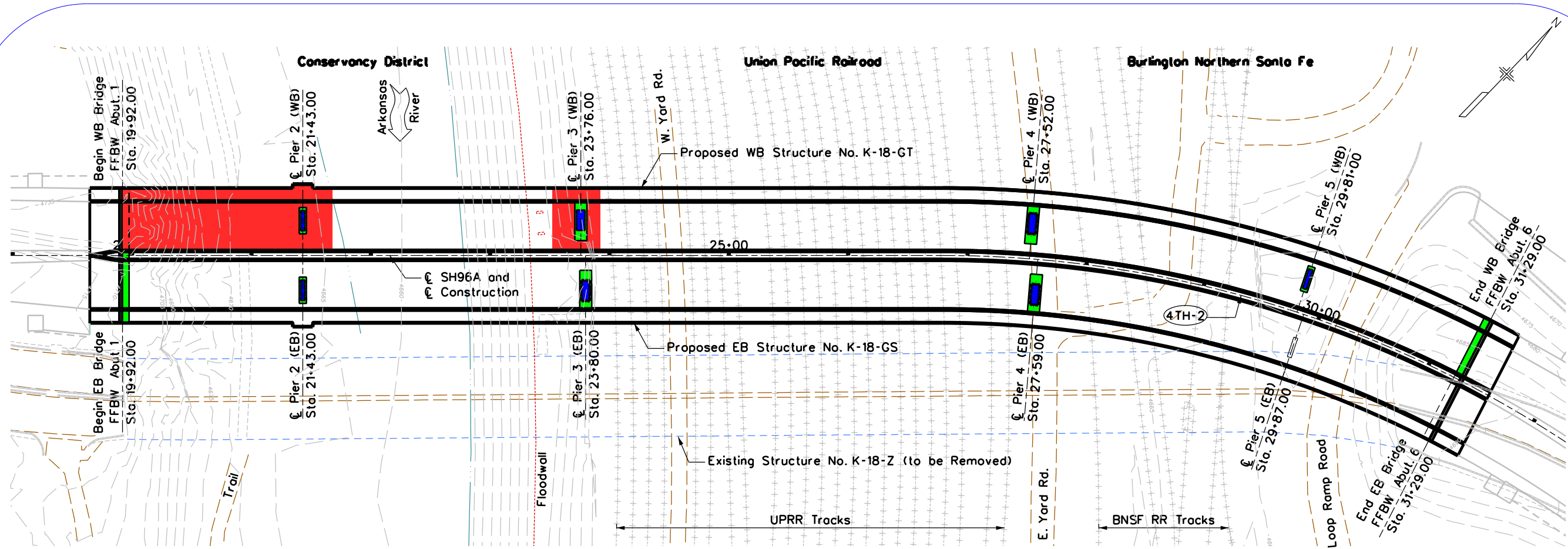
January 13, 2009
Day 394 of 1278

Project Milestone Dates

Milestone Event	April 2008 Baseline Finish Date	Actual
Project Award	October 18, 2007	October 18, 2007
Notice to Proceed	November 8, 2007	November 8, 2007
Abutment 1 Drill Caissons	February 15, 2008	February 15, 2008
Abutment 1 Cap Form/Rebar/Pour	March 6, 2008	March 6, 2008
Pier 2 EB Drill Caissons	March 3, 2008	March 3, 2008
Pier 2 WB Form/Rebar/Pour Footing	March 24, 2008	March 24, 2008
Pier 2 WB Column Form/Rebar/Pour	April 29, 2008	April 29, 2008
Pier 3 EB Drill Caissons	April 17, 2008	May 1, 2008
Pier 3 WB Form/Rebar/Pour Footing	May 15, 2008	June 4, 2008
Pier 3 WB Column Form/Rebar/Pour	July 1, 2008	August 5, 2008
Pier 4 EB Drill Caissons	May 8, 2008	July 1, 2008
Pier 4 WB Form/Rebar/Pour Footing	May 13, 2008	August 8, 2008
Pier 4 WB Column Form/Rebar/Pour	August 20, 2008	September 18, 2008
Pier 5 WB Drill Caissons	April 17, 2008	May 30, 2008
Pier 5 WB Form/Rebar/Pour Footing	April 21, 2008	June 12, 2008
Pier 5 WB Column Form/Rebar/Pour	October 21, 2008	July 11, 2008
Abutment 6 WB Drill Caissons	April 18, 2008	April 22, 2008
Abutment 6 WB Cap Form/Rebar/Pour	May 8, 2008	May 8, 2008
Span 1 WB Form/Rebar/Pour Bottom Slab/Webs/Diaphragms	June 17, 2008	August 29, 2008
Span 1 WB Form/Rebar/Pour Deck	July 8, 2008	October 10, 2008
Pier Table 3 WB Form/Rebar/Pour Bottom Slab	August 18, 2008	November 21, 2008
Pier Table 3 WB Form/Rebar/Pour Diaphragm & Webs	September 4, 2008	December 5, 2008
Pier Table 3 WB Form/Rebar/Pour Deck	October 7, 2008	December 31, 2008
Span 5 WB Form/Rebar/Pour Bottom Slab/Webs/Diaphragms	February 12, 2009	
Span 5 WB Form/Rebar/Pour Deck	March 12, 2009	
Span 1 EB Form/Rebar/Pour Bottom Slab/Webs/Diaphragms	October 7, 2008	
Span 1 EB Form/Rebar/Pour Deck	October 27, 2008	
Form and Pour First Segment – W3-1E	November 19, 2008	
Form and Pour First Closure – Span 2 WB	May 19, 2009	
Shift Traffic to New WB Structure	February 17, 2010	
Install Last Drilled Caissons – Abutment 6 (EB Only)	April 26, 2010	
Form and Pour Last Segment – E4-10E	October 12, 2010	
Form and Pour Last Closure – Span 3 EB	November 16, 2010	
Complete Structure and Final Traffic Configuration	March 4, 2011	





All items are based on the April 2008 Baseline Schedule with the print date of May 30, 2008 per request from the CDOT Project Engineer. No comparisons will be made to the current (monthly) schedule update from this point forward, as was done on previous updates. All comparisons will be made to the April 2008 Baseline Schedule. All dates represent the “Finish” of the activity, unless otherwise noted.

The actual milestone dates are later than originally projected. This is mainly due to the drilled shaft subcontractor requiring more time for drilling the 8' diameter shafts than originally anticipated. Flatiron plans to construct Span 5 WB CIP Superstructure simultaneous with Span 1 EB CIP Superstructure to improve the schedule. Since cantilever construction is critical path, Flatiron intends to construct Pier 4 WB Pier Table falsework while constructing Cantilever 3 WB. Cold weather operations have reduced production, but Flatiron intends to staff up in early spring.





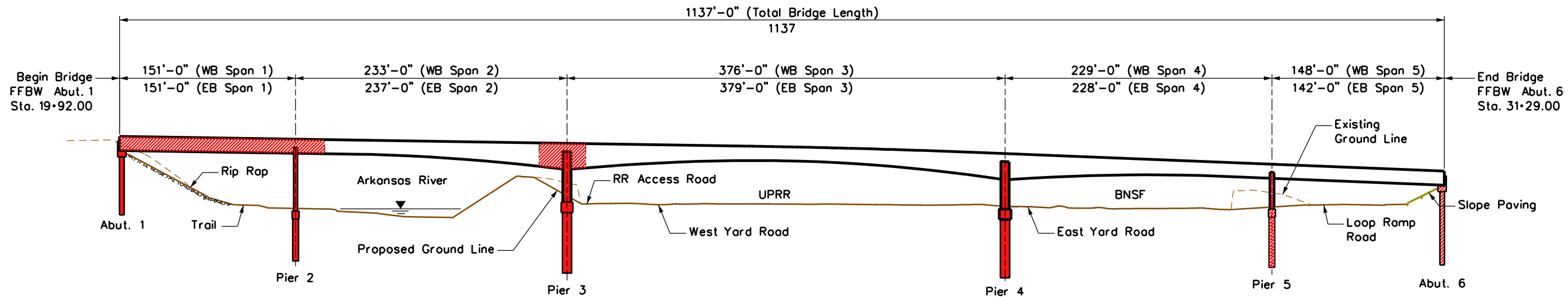
PLAN

LEGEND - PLAN

 - Pier Completed	 - Superstructure Completed (Webs, Bottom Slab, & Diaphragms)
 - Footing Completed	
 - Superstructure Completed	

LEGEND - ELEVATION

 - Completed Elements (WB Only)
 - Completed Elements (WB And EB)



ELEVATION

